

Talal Abu-Ghazaleh



Because I Love THE
TRUTH

Facts included in articles published between 2022-2024



Talal Abu-Ghazaleh

Because I Love THE

TRUTH

2025 Edition

The Hashemite Kingdom of Jordan
The Deposit Number at the National
Library
(6861/12/2024)

306.46

Abu-Ghazaleh, Talal Tawfiq Salem

**Because I Love the Truth/ Talal Tawfiq Salem Abu-Ghazaleh,
Translated by Abu-Ghazaleh Translation, Distribution and
Publishing.- Amman: The Company, 2nd Edition, 2024**

(528) p.

Deposit No.: (6861/12/2024)

**Descriptors: /Artificial Intelligence//Industrial Technology//
Economic Development//Crisis//Sociology Technology**

يتحمل المؤلف كامل المسؤولية القانونية عن محتوى مصنفه ولا يعبر هذا المصنف
عن رأي دائرة المكتبة الوطنية أو أي جهة حكومية أخرى.

ردمك (978-9923-847-08-4) ISBN

ردمك (978-9923-847-09-1) ISBN E-BOOK

What is most worrying is our knowledge
of the truth and our ignoring it.
This takes place
because we omit the role of planning in
any work we want to accomplish!
We succumb to our difficult
circumstances.
And we often fail...

Talal Abu-Ghazaleh

INDEX

Preface	13
Going Digital in the New Normal	16
Climate Change is Happening Faster Than We Thought	18
Biden Orders Study into Developing a Digital Dollar	20
The new Global technology order	22
The Importance of Digital Transformation	25
Challenges with Sustainable Urbanization	27
Digital Transformation ... Simplified -We face two choices:	
“Innovate or Perish”	29
The Brave Knowledge World	31
The Future of Artificial Intelligence	33
The Inevitable Digital Future	37
The Battle for the Mind	41
I Predict: The Worst is Yet to Come	43
The Importance of IT Auditing	49
Artificial Intelligence is the Enabler for Future Marketing	52
Developing Sustainable Cities	56
Outcomes of the Arab-American Jeddah Summit The League of Arab States is our Regional Patron for “Security and Development”	60
The Visit Of Nancy Pelosi to Taiwan	63
Sustainable Urbanization	64
The Technological Cold War may trigger the expected	
Third World War	66
Educational Reform is the Basis of all Reform	69
Eduvation Summit’22: Digital Transformation in Schools	72
Reskilling in the Digital Age	76
All Electric – New Energy Alternative	78
A Call to Our Arab Nations - To Move from the Millennium Goals and Sustainable Development to Necessary Development	81

AI Will Lead the Upcoming Technological Revolution	84
Digital Poverty: An Ongoing Challenge	87
Digital Competence: A Necessity in the Modern World	89
Climate Change – You Cannot Manage What You Cannot Measure	91
By advancement and confidence, we gain control and influence	94
What is Causing World Hunger?	96
Improving Renewable Energy Infrastructure	98
Artificial Intelligence (AI) Technologies “The Magic Key to Future Learning”	100
Egypt’s Information Technology	103
The Growing Problem of Electronic Waste	109
The Problem with the Metaverse	111
Geoengineering – A Possible Solution for Climate Change	113
Xi’s Challenges During His Third Term in Power	115
Accounting and Financial Reporting for Climate Change.....	117
US Intensifies Onslaught on the Chinese Technology Sector	119
The Future of the Internet	121
The Importance of Digital Transformation in the Industry	125
A Call for: A Democratic International Order	133
The Effect of the Pandemic on Economic Behavior	135
Discontent with Democracy	137
Building Trustworthy AI Systems	139
Feeding 8 Billion People	142
Reflections on our Digital Future	144
A Vision in Administrative Reform - 13 Facts, 13 Conclusions If America does it, we should also do it:“Economic Protectionist Policies and Support for National Industries”	146
“My dear homeland... The greatest of homelands”	150
Every Company Must Become an IT Company like TAG.Global	153
The End of the US Oil Shale Industry	156
Arab Cooperation “Exemplary Vision of Common Destiny”	158

Abu-Ghazaleh Outlines the Society Policy in Money	
Laundering Control	160
Digital Transformation: A Catalyst for Change	163
The Internet: Between the Fake Democracies and the Boundaries of Responsibilities	166
The importance of smart tourism	168
The Future US Needs a Weak World	170
Egyptian Gas Pipeline to Europe“Massive Arab Project for World’s Most Important Energy Product”	172
Infrastructure Challenges: “American-Chinese Comparison”	174
Democracy is at Risk	176
The Chances of War Between the US and China Increases	178
Apple’s Reliance on China	180
The New Battle for Internet Search Supremacy	182
Talal Whispering to Talal’s Mother	184
Lebanon: Caught Between Banking Secrecy and International Guardianship	185
The Blockchain – A Powerful Digital Transformation Technology	187
Victory Over the Occupation Liesin Steadfastness Against it	191
Discussion on Criteria for Ranking Countries	193
The Metaverse - The Future of the Internet	196
The Strategic Alliance between China and Africa	199
What they call AI is simply intelligent programming	201
The worst is yet come	204
Economic Reports Point to a Possible Recession	206
AI and Shortening Time ...China Using AI to Improve Educational Outcomes	208
The Importance of Special Economic Zones	211
An Arab Accounting Compliance Law	213
US-Sino Relations: No real change	215
Bypassing Congress to Avert the US Debt Ceiling Crisis	217
The Hidden Costs of AI Chatbots	219

Let Us Agree on One Definition for AI	221
AI Regulation: A Matter of Increasing Importance	224
Leadership Over Showmanship – The Chinese Way	227
The Growing Significance of the Platform Economy	229
US Led Challenge to Globalization	231
The Need for Better Governance	233
Principles for AI in Education	235
Urbanization Challenges vs. Climate Change	237
The Increasing Weaponization of Technology	239
Our Banks Need to Transform to Meta-Banks	241
Global Economic Optimism May Be Premature	243
How Technology is Transforming the Battlefield	245
How AI Can Help Promote Sustainable Urbanization	247
How to Prove Your Competence in Pro-Active Programming (PROPRO)-Known as Artificial Intelligence (AI)	249
From “Oppenheimer” to Pro-Active Programming (PROPRO) - known as Artificial Intelligence (AI)	251
Beijing Is Fighting Against Western Sanctions	253
Dark prospects: Future of relations between Washington and Beijing ...	255
Returning to the Gold Standard	257
The Growing BRICS Alliance Threatens US Dominance	258
Highlights of the G20 Summit in India	260
Africa and the Upcoming Economic Promise	262
My Accounting for Environmental Costs and Liabilities Report to the UN	264
Climate catastrophe: Challenge that must be confronted before it is too late	266
The Supremacy of the US Dollar Continues	268
Abu-Ghazaleh: Call for adopting proactive Arab strategy to participate in shaping future	270
The Heart of Arabism is still Beating... Despite all the Wounds	272
Except My Homeland- Except Palestine	274

Climate Crisis Unleashes Havoc	276
Serious Consequences of Knowledge Gap in Arab World	278
Palestine, which Palestine! It is Al Aqsa Uprising	280
The World's First Humanoid Robot Factory	282
US vs China - The Global Tech Race Continues	284
Intellectual Property and Pro-Active Programming (PROPRO)	
- Known as Artificial Intelligence (AI)	286
A Faltering Global Economy	288
Sustainable Urban Expansion for Cities to Lead the Forefront of	
Climate Solutions	290
LIFI – The Next Generation of Network Technology	292
Decarbonization Comes at a Price	294
Challenges Undermining Progress in Sustainable Development	296
Dialogue between the US and China is Vital	298
Success in Revolutionizing Education: A Make or Break	300
A New Growth Model for a Better Future	302
Proactive Programming in World Politics	304
Role of Governance in Addressing Climate Change	306
Oil Prices Closely Linked to Global Politics	308
A Decade in Retrospect: Revisiting WTO reforms	310
The U.S.-CHINA Confrontation	312
Belt and Road: A Positive Vision for Enhancing International	
Cooperation and Economic Sustainability	314
Internal Conflict and Global Ramifications: Challenges in the Biden	
Administration Following the Brutal Aggression on Gaza	316
Abu-Ghazaleh Shares Insights from Bruce Stokes on the Coming	
2024 US Election	319
The Changing World Money Order	321
US-China Scientific Collaboration is Important and Must Continue.....	324
The US-China Conflict: Security vs Growth	326
The Sino-American Technology Conflict	328

Washington and Beijing: Proactive programming based weapons arms race	330
Lithium is Vital for a Sustainable Energy Future	333
International hypocrisy: embracing Ukraine while criminalizing Palestinian resistance	335
Economic Inequality	337
The Clouds of Economic Weakness are Approaching	339
Smart Agriculture: Sustainability and Resilience in the Face of Climate Change	341
Fossil Fuel Debt - A New Form of Colonialism	343
The Parallel Economy	345
Determinants of the effectiveness of public spending policy on economic growth	347
The Role of Banks in Supporting National Development Public and Private Banks, Competition or Integration	349
Blockchain Technology: Redefining Relationships between Individuals and Organizations	351
The resistance: Dignity and Freedom Struggle in the Face of Occupation Oppression - The Right to Confront Occupation	353
AI Will Create Abundant Work Opportunities	355
The UAE COP28 Summit - Conclusions and Reflections	357
The Impact of Foreign Investment on Economic Development	358
The Importance of Greater Multilateralism in 2024	360
Technology Trends to Watch in 2024	362
The Necessity for Developing Interactive Programing Policies in the Arab World	364
Unlocking Economic Potentials Under Boycott	366
2024 – A Year with Many Economic Challenges	368
Knowledge, Education, and the Future of Interactive Programing	369
The Financial Losses from Climate Change are Terrifying	371
Washington and Beijing: The Peak of the Technological Dominance Battle!!	373

Immigration and Internal Political Disagreements in the USA	375
Global AI Governance is Essential	377
The Importance of Digital Skills in the 2024	379
Immigration and Internal Disputes in America	380
Our Future is in the Cloud	382
Israeli Disinformation against UNRWA ... Screaming as much as it Hurts	384
AI - A Complex and Diverse Phenomenon	386
Palestine... The Old Died and the Young Did not Forget	388
Reviving Democracy in a Polarized World	390
Interactive Programming is a Double-Edged Sword	392
“The safe passage” is a term intended to denote displacement and the erasure of the Palestinian presence	394
2024 - The Year for Humanity to Shape AI	396
The Specter of High Inflation Looms Over the Eurozone Economy	398
The decision of the International Court of Justice and the reshaping of the Palestinian cause on the global stage	400
Technology Appropriateness for Developing Countries	403
Climate Repair: A Strategy to Stabilize the Planet	405
The Increase in Global Public Debt: A Warning of a Global Financial Crisis	407
Entrepreneurship Should not be a Reckless Adventure... Success is a Value	409
Economic Policy: Between Comprehensive Understanding and the Role of Public Participation	412
Navigating the Challenges of Emerging Technologies in Arab Countries	414
Beijing: Perspectives on Sustainable Growth and Opportunities in Asia	416
TARPA – A Strategic Cross-Atlantic Technology Imperative	418
US-China Relations - Growing Similarities, Growing Tensions	420

Accounting's Strategic Evolution in the Technological Era	422
Redefining Education for a Digital World	424
Harnessing AI to Build Sustainable Cities	426
The Unfulfilled Promises of Climate Action	428
Complicity in Gaza Genocide Should be Accountable	430
AI Models: Tools for Strategic Power	432
China's Transformation from Poverty to Prosperity and Power	434
International Justice: A Unified Message Against Zionist Policies	436
Resurgence of the US Semiconductor Sector	437
Through Technical Superiority, Ideology, Faith, and Certainty, the Palestinian Resistance Triumphed	439
Shared Prosperity in the Age of Technology	442
Developing a Balanced Approach to AI	444
The Entity and its Allies... Malicious Efforts to Leap over Defeat	446
China Seeks New International Relations Beyond War Mentality	448
The Second Global AI Safety Summit	450
The High Consequences of Gaza War: A Burden That the Occupying Entity Cannot Bear	451
"Is the Idol of the West Still Worshipped?"	453
Sustainable Middle Eastern Cities	455
Abu-Ghazaleh Shares Insights from Bruce Stokes on the Upcoming 2024 US Election	457
Impact of Tariffs on the Transition to Green Energy	459
The Impending Data Drought in AI	461
China's AI Prowess	463
Await the Verdict: The International Court of Justice, the Judicial Body Ensuring Global Peace	465
AI and Our Planet	467
The Cost of Internet Exclusion	469
The Spiraling Costs of Developing AI's	471
My message to Palestine has been and will always be Knowledge	473

Rethinking Democracy and Capitalism	475
Safeguarding the US Dollar	477
International Justice in the Face of Western Protection of the Entity	479
The Urgency of Progress Towards Sustainable Development Goals	481
The Imperative to Revitalize Multilateralism	483
A Technological Future for Everyone	485
Pioneering Regional AI Leadership	487
The Need for Greater Financial Liquidity for Disasters’ Affected Nations	489
The Rise of AI Schools	491
Managing Global AI Rivalry	493
The AI Search Revolution – Beyond “Googling It”	495
The Critical Role of the UN in AI Regulation	497
The Need for a New UN Charter in a Multipolar World	500
The Urgency of Reducing Methane Emissions	502
Appendices	507

PREFACE

A Treasure for the Present, a Shield for the Future

Ghada Fouad Alsamman

“Read the book by its title”, so says the proverb. Therefore the title of Dr. Talal Abu Ghazaleh’s book, “Because I Care About You and the Truth” reflects two values, caring and being truthful, which everyone on this earth should be pursuing. Along the way, however, some get tired, some get bored, some get evasive, and some quit.

Only those committed to the truth continue their pursuit steadily, as they believe in its lifelong message. Truth is clear to them and becomes even clearer with experience. Overtime, their experiences accumulate and horizons widen. They then make multiple attempts to change the bitter, dark reality into a bright one; one way or another, no matter how varied the risks and the obstacles they may face . They rely on confidence and certainty in their journey.

In this manner, Dr. Talal Abu Ghazaleh sought knowledge to lighten our Arab nights. He embarked on his journey from the day when he was evicted from his homeland in Palestine as a result of the Zionist invasion in 1948.

The harsh days he lived did not break him. The challenges he faced never made him stumble. He lived his day-to-day life, while keeping an eye on the future. He knew how important the time factor was and that was why he was ahead of everyone. He did not care about the negative aspects. On the contrary, he disregarded them. He sowed the seeds of hope and optimism, attracted youth, invested in scientific competencies, and multiplied the positive aspects, until he established his own institution: “Talal Abu Ghazaleh Global.” Everybody praised him and was eager to become acquainted with him, including enemies and friends, those who loved him and those who envied him; competitors and partners alike.

He did not restrict his knowledge to his business and varied activities only. He planned it to be comprehensive and to benefit others too. He was never tired of thinking about the issues of his community and the problems

facing the generations. He laid the facts before everyone and shared his dreams cleverly over the days. He constantly reiterates that there is nothing impossible or unbelievable in his life. He believed that all good ideas are realizable shareable.

He shared his dreams, rules, theories, and devices with every public and private institution, department, sector, facility, school, university, worker, specialist, amateur, and professional. He also translated his ideas into articles, interviews, seminars, and workshops.

It is very difficult to count Dr. Talal's theoretical and practical accomplishments. This book therefore is including a limited number of articles Dr. Talal Abu Ghazaleh has published in the most significant websites, magazines, and newspapers. The table of contents of the book reflects how serious, diverse, and bold the ideas discussed in the articles are.

Every time I read a book written by Abu Ghazaleh, I tell myself it is his best, only to find out that he is about to issue a new masterpiece. The ideas tackled in this book prepare us very well to embrace the future. He reads history to learn from it, he fights for the truth, gives important pieces of advice for success, loves work and hates laziness, and demands teaching technical education for the coming generations rather than the traditional teaching methods. He persistently rejects the Zionist occupation of Palestinian. He has made various initiatives to face world crises. He has built a CV that is admired by many. He inspires generations and gives hope to all people without exception. His interests are multiple and his knowledge are diverse.

He is a wise man, who applies his beliefs and principles on himself before passing it to the others. He listens. He knows how to utilize the capacities and provide the community with distinguished cadres in all areas.

“Because I Care About You and the Truth” is a book that combines a series of articles Dr. Talal Abu Ghazaleh has written and published in various outlets. They tackle various topics of interest to readers of today, tomorrow, and the future.

Truth taught me to love others, to care
for them and to respect them.
Truth taught me to confront and to win.

Truth taught me to be considerate and
modest: what I am.

This is what I choose to share with you

Talal Abu-Ghazaleh

Going Digital in the New Normal

The pandemic has taken a heavy toll on the world and has affected business sectors across the globe in a manner that has been quite alarming. In an attempt to minimize the impact the pandemic brought, businesses desperately turned to digital technologies to maintain some level of operation through what was a testing time for us all. This was done in many instances in a haphazard, random manner with little planning.

For us at TAG.Global, the pandemic brought minimal disruption as IT has been woven into the fabric of the organization, meaning that we had the productivity tools in place to continue business with our clients around the world. Many organizations however were not so lucky and suffered quite badly as a result of not having a robust IT infrastructure and well qualified digital knowledge workers in place which could absorb the shock that COVID brought.

Post pandemic, I believe that all of us, particularly those that were not adequately prepared, should carefully analyze what happened over the past two years in order to better prepare ourselves for the future. I have been asked by many international organizations and committees about what questions they should now be asking to better prepare for the future. I would start off by asking:

- Were our organizations prepared for remote working both from technology and personnel perspectives?
- Did our investments in IT technologies pay off during this time of crisis?
- In hindsight, what capabilities were lacking that we need to have in place to avoid a similar situation in the future?

I believe that each one of us needs to be shifting mindset and thinking about how we can turn our companies into IT companies. This is what I did when I established Abu-Ghazaleh Intellectual Property (AGIP). AGIP is an IT firm whose management are IT professionals, ensuring that technology is part of its every operations as the largest intellectual property firm in the world.

Modern technologies such as AI, the cloud, remote working technologies and others, provide useful ways to make workplaces smarter, more agile and responsive to change. The key is to put together an IT strategy and start investing in this flexibility so that all the elements are in place to ensure that business continues hindered during challenging times.

Having assisted many international organization develop IT strategies to enable their digital transformation efforts, I would suggest that organizations use the following as a framework to help develop a pragmatic IT strategy that can be developed easily and rapidly:

- Identify what key business processes and activities need to be functional during a crisis. This should include people, processes and technology.
- Perform a gap analysis of where your company currently stands in relation to the required capabilities. This will help to identify strength weakness, opportunities and threats to help identify gaps.
- Identify projects that can be implemented to mitigate the gaps which should be developed with SMART principles in mind along with budgetary costs.
- Put together a project plan for the prioritization and implementation of these projects with support from C level management

Our IT consultancy firm TAGITI, have quite often found that engaging in such projects proves to be a useful for management as it provides a 360 degree view of the organization, its capabilities, as well as what processes/ departments may be out of shape and need improving. When running an organization, it is all too easy to get lost in the daily management of it. Undertaking an exercise like this allows for issues to be identified and improvements to be made.

To this end, I extend the expertise of my IT consultants to any organization looking to develop a robust IT strategy in an independent and non-partial manner to enable them to go digital in the new normal.

Climate Change is Happening Faster than We Thought

The UN has recently released a report that was produced by the Intergovernmental Panel on Climate Change; the report that took a detailed look at the threats and concluded that nations are not doing enough to protect the environment from the hazards that climate change is already bringing with it. Melting polar ice caps, rising sea levels and abnormal weather conditions are clearer to observe across the world, and we may well lose the ability to reverse these if greater action is not taken.

Climate change is happening faster than most expected and it seems that countries are not doing enough as the planet continues to heat up. The effects of climate change are happening so rapidly that it could soon overwhelm our ability to adapt, which would be devastating to our existence on this planet.

I totally agree with the statement of the UN Secretary General Antonio Guterres, who said that the report serves as a ‘damning indictment of failed climate leadership’. It is clear that many are only giving lip service to the issue of climate change, particularly oil and gas companies who are very innovative in making the carbon numbers balance, but make very little actual difference in reality. This is a major issue as there is a growing need for energy around the world, and producing more energy while producing less carbon is indeed a huge challenge.

Heat waves, wild fires, scarcity of water, storms and floods are being seen on an unprecedented scale worldwide and are testament to the fact that climate change is no joke. The adverse effects are being felt widely and the results are certainly more negative than expected. Part of the problem is that nations have been too slow to adapt as the money is not there to help them build the necessary infrastructures to combat the effects. If this continues to happen, we will find more and more people forced to flee from their homes. It is clear that we cannot let climate change just take its course and hope to adapt to it, as early indicators are already showing that we are failing miserably at this front.

We must ensure that global warming does not increase by more than 1.5 degrees, as scientists point out that beyond this level would be catastrophic. In order to do so, we must work together to totally eliminate fossil fuels by 2050 and work with technology and energy companies to develop real alternatives. We must also help the much more exposed poorer nations to climate risks than their western counterparts.

A decade ago, there were pledges by western nations to deliver \$100 billion to develop newer, cleaner sources of energy and to adapt to climate change. Unfortunately, only a fraction of this pledged money has been forthcoming which is essential to prop up less wealthy nations who desperately need help. As an issue that is facing all of us, we must work together to combat it, as otherwise our efforts will go in vain.

As well as bringing down carbon emissions, we must work on taking action to protect our communities and use the strategies detailed in the UN report to prepare better. If this is left uncontrolled, people with the fewest resources and who are least responsible for this will feel the greatest impact with farming land becoming unusable, land becoming uninhabitable, heavier rainstorms decimating crops and extreme weather conditions making living unbearable.

We cannot allow an abdication of leadership to continue and we must bring energy giants to account. Our survival depends on taking real action and as the Chairman of the Consortium for Sustainable Urbanization, I call on world leaders and energy chiefs to work together to help avert an impending crisis of our own making.

Biden Orders Study into Developing a Digital Dollar

It seems that the USA is finally giving the idea of developing the digital dollar the attention it deserves. On March 9, Biden signed an executive order requiring the government to assess the risks and benefits of developing a digital dollar. He has asked the Treasury Department, the Commerce Department and other agencies to develop a report of the future of money and the role of digital currencies in this.

This comes as a result of the explosive growth of cryptocurrencies which has surpassed \$3 trillion US dollars, which could pose a threat to the US dollar as the reserve currency underpinning world financial markets. This could also affect US competitiveness as well as its national security. Understanding the cryptocurrency world including its opportunities and risks is essential as digital assets are affecting how people access banking, improving financial inclusion through digital technology.

The US government needs to understand digital currencies in light of the volatile, unregulated environment in which they currently operate and how they can develop something which is better regulated. This exercise will also allow the US administration to understand the infrastructure that is needed to ensure the proper development and smooth introduction of a digital dollar with all the necessary checks and balances in place. Such a decision needs to be taken with care as the implications of moving in this direction are profound for the stability of international monetary systems that currently rely on the US dollar.

Having a digital dollar that is properly managed and controlled makes sense, allowing faster, more accurate transactions to take place, which also helps to address inefficiencies in the current US payment system. Technology leads to greater efficiency, better transparency and faster processing, which is essential in a world that is already well on its digital journey.

I fear though that the rate of progress developing a digital dollar is far too slow compared to counterparts across the world. If the US government takes too long to develop the digital dollar, this entire industry could

move to other financial centers that have the needed digital currency infrastructures in place.

Trials of China's digital yuan (e-CNY) started in October 2020, with the Chinese Central Bank – The Peoples Bank of China (PBOC) – piloting the digital currency. The European Central Bank has been tinkering with the idea of a digital euro since July 2021, reporting that it needs two years to investigate what this might look like.

The Federal Reserve's desire to create a digital dollar is still many years away with work very much in the preliminary research phase. Although the Federal Reserve released a paper in January 2022 about the pros and cons of adopting a digital dollar, the ultimate decision regarding adoption lies with the US congress. With many intra party divides, it seems there is no consensus for the development of a digital dollar. This adds to an already divided political climate in the US.

Even with Biden's executive order for a comprehensive report, it will take years to develop and pilot a viable product, by which time the USA will be way behind the curve which will further threaten its position as a global leader.

The New Global Technology Order

The advent of technology has led to a power shift from a predominantly American world technology monopoly, to one that has become more dissipated and where power now is shifting to the East. America was previously viewed as the hub of technology and a center for excellence, attracting the best brains and innovating the greatest technology products for the world to consume.

The ubiquity of technology in today's age has meant that America is no longer in pole position on the world stage as the tools for innovation are now in the hands of people across the world. The only barrier is for them to be knowledge workers, which is becoming a de-facto standard especially in Asian countries who have started to overtake their US counterparts by filling local and regional appetites for technology products and service.

Previously, we saw mainly US technology companies leading technology innovation which saw the creation of the Facebook's and Google's that we see today. The US still holds a very strong position with relation to technology, innovation, rule of law and intellectual property, but we are seeing a trend of regional competitors showing great promise in the East. Chinese companies it seems like doing business with local companies as they understand their problems and bring a local element with US companies seem to lack.

They share the same concerns, worries and bring about culturally acceptable technology solutions, using a progressive approach where they look at people as assets to be unleashed rather the western top down approach that focusses on people as problems to be solved. This can be seen in the East with the dominance of local technology firms over US ones, that seem to cater for local needs much better than US companies ever could, meaning that consumers no longer need to accept US technology products and can choose providers that are more attuned to their cultural preferences.

This can also be seen all over the world in many examples of non US companies dominating their US rival in foreign markets. For example, the largest e-commerce player in China is ‘AliBaba’ and in Latin America is ‘Mercado Libre’; ‘Amazon’ is nowhere to be seen. The largest ride application in South Asia is an application called ‘Grab’, rather than ‘Uber’ that has dominated Western markets. There are many other such examples where the US giants have little, if any, market share.

Two thirds of most societies around the world consist of young, under 35 years - old member and they do not share the old mindset where America was seen as the leader of the free world. They have access to technology at their fingertips and are eager to make a difference to build the latest technology innovations. They are bottom-up thinkers and generally dissatisfied in the way that big American tech giants have forced technology options onto them. They have rather, taken things into their own hands to build strong rival technology brands. Talent is now available everywhere to build local, tailored innovations and there is a huge market to be tapped into as global audiences demand more localized products and services.

While the American technology sector is still a strong world player, it will need to change the way it engages with non-US markets. In the past, they were somewhat insensitive to local needs and even not interested in securing non-US business as the English speaking markets were enough. In today’s market, there is not just a willingness for the Chinese to work with the Chinese, but a real enthusiasm for it as they understand local needs and culture much better than the Americans.

I think it is quite clear that the traditional way of doing business by American firms is no longer valid. In the past, they would enter large consumer markets with no competitors and outsource production to the cheapest bidders. For years this has worked like a charm, but as foreign market develop their own talent pools and alternatives, US firms will have to work double time and change their strategy if they want to secure foreign markets.

The world now has a choice and America needs to pay attention if it wants to maintain its global market dominance as technology rivals are fast catching up.

Technology is our future and those countries that want to ensure they have a role to play in this digital future would be wise to focus on building knowledge workers to serve this ever-growing sector. This was the prime reason for me to author 'The Brave Knowledge World'; a book that is a factual journey into the future, showing how technology will change the course of human history in the 4th industrial revolution.

I welcome anyone wanting to secure a position in our digital future to read this book and build capacity in the technology areas mentioned which are set to revolutionize our existence.

The Importance of Digital Transformation

Digital transformation is changing the way in which business is being conducted globally, allowing organizations to become efficient, data driven entities providing them with enhanced business analytics that is allowing them to make better decisions. This is giving organizations, regardless of size or sector, the ability to react faster to change and gain insights into their business in ways that would not have been possible without the implementation of digitalization.

This is essential at a time where markets are under extreme pressure to change in the light of COVID 19 and will be even more important after the crisis, where organizations will need to change the way they function and adopt greater technology in order to operate in a post-pandemic business world.

My business consulting firm ‘TAG-Consult’, is well versed in managing digital transformation projects and has a long history of success of delivering such projects within the public, private and military sectors. TAG-Consult has a team of qualified and well experience consultants who initiate such projects by thoroughly evaluating an organizations procedures, followed by documenting them and applying improvements in order to come up with improved future procedures.

Consequently, what results is a clear definition of specific organizational requirements and specifications for technology solutions that will automate business needs in an effective and efficient manner. In addition to this, TAG-Consult helps such entities develop the technical request for proposal (RFP) documents and also supervises the implementation of the technology solution implementation to ensure the final digital transformation is a successful one and meets all desired objectives.

Considering the current pandemic crisis, I believe that governance and specific managerial consultancy services will be essential for post crises management, while taking into consideration relevant local and international standards to ensure service and product quality as well as long-term business sustainability.

Digital transformation has proven to be essential for the survival of the companies in the digital economy with the primary advantages being:

- Improving decision making process through better business analytics
- Optimization of processes and enhanced integration with operational systems
- Better organizational performance and customer experience
- Enhancing marketing strategy through the opening of new channels to reach new clients
- Improving communication amongst the staff and enhancing work conditions
- Allowing organizations to become more efficient, greener environments
- Enhancing organizational transparency and accountability

I see that digital transformation is an opportunity to revisit company processes and achieve better operational efficiency, particularly in the light of the disruption that COVID 19 has caused and the cracks it has revealed. It is imperative to seek professional help when undertaken such projects as organizations have typically been technology driven rather than process driven, leading to unnecessary investments in technology that have delivered little value.

This is more so the case today with the plethora of technology options now available particularly in the fields of artificial intelligence, internet of things, machine learning and others, that are making this field all the more complex. Technology should be a business driver and not the goal in itself. Such projects need to take into consideration people, processes and culture that are often missed out in traditional technology implementations.

My consultants have assisted many organizations in their digital transformation journey. I offer their expertise to any organization looking to digital transform that want to secure their place in the future of the digital economy.

Challenges with Sustainable Urbanization

Cities have seen exponential growth in their inhabitants during previous years with increasing migration of people from rural to urban settings in a plight to seek better opportunities and services. This shift is putting greater load on city infrastructures to serve growing populations in light of challenges such as climate change, food production, and huge increases in the demand for energy. Its clear that our over-burdened urban habitats need to commit to sustainable urbanization in order to meet future challenges with confidence.

Cities require proper planning and governance in order to provide equitable services to citizens and must be a creator of jobs and opportunities, taking into consideration diminishing resources and with minimum threat to the environment. Through careful planning and foresight, many of these challenges can be addressed and the discussions must stem around climate change and bringing down carbon emissions, as according to the United Nations, the world population is set to increase to 9.7 billion by 2050.

The problematic convergence of urbanization and climate is aggravating the already present cracks in our cities that must be innovative in their approach when planning for the future. Global cities are vulnerable to floods and other disasters and the poor are generally those that suffer the most when they occur. Cities need to better prepare for such events which requires expertise, money and the desire to change. Without adequate planning and investment, many people will find themselves subject to negative impacts of climate change, limited job opportunities and greater social instability that will have a knock on affect on all spheres of society.

According to the United Nations, cities contribute to 70% of greenhouse emissions and occupy just 2% of land area . This is being worsened by increased fossil fuel consumption, greater deforestation and increased production leading to greater pollution; contributing to growing environmental pressures, particularly in developing countries that are seeing uncontrolled urban population growth and an increasing demand on their limited resources.

Geographical changes, people migration and increased demand on city services must be studied in greater detail to determine how they are

affecting greenhouse emissions and the full extent that changing urban centers are having on climate change. We must be able to have insights into what is going on and what consequences this has on our future. With so many factors going into decision-making and the wide spectrum of data that need to be considered, the only plausible way this can be done efficiently is through the use and the implementation of technology to aid stakeholders in making decisions using actual data coming from within their city.

There is a strong argument for the greater adoption of smart technologies such as IoT sensors and AI based systems as cities are becoming dynamic environments that need to be enabled with technology so that more informed decisions can be made and a greener environment achieved. Energy production, waste disposal, traffic management, sustainable housing and climate management are just a few pressing concerns that must be considered when developing comprehensive urban planning frameworks. Technology must play a significant part as achieving sustainable urbanization is becoming a game of cat and mouse that requires real time data and rapid action.

Achieving UN sustainable development goals will require serious work and the approach will inevitably vary from city to city. Capacities differ, technology implementations vary and each city has its own priorities, but it is clear that only through collective action and mutual support will we be able to mitigate the impacts of climate change and make our cities more resilient and smart.

Alongside this, global digital literacy must be improved, internet resources must be made more available, digital inclusivity must be promoted and fair access to online markets and resources should be guaranteed. These are necessary to mitigate the economic and political fallout of COVID 19 and make our cities truly sustainable.

COVID 19 has been a wakeup call showing us how fragile our cities really are. We need to push the adoption of greener technology solutions in order to be better prepared for future events and move from playing marginal roles and seize the opportunity to build sustainable cities for the future.

I fear that if we do not take drastic action now it will be too late and we will have failed in our duty in passing down a sustainable world.

Digital Transformation ... Simplified

We face two choices: “Innovate or Perish”

As the business world grows larger and more complex digitally, internal organizational demands can become overwhelmingly dependent and technologically demanding. In addition, customer expectations are shifting towards agility and a new level of personalized services and solutions that demand superior quality, efficiency, and collaboration. Products & services therefore must keep pace with the digital innovations happening inside and outside the organization; it is really a do-or-die scenario.

Digital transformations is a natural progression for the business, one that is more suited to the needs of the digitally-connected world. However, it is important to keep in mind that digital transformation is not a single change or project, but rather a journey that must begin at the top.

In order to formulate a clear understanding of digital transformation, perhaps it is easier to define what digital transformation is NOT. Digital transformation is not only about creating a ‘change’. While ‘change’ is certainly required to reform any organization, it is not adequate to transform its people, and capabilities, or add new values to customers. In recent years, too many organizations ventured into ‘digital transformation’ journeys through siloed digital initiatives that were intended to create a change, however, these journeys were not holistically designed to be strategically or operationally transformational. And the results were mediocre at best. Moreover, digital transformation is not just about commissioning new digital technologies across the organization without understanding how such technologies can transform processes or the customer experience. Finally, tackling digital transformation reactively with a technology-first approach has proved a failure in many organizations.

The transformation shall begin with awareness and capacity-building programs. Second, collaborative teamwork must be phased into the culture of the organization. Of course, employee trust and empowerment are the foundation upon which teamwork can only succeed. In the end, all of these will eventually influence a culture change capable of embracing and adopting the new paradigm of digital processes and technologies. Then & only then will a new value be created.

More often than not, organizations undergoing digital transformation face many uncertainties and challenges. Each can be unique in its complexity, risk, and severity. To mitigate these and streamline the experience via an optimal approach, a structured approach needs to be put in place. This is what is referred to in the industry as a digital transformation framework. With such a framework, a target metric is defined. Business leaders will be able to monitor, assess, and re-design certain components to accelerate adoption with minimal resistance and increased efficiency. The framework typically also encompasses other metrics such as a business growth metric, an agility metric, and an engagement metric, all of which are designed to provide greater visibility into the implementation processes of digital transformation against the greater organizational objectives.

From a pure technology perspective, it is important to keep in mind that the digital transformation journey must begin with the ‘digitization’ or ‘digital enablement’ phase. This phase is about “datafying” human behavior by taking it from the analog world into the digital realm of bits and bytes. And once the digital data is generated, it can then be shared and processed across the organization via digital systems and solutions. This process is known as ‘digitalization’. Finally, end-to-end integration of multiple services and channels is what will constitute the technology building blocks of the digital transformation journey.

TAG Digital Transformation (TAG-DT), a member of TAG.Global (www.tag.global) organization offers unparalleled digital transformation solutions, education, and consulting services. Building on TAG.Global’s five decades of expertise in providing professional services and solutions with an international network that spreads across more than 110 offices worldwide, TAG-DT brings together the combined expertise of global professionals that have advised governments and private sector organizations for decades.

“We can never be certain about the future and therefore we must continue to be flexible and adaptable so that we can react quickly to the needs of our clients and our market place.”— Talal Abu-Ghazaleh

The Brave Knowledge World

The technology tsunami we are facing in today's world is leading to a revolution in every aspect of life and business. The advanced level of innovation we have achieved exceeds any former predictions. Technology, it seems, has started to run in our veins, and it is powering everything from our personal lives to huge corporations the likes of which we have never previously seen. From the industrial revolution to today's computing revolution, man has made quantum leaps in all spheres of human activity because of the technology that is now at our fingertips. Technology has catapulted our world into an unprecedented era.

In our time, the major force of change is the internet which has revolutionized the way in which we live. Society at large now expects information to be a click away through powerful search engines, which are portals to millions of websites and services. The internet has exploded massively since its inception, driving all other related ICT industries as a result. The hunger for more technology and services is a major turning point, with the technological revolution primarily being driven by the insatiable appetite of consumers globally.

With an 'always on' internet, social interaction, goods and services have been transformed and can be consumed at any time of the day, from any provider, from any part of the world. This has made the world a global village and has allowed our physical world to converge with the digital, to deliver faster, better services to consumers who are constantly demanding and expecting more. This merging of realities will become more prevalent as the internet matures and brings on more users, especially the millions in poorer nations who are utilizing mobile internet technologies to transact on the internet. We are at the beginning of this transformative journey and have much to look forward to.

Today, data, not technology, is becoming the real fuel for innovation and inventions in the future. Data is all around us. Capturing that data and making sense of it, unlocking it, and using it to solve real problems. This is the challenge of scientists and engineers currently. Technology has become more than mere gadgets and toys: it is the future of humanity. The advent of the digital age has created an extraordinary moment in civilization, representing a new horizon for mankind bringing a wealth of opportunity and astounding progress.

In my mind, there is no going back from the onset of this age.

The current age of technological advancement is giving birth to disruptive technologies of the future. This refers to innovations that will cause major changes in the lives of mankind, from the ways in which businesses operate, how healthcare is delivered, how governments are run, to how citizens live their lives and everything in between.

It is the future of these anticipated disruptive challenges, the opportunities and how the world will potentially change as a result of them, that were the prime reasons for me to author “The Brave Knowledge World” book. I wrote the book as a factual journey into the future, showing how technology will change the course of human history in the 4th industrial revolution, blurring the line between humans and technology. It is a technological discourse that reveals a symbiotic relationship between man and technology and covers a broad array of disruptive technologies, anticipating many challenges that such technologies may bring.

In the book, I thought to highlight dilemmas and questions that technologists and lawmakers will need to give serious thought to. I encourage public discourse to take place at all levels as the effects are far reaching and not just the responsibility of technologists.

The book matters to anyone interested in understanding how human future could pan out in the face of rapid technological advancement and what needs to be done to ensure that this transpires in a manner that is conducive to human development. This is part of my long-term mission to build knowledge workers of the future and is something that I have been actively working for over the last four decades. We owe it to future generations to empower them with the skills to meet the growing needs of the digital age.

The Future of Artificial Intelligence

Science fiction has long been focused on the theme of having machines with artificial intelligence (AI), capable of creating, thinking and producing the same way human beings are intrinsically able to. While the extent to which AI can achieve real consciousness is not the subject of discussion here, AI technology as a means to achieve improved productivity and progression within all spheres of life is already underway.

AI is one of the major underpinnings of future technology applications finding its way into a multitude of areas which will usher in great advancements as a result. All smart innovations, the IoT, nanotechnology, autonomous vehicles and others, owe their present and future to the artificial brain powering them.

What makes AI systems so commanding is their ability to analyze and cross reference vast amounts of information instantly, using this information to make decisions and above all to learn. This learning aspect makes AI systems very powerful as they are no longer dependent on statically fed information; they start to resemble organic minds that can think within the programmatic boundaries set within their computer DNA code.

This allows them to build information relationships and cross correlate massive datasets together at breakneck speed which in turn greatly benefits the human beneficiary with insights, reasoning, simulations and ideas from their learning that would otherwise be very difficult for humans to deduce.

The field of modern AI can be traced back to 1956 at Dartmouth College, New Hampshire where the term artificial intelligence came about. Since then, work in the field of neural networks and machine learning have fueled AI progression leading to billions of dollars being pumped into research and development. This has become the new space race with companies and nation states now fiercely competing to bring about bigger and better AI systems for a range of different applications.

Such technology will allow us to address the healthcare challenges here-to-fore impossible to address, such as those suffering from spinal cord issues

that may end up causing paralysis as a result. Artificial implants with built-in AI technology will allow movement to be restored, empowering severed parts of the spinal cord to communicate once more and even improve with AI controlled bionic limbs. AI implants could take over sections of the brain within patients who have suffered brain trauma and quite literally make them human again. AI-enabled exoskeletons will be life-changing for the elderly and sick, giving them free movement once again.

The boundary between human and computer will distort as they become progressively intertwined. AI will not exist as a paradigm on its own but will in fact change to become IA, an Intelligent Augmentation of human with AI, magnifying human intelligence to unprecedented levels and powering the Singularity.

Hypotheses and conceptions formed by the human mind will be aided by AI to cross reference billions of cumulative global datasets to allow humans to attain much more precise and informed conclusions, thereby furthering the boundary of the Singularity at an exceedingly immeasurable rate. The AI intellect will surpass our current human brains, being able to digest and synthesize millions of books on a particular subject in seconds and having all data thereof available as though we always knew it.

AI will revolutionize the way in which national crises are tackled, autonomously dealing with critical situations such as search and rescue after an earthquake or clean-up operations in situations toxic to humans. Current civil defense setups will comprise AI-controlled vehicles and robots as a front defense line against hazards, with their work being overseen and managed by human counterparts.

AI robots will be able to zoom out to the scene of accidents, lift vehicles with ease, cut through car chassis with safety, scan passengers for injuries on the fly, pull out victims, disable fires and other hazards and even administer first aid. Work has begun on all these applications and it is no exaggeration to say that such technology will be in our cities in the near future.

The same type of robotic AI machines will be used in sectors which are perilous to humans such as mining, deep sea occupations, nuclear facility operation and maintenance, plus many other hazardous activities, providing a level of safety and accuracy never previously seen.

Factories and manufacturing plants will be complete black box environments, totally robotized and controlled by AI from start to end. This will almost abolish any human intervention in factories prone to huge consequences on the skills required by the workforce of the future, which will be led by knowledge workers. Lifelong learning will be the key skill the future workforce will need to ensure they remain employable, focusing on creativity, ingenuity and out of- the-box thinking.

This matter has become such a concern to many to the point that some have suggested a type of Universal Basic Income (UBI) be provided to compensate for the lost human jobs taken over by AI. It would be funded out of additional taxes that AI-enabled factories would have to pay and compensate human workers. This could certainly be possible as the economies of scale that AI will provide will allow companies to massively increase their volume and output quality thus generating greater revenues.

The implementation of UBI remains to be seen and will certainly be an interesting concept to follow while moving forward, but I strongly believe in empowering workers with knowledge in order to increase the value they provide to their employers and the society at large.

Space travel will become a largely robotic affair with AI-controlled robots furthering our knowledge of space in a way humans would never be able to. Such sentient beings would be able to go to the most inhospitable locations in our universe and be able to perform many years of research and space exploration without having to put human lives at risk, all the while reporting their feats to their earthly masters. Deep sea exploration, mining and underground exploration will also be transformed in a similar manner.

The financial establishment worldwide will be controlled primarily by AI algorithms, improving transparency and eliminating fraud as a result. The next generation of traders will be AI machines which will compete to

predict trends within markets and identify profitable investments. No doubt competition between investment houses will rise to develop the latest and most sophisticated AI machines, enabling them to widen investing choices by processing massive sets of variables and selections. Human trading floors will end up becoming a thing of the past.

The intelligence within AI systems will develop to become able to respond as humans do to any conversation, throwing in all the semantic and syntactic morphologies which go into everyday conversation making, such as banter, small talk, emotion, proper contextual comments, objective facts, subjective ideas and all the other associated day to day idioms and expressions.

Eventually, AI will be able to far surpass the Turing test; a challenge developed by Alan Turing in 1950 to test a machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from that of a human.

The future of AI is indeed exciting as it is set to impact many aspects of our lives. My hope is that this technology is used to launch mankind into a new model of existence where humanity is better shared between fellows and where disparity between societies is reduced.

The Inevitable Digital Future

The current pace of technological adoption is truly astounding with the world becoming more 'digital' by the day. Digital has permeated through every facet of our societies, transforming every aspect of our existence, bringing great prosperity and benefits that can be seen in the way it has helped the World through the COVID 19 crisis.

This revolution has generated elements that have improved the society, but at the same time it produced new series of challenges that must be addressed to minimize the negative impacts in order to satiate our growing hunger for the digital in a healthy and holistic manner. Digital has seen the development of entirely new ecosystems and supply chains, employing millions in roles that simply did not exist fifty years ago. The great economies of India and China are testament to this fact, becoming the technological powerhouses that is in turn shifting the balance of power from West to East.

Any economy that wants a place in our inevitable digital future must invest in its digital infrastructure and capacity. Those that control technology will control the world and that is why we are seeing an ongoing battle between countries such as the USA and China, with frequent technological sabre rattling. They know very well that those that can tame this beast will in effect control our world. For the 'democratic' West, this is an unfathomable prospect that keeps their administrations up at night.

It is a revolution beyond their control.

Barriers to entry are much lower than those of the industrial revolutions of the past, with the Internet providing all the expertise you could possibly need to become a part of it. Those that innovate will become the employers of the future, and it may be that the hunger of Eastern nations for technological development surpasses the ambitions of the West, leading to ‘turning of tables’ in the future.

My advice has always been that those that want to secure a place in this digital future must build capacity in technological areas and aspire to become digital workers that have the relevant skill sets to meet the demands of the global economy.

Those that stop learning, adapting and improving will soon find themselves obsolete and unemployable. This has been seen time and again in history. I, myself, am a lifelong learner and a student of this age where I learn something new every day. From my very early days, I was interested in technology and saw the considerable potential it had in transforming both business and society.

This sparked my interest to learn more and led me to attend a computer course in High Wycombe, UK by IBM, showing their ‘office computer’. This was in 1965 and the ‘office computer’ was the size of an entire room and needed a team of technicians to operate. I immediately realized that this was the beginning of something significant, and in 1972, I established TAG.Global as provider of business and management consulting services with technology at its very core; which has now grown to over 100 offices

globally. This would not have been possible had it not been for the advent of technology that now underpins every service we provide.

Governments and societies around the World that do not adopt technology and join this digital tsunami will find themselves obsolete, isolated from the global economy, inefficient and unable to adequately meet sustainable urbanization and climate change objectives. The use of technology is fundamental in the bid to develop sustainability in a manner that limits impact to the environment. The UN has called this the Decade of Action where serious work needs to be put in to accelerate global efforts towards meeting UN Sustainable Development Goals (SDGs) by 2030. This in my mind can only be done through technology as we need to be smarter and working harder.

Over the last twenty or so there has been a trend for cities to start smart city initiatives to deliver more efficient, equitable services to their citizens. These initiatives have seen varying degrees of success, with some achieving world-class implementations while others failing miserably. What started as a utopia prophesized by many technocrats has actually been a difficult concept to materialize. This deserves to be revisited in order to refocus global efforts, as time is ticking. There are real issues that need to be addressed as this is an extremely complicated affair that requires multi stakeholder input, strong public-private partnership and pragmatic leadership.

I have discussed at length the development of smart cities in my new book called “The Inevitable Digital Future”, available in both English and Arabic. We have a responsibility to leave our grandchildren with a World that is sustainable and green.

I hope this book proves useful to those looking to build smart cities and paves a way that future generations can proudly look back upon, remembering us as fathers of action who acted with wisdom and insight.

The Battle for the Mind

Modern warfare has become much more sophisticated than ever before, with militaries all over the world pumping billions of dollars to develop the latest technological weapons in a bid to win their wars. Novel strategies that militaries have tested and implemented over recent years include economic, cyber, information and psychological warfare.

Today however, a completely new form of combat is being developed under the name of ‘cognitive warfare’ that controls the way humans act and think. This may sound like science fiction, but recently NATO has been actively engaged in weaponizing the brain and hacking individuals in a completely new form of warfare to control human behavior. They are even thinking of expanding their traditional domains of warfare; land, air, space, sea and cyber, to include a 6th potentially much more lethal military area under the title of the ‘human domain’.

NATO is heavily investing in research in this domain; the cognitive warfare which aims to make everyone a potential weapon, and strives to develop a 5th column within target nations in a manner that would be unknown to them. The brain is now the new battlefield and it is likely that conflicts of the future will target the minds before engaging in physical combat.

A report sponsored by NATO in 2020, regarding cognitive warfare, states that capabilities in this area must be built and that militaries must work with academia and the private sector to weaponize social sciences to develop sophisticated cognitive warfare capabilities.

It seems that such warfare has already been tested out on populations under our noses with ‘The Ottawa Citizen’ reporting that Canada’s Joint Operation Command used the COVID pandemic to test cognitive war strategies and tactics against its own people. This style of warfare puts the mind at the center stage of the battle with the objective of influencing opinion, sow dissonance, mentally decimate and build specific narratives in minds, which can aid in disrupting society before a single bullet is fired. NATO, US DARPA and other western military agencies are heavily investing in this domain to develop this new breed of military weapon which is aimed at debilitating human minds.

This has huge implications as attacks under this new breed of military campaigns can potentially take place at any time and without the intervention of military powers. Ubiquitous access to the internet, smart phones and the availability of social media big data and AI technology means that sophisticated attacks against the minds of any nation can be developed and launched without any forewarning and without targets knowing that they are literally being hacked to think and act in a particular way. All of this is incumbent on having access to information, which we are now producing in abundance everywhere through the plethora of online applications and platforms we engage with on a daily basis.

This can be easily leveraged by militaries to understand their target audience better and develop novel ways to affect their thoughts and actions. It goes without saying that if one can mentally disable his foe, the battle will have been won before it even started. This becomes a very powerful weapon in the hands of those who wield it.

Just as marketing advertising has become the mainstay of social media companies, with them generating billions from marketing revenue, I can see these same players working closely with militaries to provide them with this big data and become even more powerful than they already are, going on to generate trillions as military budgets increase year after year. The battleground will become the internet with no beginning or end to such campaigns that can be conducted 24 hours a day without respite.

We must start to build our own capabilities in this area so that we can detect and defend ourselves from this trojan horse. Whether we like it or not, this technology is already here and will find its way to us, subconsciously influencing the thoughts of our nations and the ways we act.

I strongly urge our governments and military agencies to double their efforts to research and develop capacity in this area, particularly in specializations such as nanotechnology, biotechnology, information technology and neuro sciences.

If we do not do anything, we will become lime lambs lead to their slaughter and pawns with no control. It seems that winning future wars will be based on ones superiority in cognitive weapons and the extent to which minds can be manipulated.

I Predict: The Worst is Yet to Come

Digital Transformation:

I have emphasized on previous occasions that digital transformation is an inevitable phenomenon, whose control over human life is accelerating to a degree that may exceed human adaptability, if we do not take the necessary measures to keep pace with it. As a result, all interactions between countries and individuals will become “digital”; without human contact. A lot of developments in this regard have been achieved so far, but more is yet to come, including all activities and practices, either to fully digitize activities that were partially digitized, such as education, administration, trade, transportation, and others or to take over new human activities that have not yet moved from their traditional framework to the digital framework. Given this, we must prepare for the digital revolution in all its manifestations so as not to fall behind and widen the gap between traditional practices, which are out of date, and modern ones, which represent the future. It is a race against time and there is no room for waiting and slackening.

The Struggle over the Unilateralism of the International System:

Unilateralism - or the international system subject to unipolarity - simply means that a superpower controls the fate of the rest of the world, by controlling the United Nations and its decisions. This is the worst situation that can afflict our world in terms of the practices that are neither subject to international law, nor the principles of proper interaction between states, nor to standards of justice, or respect for the rights or legitimate interests of other countries. Therefore, unipolar practices may lead to wars, aggression, enforcing sanctions, domination, and imposing control using blackmail, threats, intimidation, and so on. This phenomenon is familiar to us in the Arab world as a result of the domination inflicted on our countries by greater powers, either individually or collectively.

Is “dualism” the solution? That is, “the rule of the two poles”. The answer is a resounding “No”.

During the Cold War era (before the collapse of the Soviet Union) the international system was subject to bipolarity; with the Soviet Union and its allies on one side, and the United States and its allies on the other. Bipolarity created some balance in terms of one of the poles confronting any action by the other that affects its interests, or the interests of its allied countries. This

mutual response prevented individual intimidation, preventing harm but not necessarily achieving justice, or even benefit in the case of disagreement on a specific position. However, there are instances where the two poles agree on procedures and policies that do not fall under international law. In such cases, the international organization was controlled by the majority rule of the major powers and issued unfair and illegal decisions against weaker countries.

The Dollar as an International Currency:

When the Soviet Union collapsed in the last decade of the previous century, control of the entire international system rested in the hands of the other pole, that is, the United States and its allies. US control has strengthened the subjugation of the entire financial system to the US dollar, which has become the only reference for all currencies and transactions between all countries of the world. This put a lethal weapon in the hands of the United States to silently wield it by imposing sanctions to paralyze any disobeying country that conducts any financial transactions without using the dollar... no sale, no purchase, no import, no export, and no ability to benefit from the national currency of the sanctioned state.

The phenomenon of economic sanctions and the dominance of the dollar has been exacerbated to the point where it has cast dangerous shadows on all economies of the world without exception, including the US economy.

BRICS Currency as an International Competitor:

Naturally, this provoked reactions from the affected countries and motivated them to take countermeasures, beginning with Chinese efforts to offer an alternative to financial trading on the dollar to the concerned countries, and then expanding to include others.

We are now witnessing what Russian President Vladimir Putin revealed; that work is underway to create an international reserve currency based on the currencies of the BRICS countries, during a speech to the participants in the BRICS Business Forum that was held recently. The word “BRICS” is an abbreviation of the names of the countries with the fastest economic growth in the world: Brazil, Russia, India, China and South Africa. During the forum, he stated, “Together with BRICS partners, we are developing reliable alternative mechanisms for international settlements. The Russian Financial Messaging System is open for connection with the banks of the BRICS countries.”

He added, “The Russian MIR payment system is expanding its presence. We are exploring the possibility of creating an international reserve currency based on the basket of BRICS currencies... It is important that, despite all the problems and difficulties, BRICS business circles have been consistently enhancing mutually beneficial ties in the areas of trade, finance, and investment.”

Challenges and Dangers of War:

The world is now facing successive disasters either as a result of wars and conflicts and instead of the international organization and its influential members working to extinguish them according to international law; it is satisfied with empty statements and vain declarations, while its members race to pour fuel on the fire of successive wars, the latest of which is the war we are witnessing between Russia and Europe. We have not seen any sincere international effort to stop this war, nor to stop the destruction, death, devastation, siege, sanctions, and disasters that we witness every moment. We only see the different parties racing towards incitement, imposing a siege, sending weapons and mercenaries, destroying communication, wasting all kinds of resources, and creating suffocating crises all over the world without any justification.

In light of such a paralyzed international system, and as the United Nations refrains from exercising its duty, every country works to protect itself from stronger countries and secure its needs and interests. Then, those countries are forced to waste their resources on arming and entrenching instead of spending what they have on construction and improvement and the development of life for the better. Since no country can secure sufficient protection for itself, the international system, represented by the United Nations, was established to provide protection, security, and peace to its members and to absolve them of the task of doing so unilaterally.

Deglobalization:

Unfortunately, this is the situation at the moment. As a result, countries work to protect their interests and their existence, retreating from the framework of globalization towards: “My country above all else.”

“Globalization” is the state that resulted from the disappearance of distances and barriers that separated the countries and regions of the world as a result of the development of different means of transportation and communication.

Hence, all regions and countries of the world opened up to each other, and peoples converged, and it became easy to travel, deal, cooperate and exchange interests to the extent that the entire globe became akin to a single village.

Naturally, globalization was not completed for objective and understandable necessities. However, communication is increasing, despite the efforts of extremism, violence, and malicious groups that took advantage of the removal of barriers and were able to cross borders easily to commit crimes and atrocities against innocent people, forcing many countries to re-impose restrictions on movement that were previously removed.

Positions regarding globalization differed. Some condemned it and held it responsible for the chaos that prevailed, and others consider it a natural and inevitable phenomenon, and if we had made use of its advantages wisely, in light of an effective international system, there would be no chaos. So, globalization should not be classified as either a good or bad phenomenon. It is a natural phenomenon and it is not responsible for any misuse that occurred in its wake.

International System Failure:

If any failure can be attributed to globalization, it will be the result of the chaos resulting from the failure of the existing world order and the impotence of the United Nations. When the international system is reformed, many other issues will be fixed along with it. Then, we will move on from the time of wars, conflicts, the arms race, backwardness, the spread of epidemics and human tragedies, the spread of the phenomenon of asylum, the destruction of the environment, the waste of all available resources, the spread of hatred, extremism, blind terrorism, and the threat to the lives of individuals and societies, no matter how far from the areas of conflict to a world of security, prosperity, progress, happiness, and noble dealings between all the peoples of the earth under the protection of an honest, wise, and effective international system.

The Worst is Yet to Come!!

1. The challenges of the Chinese rising dominance
2. The scourge of war
3. Famine and scarcity of food and medicine
4. Energy wars and outages
5. International currency challenges

6. Technical gap risks
7. An unfair world order
8. Social crises
9. The crisis of depression and high prices
10. Internet governance and the challenges of alternatives
11. Environmental pollution is getting more serious by returning to coal
12. Water crisis
13. Epidemiological challenges
14. Unilateral sanctions and their repercussions
15. The unemployment and poverty crisis
16. Disputes over the principles of intellectual property rights
17. Supply chain issues

The Solution: The Need for Democratization between Countries and Within Countries:

The solution to all these and other dilemmas is a democratic international system committed to the United Nations Charter, which provides all states with equal rights and the necessary international protection against every aggression or transgression by any party.

This situation will not be achieved without sincere agreement between the so-called superpowers to respect the international organization, its law and its charter, and the abolition of the veto right that distinguishes five countries over the rest of the more than 193 member states of the international organization. Otherwise, the international system will remain paralyzed and unable to achieve any of the requirements of the Charter, the most important of which is the peace and security of the two countries. Therefore, wars, conflicts, and economic crises spread without the United Nations making one move. Consequently, the destruction of the environment continues as a result of the non-compliance of the influential countries with the necessary measures to protect the environment as these basic measures conflict with their industrial, commercial, and economic interests in general.

A Call to the Wise Figures around the World:

We have become accustomed to “it gets worse before it gets better”, meaning that agreement between different parties is only achieved after wars and their dire consequences and resulting destruction. When the warring parties

despair, they are forced to go to the negotiating table. Why not reverse course and wisely negotiate instead of resorting to arms first, or resorting to destruction rather than building?

All I say is that if the leaders fail to agree on an international system to be implemented by the United Nations and its various organs, then the wise figures of this world should have their say. They have to come together to set a system and a law for our world and present it to the leaders so that they may see the best course of action to take.

In conclusion, continuing on the same path that led us to where we are is a dangerous endeavor, and what awaits us is much more hazardous than the horrors that we have already witnessed. We must, therefore, not go down the path of destruction and seek a different route.

In my capacity as Honorary President of the international research forum “Bosphorus Summit” since its establishment ten years ago, I will call on its next conference to invite an international team of (non-governmental) world figures to form a council to study the major international contentious issues and propose solutions for the decision makers at the negotiating table after the war, as is done at the end of every war.

This is because, through my previous knowledge, there is little hope of any meaningful negotiations before the end of the war.

The Importance of IT Auditing

Over the last thirty years, the technological advances we have seen have surpassed any predictions of the past with digital now permeating every facet of our personal and work lives. Organizations have achieved a profound level of automation and efficiency in their work that has led to greater economies of scale and mass production using technology.

Technology is now part and parcel of any organization, and I have been repeatedly saying that many professions like the accounting world, I was initiated into, will in the future require the highest degree of technology expertise to be conducted correctly as accounts become electronic. Alongside accounting, technology has crept into every aspect of organizations' operational activities, from human resources through purchasing. Technology is now rampant in any organization and will continue to grow as we see new technologies take root such as artificial intelligence, IoT, and as we relinquish greater control to technology to help us make decisions.

Even our cities are becoming more dependent on technology in order to build new, sustainable cities at a time where innovative solutions are required to cope with increasing urbanization and providing equitable services to a growing population. I have written at length of the development of smart cities in my new book 'The Inevitable Digital Future'.

Technology then, has become the beacon of light to which all of us are flocking and in turn means that we are placing more reliance on technology. This increased reliance means that technology must be governed and audited in a robust, transparent manner and is no longer something that can be swept under the rug or dealt with in a superficial manner. Technology auditing is paramount for all organizations to ensure that it is delivering the value expected and it is effectively controlling organizational risks. Technology auditing has become as important as financial auditing and traditional auditing in the past; services which TAG.Global has been providing for half a century.

The demand that I am seeing for technology audit under my IT consulting firm, TAGITI, is now unprecedented, with regular requests from leading firms to audit their IT implementations to provide assurance to executive management that technology is in alignment with business, delivering the value expected and is in line with regulation as regulatory bodies demand greater compliance. Data is now money, and organizations must ensure their IT infrastructures are secure and in-line with international best practices.

In my mind, technology auditing is a necessity for all organizations as it:

- Reduces risk and strengthens operational controls - The planning and execution of an IT audit consists of the identification and assessment of IT risks in an organization. Once risks are assessed, there can be clear vision on what course to take - to mitigate the risks through controls, to transfer the risk through insurance or to simply accept the risk as part of the operating environment.
- Assists in compliance with regulations - The IT auditor serves a critical function in ensuring that specific regulatory requirements are being met by the client organization, which is of particular importance to banking and finance entities.
- Facilitates communication between business and technology management - An IT audit can have the positive effect of opening channels of communication between an organization's business and technology management. Auditors interview, observe and test what is happening in reality and in practice. The final deliverables from an audit are valuable information in written reports and oral presentations. Senior management can get direct feedback on how their organization is functioning.
- Aids management in oversight of technology - An organization's technology exists to support business strategy, functions and operations. Alignment of business and supporting technology is critical. IT auditing maintains this alignment and demonstrates the value of technology to the business operations.
- Improves technology governance - Central to IT auditing and to overall IT management is a strong understanding of the value, risks and controls around an organization's technology environment. More specifically, IT auditors review the value, risks and controls in each of the key components of technology including applications, information, infrastructure and people that in turn allows for better IT budgeting and planning.

TAGITI's services in the field include:

- Application systems audit and review - The main focus here is to review the core financing systems, accounting systems features, application interfaces, and information flow, and assess it against international best practices for accounting and application systems as well as business requirements.
- General computer controls audit - This service focuses on IT controls that are designed to manage and monitor the information systems environments, in addition to the IT controls over the acquisition, implementation, delivery and support of systems and services.
- IT security audit, penetration testing and vulnerability assessment – These services allow us to identify vulnerabilities in an organization's IT infrastructure which is essential as more services become available online. It provides assurance that infrastructures are secure and internet worthy.

It is imperative to employ the expertise of well-seasoned professionals in this area as it is highly complex. TAGITI has many years' experience in performing such audits and I extend their expertise to any organization looking to undertake this important activity.

Artificial Intelligence is the Enabler for Future Marketing

We are now living in a digital world where consumers are constantly being bombarded by an enormous variety of goods and services from providers across the globe. From traditional advertising to targeted online campaigns, companies are using a plethora of tools and techniques to get themselves in front of customers, in an attempt to secure a greater market share in a borderless economy. This unprecedented level of competition is pushing companies to become more innovative in order to make their marketing strategies more targeted and more effective so that they get more ‘bang for their buck’.

As the digital world has brought with it new technology platforms, companies are enlisting the expertise of specialist marketing firms in order to target relevant consumers in an intelligent manner. With millions of potential consumers online, effective marketing can only be achieved through the intelligent analysis of consumer behavior and sentiment to display relevant advertisements in front of prospective buyers. This renders traditional methods of marketing redundant, as it was a ‘hit and miss’ approach, through mass marketing, to as large an audience as possible in a bid to secure interest and enhance sales. The future of marketing however is a far more intelligent affair. It largely depends on two elements working in synergy with one another - big data and artificial intelligence (AI). Online platforms have started to use this new marketing approach to deliver better marketing outcomes.

A look into how AI works reveals a technology based on mathematics that recognizes patterns through information fed to it. That information can then be used to perform rapid functions on huge datasets. This is extremely useful in analyzing consumer behavior, which identifies the trends and the patterns that can assist in advising on building targeted marketing campaigns. This however relies on having adequate amounts of big data available for analysis, as well as systems, smart enough, to make sense of both structured and unstructured data.

A combination of having intelligent AI systems, sufficient amounts of consumer related big data and the computing processing to crunch this information is now putting together the foundation of future marketing.

The falling costs, availability and maturity of these technologies, have led to greater adoption amongst marketers as the value proposition of them can now be seen. This is a symbiotic relationship between technologies that need each other to exist in a new ecosystem, providing value that otherwise would be nearly impossible to derive using traditional marketing methods as the variables and interactions are far too many for humans to analyze.

Social media platforms, such as Facebook and Google have been quick to secure market share and become leaders in these technologies, establishing huge tech empires as a result of providing rich consumer based information to marketers on habits and trends of their users, allowing for targeted content to be sent to interested audiences.

As an example of the colossal success of using AI for marketing, the revenues of Google's AI based AdSense and AdWords programs generated for them over 134.81 billion US dollars in 2019 according the market research company Statista.

This is a mind blowing amount for a company that develops a software program; a search engine, that has been leveraged as a huge marketing platform to gather information about online consumer habits, their online search history and interests and interactions and help companies build sophisticated marketing campaigns. Marketing is all about getting the right messages to the right audience and there is no doubt that we are at the very beginning of this online AI marketing tsunami.

With many AI marketing tools and approaches now available, it is clear that companies need to have comprehensive AI marketing strategies in place in order to streamline corporate AI marketing activities, maximise the benefits of technology adoption and ensure that budgets are spent appropriately to deliver maximum Return On Investment (ROI). It is important for companies wanting to adopt AI marketing to understand that there are new

technologies, practices, governance and skills that will be needed and that the journey will be an experimental one until companies can use their data to create new value and new experiences for their customers.

The benefits that AI marketing is currently bringing with it is allowing companies to:

- Engage in enhanced advertising by allowing AI systems to intelligently tweak marketing campaigns. Machine-learning algorithms can find new ways for optimizing layout, copywriting and targeting. This allows advertisers to optimize campaigns and test out more ad-platforms leading to more effective campaigns being developed.
- Allowing end users to receive a personalized website experience by AI intelligently analyzing hundreds of data points about users and displaying personalized offers and content through AI systems such as Google Analytics.
- Allowing companies to develop interactive AI Chat-bots which act as online assistants, enhancing interaction with consumers and providing a level of customer support that would not be otherwise possible.

I see that for the coming future, trending AI systems include conversational interfaces and proactive AI home assistants, which enable natural language interactions with AI via voice. We are already seeing such systems with tools such as Alexa, Siri, and other AI home devices that provide voice access to the Internet with a level of home automation.

These systems will be the next target for marketers, as they become a new interface through which consumers interact with the Internet. Such systems will find success not as dumb devices, but as interactive systems that come up with proactive ideas and suggestions that users wouldn't think of. This will provide rich pickings for marketers as these systems mature and become more useful as consumer adoption increases.

AI is improving marketers abilities to automate analysis, tasks, and communications. They are really good at looking at vast data sets and identifying relationships between all kinds of behaviours that humans wouldn't pick up on. AI however is not so good at innovation yet.

As AI matures, I see that such systems will become more creative and increasingly intelligent, eventually becoming a necessary part of any firm by looking at organization-wide datasets and coming up with new, independent conclusions. This will require a substantial shift in mindset and will inevitably become the next brand of business productivity software.

Data here is everything without which AI on its own would serve little purpose.

In conclusion, I would say the AI is not just the future of marketing; it will touch and influence every discipline we currently have and it is the future of everything.

I therefore call upon our youth to focus on becoming knowledge workers to fill such roles and to become experts in AI as this is where the future lies.

I see this as the “survival of the fittest”. Those willing to skill-up will be tomorrow’s winners and there is no reason why this region cannot become a leader in AI technology.

Developing Sustainable Cities

A fundamental shift in our existence as a human race is underway as a result of the internet and the fourth industrial revolution technologies that are revolutionizing the world. The information age is truly upon us and is expanding at an exponential rate, leading to the development of digital societies and linking global communities in ways that were never previously possible.

Technologies such as artificial intelligence, internet of things (IoT) and big data are crucial in redefining the way in which cities operate; helping to deliver cheaper, fairer, more transparent services to a growing population in the face of increased urbanization. Our cities are at the center of prosperity and provide the most opportunities, attracting intra country migration which poses significant challenges in planning, governing and running them. In recent times, cities have borne the brunt of the outfall from the COVID epidemic but have remained as flagships of hope and confidence, providing homes, employment, social and religious facilities as well and health and economic support in a time of uncertainty.

The use of technology is fundamental in the bid to develop sustainability in a manner which limits impact to the environment. The UN has called this the Decade of Action where serious work needs to be put in to accelerate global efforts towards meeting UN Sustainable Development Goals (SDGs) by 2030. Greater leadership, smart technologies, action on city levels and empowering people are key to generating the movement required to create real and long lasting change.

Issues such as population increase, climate change and now the COVID epidemic are real causes of concern as the joint effect they are having on our cities is serious, aggravating social and economic fissures and putting greater demands on municipalities to serve a growing population in a sustainable manner. The only way these challenges can be met is to instigate change by leveraging technology to develop smart, sustainable cities. Cities need to have dynamic frameworks to operate within with technical and legislative experts and the financial backing to meet the goals that sustainable development initiatives have put forth.

Over the last twenty or so years there has been a trend for cities to start smart city initiatives to deliver more efficient, equitable services to their citizens. These initiatives have seen varying degrees of success, with some world class implementations in countries such as Singapore, with others failing miserably. What started off as a utopia prophesized by many technocrats has actually been a difficult concept to materialize at the grass roots level.

This deserves to be revisited in order to refocus global efforts as time is not on our side and there are real issues that need to be addressed. Developing sustainable cities is not a technological issue but rather one of planning, implementation and governance.

It is vitally important for cities to have comprehensive strategy at the onset in order to properly drive a smart city agenda. This will assist in suitably identify the needs of a city as well as the required technology, infrastructure and governance needed to establish a smart city ecosystem. This stage is crucial to get right for a successful foundation to be built as there is no one size fits all. There should be an independent team responsible for managing this strategy and its implementation that should be established as a body autonomous from the government in power. This will ensure longevity of the smart city project and warrant consistent improvement in its overall goals.

As well as having a clear direction and goal, this unit should consist of a project management team with experience in tackling governmental and private entities, a strong technical team that understands technology with skilled contract negotiators, experienced finance and legal team, individuals well-versed in change management, marketing experts as well as specialists in delivering awareness and education. Having cross-functional teams are fundamental to success.

Data is the fuel that powers Smart Cities. All other elements are supportive structures, allowing data to be gathered, processed and acted upon to deliver smart services to citizens. This comes at a price and requires significant investment in identifying and classifying data, categorizing the legal implications of data ownership and developing underlying technology infrastructures that can only be recouped over time. A spirit of data sharing

across departments and governmental entities must be encouraged for the greater good and pragmatic data protection regulation must be in place to avoid abuse and promote trust.

City budgets are traditionally dedicated to providing essential services and quite often the money isn't there to invest in technological infrastructure required for smart cities to be established, which is an even more pressing issue during this period of COVID. This is where the private sector comes in as they have the equity and the needed technical expertise. Public-private partnerships are therefore important to the initiation and longevity of any smart city program.

To transact effectively in this new ecosystem, central management and provisioning of services is key, as well as providing users with a digital identity through which citizens can engage with all smart services in a seamless manner. This includes technical factors such as the implementation of single sign-on (SSO) to provide a seamless experience for citizens where all their transactions can be logged and tracked with easy management. This requires service integration between providers in order to enable such functionality, as well as hosting the services through a secure network that accepts popular forms of e-payment as well as cash.

The introduction of smart services requires a detailed review of current policies and inevitably the implementation of new ones to cover advancements in technologies. Cutting-edge areas such as AI or autonomous vehicles will require feedback of experts in order to understand the implications of such technology and how this can be effectively steered. Policy development requires input from multiple stakeholders and cross-disciplinary experts as services become dependent on one another to work in a symbiotic fashion to deliver the improvement. Policies need to be developed prior to any implementation to ensure that effective governance and transparency are in place.

Any smart city must also have a comprehensive awareness program to inform citizens about the smart services available and training programmes in place to make sure they can use them. Citizens are core to the success and longevity of smart cities as they are both users of its services as well as the

workforce that develop, run and offer them. This means having well-trained staff who can assist citizens whether online, on the telephone or in person to access the services. Cities must actively engage with citizens in order for everyone to benefit from available services, regardless of computer literacy.

I believe that technology based sustainable cities are achievable for all of us. Many cities have excelled in securing gains from which we must learn.

The expertise is available meaning we do not need to reinvent the wheel and barriers to progression must be eliminated.

I have discussed at length the development smart cities in my new book “The Inevitable Digital Future”, available in both English and Arabic which I hope proves useful in developing sustainable cities.

We must work closer together if we are to achieve a greener, more sustainable world. We commonly share this planet with our success lying in a joint global effort to achieve sustainability.

Outcomes of the Arab-American Jeddah Summit

The League of Arab States is our Regional Patron for “Security and Development”

1. Much has been said about the declared, or hidden, goals behind the visit of the US President to the region in mid-July. Zionist propaganda outlets promoted tendentious ideas, some of which are not new but have been repeated for years. By that, I mean the repeated talk about the integration of Israel into the region and the establishment of alliances under different names between Arab countries and Israel, specifically against Iran, as well as the demonization of Iran and the claims that it is the one who threatens the security and peace of the region. The aim is to remove any suspicion of the Zionist threat and Israel's practices against Palestine and other Arab countries, its occupation of the Arab and Palestinian lands for more than seven decades, the siege of Gaza, the colonization of Arab lands, the continuous Zionist violation of international law, aggression, wars, encroachment on Islamic and Christian sanctities, and the oppression and killing of the Palestinian people.
2. It is clear and expected that Israel has been seeking for years to bury the Palestinian cause by flooding the region with various projects, and by portraying itself as the savior, not the aggressor. Unfortunately, these Zionist ideas have found support from the United States and the European Union, who exercise extortionary pressures on some Arab countries to accept it.
3. Now that the Jeddah Summit has finished its work, all doubts have dissipated and the facts have emerged: there are no alliances against any of the countries in the region, and the Palestinian cause has not been eliminated, as the Arab leaders affirmed that it remains the central focus and that the international inability to solve this issue over the decades is responsible for the instability, violence, extremism, loss of security, waste of resources, political confusion and even backwardness in the region.
4. What His Majesty King Abdullah II bin Al-Hussein said in Jeddah; that our region will not witness security, peace, or stability without a comprehensive and just solution to the Palestinian issue, and without the Palestinian people obtaining their legitimate national rights, was nothing but a repetition of what His Majesty affirmed time and time again at every international platform since his accession to the throne more than two decades ago.
5. This is also what was confirmed by the Arab leaders, without exception, whether they participated in the Jeddah Summit or not, and is what they

have constantly emphasized on every occasion. On this occasion, I and particularly proud of all the leaders of our nations for their unified stance towards our common Arab issues.

6. It was pointed out that the Joint Defence and Economic Co-operation Treaty between the members of the League of Arab States and its military annex, the details of which are explained in the Charter of the League of Arab States, where the second article states that the member states consider every armed attack against any or more of them an attack against them all, and therefore, pursuant to the right of joint defense - individual and collective, it is obligated to take the initiative to aid the state or countries that have been attacked.
7. So all the plans that sought to marginalize the Palestinian cause failed in Jeddah, just as the plans to transform the Zionist entity from a trespassing entity to a savior party have also failed.
8. However, although the Jeddah Summit took place in difficult Arab and international circumstances, and despite the American adoption of the Zionist position in all aspects, which constituted a clear prejudice against the Palestinians, as was evident through the program of the visit of the American president; despite all this, the damage was not as major as was previously feared or as dangerous as anticipated.
9. Some lessons can be learned, the most important of which is what the US President said that his country will not reduce its influence in the region and that it will not allow China, Russia, and Iran to fill the void in our Arab region.
10. This is a dangerous and unfair insinuation. Why should there be a void in the region? Why are the vast lands of the Arab world, the bridge that mediates three continents, the land that embraces the cradle of the greatest civilizations, the birthplace of religions, wealth, and enormous potential, with its great rich history and ancient peoples; why are these lands empty, waiting for someone to fill this void? Shouldn't the League of Arab States, which was established more than eight decades ago and its Arab action, be the one to fill the void?
11. In this context, I call on the League of Arab States to take charge again, assume its responsibilities, and present to the world a renewed model of a unified Arab approach and a firm Arab voice that represents, as it did, and as it should, the aspirations of this nation, adopt its issues, defend its rights, and restore the Palestinian cause to its previous position as an Arab League cause.
12. I am aware of the difficulties that the League of Arab States has faced and continues to face; difficulties arising from Arab differences, but this challenge represents an opportunity to overcome them.
13. The time has come, ahead of the upcoming Arab summit, to reconsider

all the negative aspects of the past, the fragmentation, the differences, the scattering of efforts whose dangerous effects we are experiencing, and most importantly the marginalization of the role of the League of Arab States.

14. The sanctions imposed on Syria must be lifted under the unjust and unilateral Caesar Act, which affects the Arab people, and extends to depriving Lebanon of its gas and oil by virtue of its proximity to Syria. What is the legal justification for imposing this siege on Syria, exploiting its oil wealth, perpetuating the occupation of important parts of its lands, and supporting terrorist and separatist gangs at the expense of its sovereignty and the dignity of its people?
15. And the beloved Libyan people who suffer with no fault of their own, while if they were left alone under an Arab initiative, they would handle their own affairs properly, and I do not say their differences, because there is no dispute there that constitutes anything more than a misunderstanding.
16. Dear Yemen, is it not more useful for the League of Arab States to lead a Yemeni-Yemeni reconciliation project? “Sana’a must be reached, no matter the hardship,” following the words of the Saudi crown prince, who called for a “Yemeni-Yemeni political solution.”
17. Why is the League of Arab States not the actual representative of all the issues of the member states, as it was originally intended to be, and the defender of the rights of its members representing 22 countries in international forums instead of each country struggling alone to defend its rights, and forced to resort to the major powers to protect its interests, at unreasonable political and financial costs?
18. Instead of the great powers singling out the Arab countries one by one, why not conduct a dialogue between the League of Arab States - on behalf of its members - and the major countries - the United States, Russia, China, the European Union, and others - on all issues that concern the Arab countries collectively or individually.
19. It is customary to invite the leaders of international organizations (the United Nations, the African Union, the European Union, and others) to attend the protocol celebrations of the Arab summits. It is more appropriate to invite representatives of major countries in addition to international and regional organizations for such meetings to discuss substantive issues and not for celebrations.
20. Unfortunately, Arab issues have gotten much worse that they cannot be ignored. It is time for a drastic and comprehensive review. It is time to revive the role of the League of Arab States.

The Visit of Nancy Pelosi to Taiwan

The officially declared purpose of the visit is to express and to reconfirm the usual American support for Taiwan.

The hidden goal however must be different. It is a US message to urge China to admit that the time for both powers to sit and to negotiate the major challenges they both face and to agree on a new world order, has come.

This American intent (if my predictions prove true) should be seen as a positive step to prevent further escalation of tensions that could culminate in an open military conflict.

In this case, China would take the right decision in responding positively to the American gesture, and would be greatly appreciated for such a noble step. This is the right alternative to the other option, which may compel both sides to go to war to precipitate constructive negotiations; a war that could be devastating for both powers.

My assessment of the situation (as an observer) is that the challenges are enormous, very complicated, very difficult and very harsh; therefore very difficult to resolve. Each of the 15 points of contention between the two sides may defy any choice of a peaceful negotiated settlement and may only be settled by war. I hope that will not be needed.

But, I unfortunately realize, as any reasonable observer may also do, that the current state of affairs and the resulting tensions, should not continue. The problem is that neither side is in full control of the tensions' components, and may not be able to come to the negotiations table voluntarily.

Why should a credible, a respectable, and mutually acceptable party, not step in and suggest a dialogue (not negotiations) under a neutral umbrella to search for political solutions without allowing the conflicts to drift so dangerously to war.

Or possibly a meeting to be organized for both sides by the Universities of Harvard and Beijing, hosted at Geneva University for example.

I may be dreaming. But why not. Dreams can sometimes come true.

Sustainable Urbanization

Migration to cities over the past thirty years has massively increased as citizens want to secure better lives. The world's cities have become the centers of national prosperity that has in turn put them under greater strain to deliver equitable services to a growing population. Our cities provide greater and better living opportunities and they naturally encourage migration from country to city.

This poses significant challenges in planning, governing and running cities as global demographics shift with such burgeoning urbanization. It is essential that cities worldwide find sustainable solutions to dealing with the population increases, particularly in the light of depleting resources and the need to provide services in a more efficient and fairer manner.

This problem has been further aggravated with the COVID 19 crisis that has affected global supply chains and economies in ways could not have been imagined. Poorer countries have suffered the most during this pandemic with inadequate sanitization, limited access to personal protective equipment, lack of social distancing space in cramped housing conditions and even limited access to soap and clean water to wash their hands.

Even with respect to the assumed more robust western economies, they actually proved to be quite frail. Our survival has turned out to be one that can only be achieved by taking collective action and developing sustainable structures that will serve us into the future. We cannot take the mindset of the past and treat the world as a blank canvas on which we can paint what we like. It has become a canvas that is starting to tear at the seams and that requires collective action from us all as the future of our planet is at stake.

COVID 19 has taught us that we all share this small planet and need to build bridges for our mutual survival and prosperity. It is refreshing to see that this spirit has been adopted in an effort to develop vaccines within record time, and shows what we are capable of when we put our resources together for the common and the greater good. We need to pass the fruits of this collaboration to third world countries in order to speed up the international response to the virus and restore some level of international normalcy; albeit under a new normal.

Urban populations are set to explode by 2050 with the UN Department of Economic and Social Affairs (UNDESA) predicting that 2.5 billion more people will be living in our cities by 2050. This is particularly worrying as this growth is set to take place in a few regions of the world, concentrated primarily in Africa and Asia. This requires serious action and proper city planning as otherwise I fear we will be seeing tragedies of epic proportions related to hunger, poverty and long term climate change, which may become irreversible; having serious consequences on our future prosperity as a human race.

Access to services such as education, healthcare, housing, employment and safety are human rights for which everyone should be entitled. Such requirements support the work done by the UN Development Agency and committees such as the Sustainable Development Goals (SDG) and others. Their work is essential to plan the urbanization that will take place over the next thirty years as this will have a huge impact on the quality of life for future generations. Our cities are already overcrowded and the influx of more people poses a problem in developing countries especially where city populations live in informal settlements.

Cities must be designed to grow in a sustainable manner that in my mind can only be done through investing in proper city infrastructure, effective policing, sustainable energy production, healthcare and education for all, as well implementing strong governance to ensure transparency, to reduce cronyism and to increase employment opportunities by providing an attractive climate for business investment. I see this as essential to prevent the possibility of developing cities becoming breeding grounds for crime, poverty and disorder if proper action is not taken.

If our global cities are developed and upgraded with the support of urban planners, architects and engineers, they will flourish long into the future. There are numerous cost effective technologies now available that can be implemented to produce better, greener, more sustainable cities.

This is a crucial endeavor that requires the utmost attention as there is a pressing need to make real change before time runs out. We do not need to re-invent the wheel as there are blueprints and expertise available through agencies like the United Nations and the Consortium for Sustainable Urbanization in New York that I have proudly chaired since 2015 to help develop a sustainable future for our planet.

The Technological Cold War may trigger the expected Third World War

Special Report

The recent visit of the speaker of the United States House of Representatives Nancy Pelosi to Taiwan was officially supposed to reassure Taiwan of US protection in the event of an invasion from China and to show that the US stands with Taiwan once subject to Chinese threat.

1. Taiwan has been self-governed by a local government but within the Chinese Republic, since 1949, but Beijing views the island as part of its territory and has the desire to reintegrate Taiwan into China.
2. The reason that Taiwan is so important to the USA and subsequently the rest of the world, is Taiwan's dominance in manufacturing processors –semi conductors.
3. The production of processors is a highly complex affair which Taiwan has been developing for almost forty years; largely monopolized by Taiwanese giant the Taiwan Semiconductor Manufacturing Company (TSMC).
4. The fragility of the world economy with respect to semiconductors was seen during the corona pandemic where semiconductor supply chains were severely affected, and that sent shockwaves through the world.
5. Semiconductors processors are used in everything from daily electronic items to airplanes, sophisticated defense systems, modern cars and everything in between. Our modern society is unable to function without this highly important innovation, the significance of which depends on how the semiconductors are going to be used.
6. The shortage of semiconductors that started during the pandemic rang alarm bells across the world, and that has pushed the prices of goods that require processors to unprecedented levels.
7. TSMC through years of innovation holds tens of thousands of patents and through world-class research and development facilities, continually innovates processes to produces ever smaller, more advanced processors. TSMC's facilities are so advanced that even chip manufactures that have their own processor facilities such as Intel choose to use TSMC to produce a large majority of their CPU's.

8. TSMC produces 56% of global semiconductor chips and over 90% of the advanced processors used in sophisticated AI applications.
9. From a business perspective, it is never a good idea to be dependent on one product which is why we are seeing moves from the two global giants China and the USA to boost their onshore production of processors. Both countries have processor manufacturing facilities that need to be modernized if they are to diminish Taiwan's dominance as the leading supplier. Doing so however is by no means easy, requires specialized expertise, billions of dollars and time to upgrade.
10. Processors today consist of up to 12 different layers of electronics connected through microscopic circuitry, which poses great challenges in terms of both engineering and physics as the scale gets smaller, hence the need to continually innovate better manufacturing techniques.
11. This is not a comfortable situation for either the USA or China as they compete in the technological cold war. Each one has been implementing illegal and economic instruments such as barriers, investigations, sanctions, and tariffs to target each other's technologies and strengthen their respective geopolitical positions.
12. In a major step, the US administration has decided to fully fund the CHIPS act where it has pledged \$52 billion to boost onshore US semiconductor manufacturing. The US is the world's leading processor designer with the bill designed to supercharge US efforts in semiconductors, legislating \$200 billion over 10 years to better compete with China.
13. As a result, Intel is focusing on upgrading its own facilities to boost onshore American production which is estimated to cost it \$20 billion to upgrade its Ohio facility, expected to open in late 2025.
14. Samsung is set to open a similar manufacturing facility in Texas to be operational by the end of 2024. TSMC has also caught wind of this and is planning to open a \$12 billion facility in the Phoenix, Arizona, with advanced processor manufacturing facilities. Eight of the fifteen largest semiconductor companies in the world are in the US with Intel leading the pack in terms of global sales.
15. President Xi Jinping has repeatedly called for China to prioritize self-reliance and wants it to meet 70% of its domestic processor needs under the 'Made in China 2025' policy. However, China was only able to meet 16% of its needs in 2019 and remains a net importer of processors, being subject to the tightening of export controls by the US.

16. While China has been recruiting international talent in this space to bolster its semiconductor expertise, it has faced difficulty in dealing with overseas companies that are critical in the semiconductor supply chain. The Dutch company ASML (Advanced Semiconductor Materials Lithography) is the sole supplier of critical lithographic chip making machines used to etch silicon wafers to produce more efficient designs.
17. Through US intervention, exports from ASML to China have been blocked and export restrictions have been tightened by the US globally on Chinese technology companies such as Huawei and others, to the extent that even TSMC has severely restricted its dealings with Chinese entities.
18. The US is ahead of China in the semiconductor sector in terms of both research, development and manufacturing. The US has international allies in this field and is highly influential on the international stage, attracting talent and adopting a pro US - anti China stance when it comes to processors.
19. I see that China's progression will be dependent on how its relations proceed with the US and the level of diplomacy it can muster in its negotiations with Uncle Sam.
20. Having said this, we should not rule out China as it is a highly resourceful country and could play well on its experience in developing internal capacity, foster better relations with the international semiconductor community, purchase foreign firms that can fill the gaps they have as well as well as put more resources into research and development activities.
21. Both the US and China need time to develop their semiconductors infrastructures as this is both expensive and time consuming. It costs billions to build such facilities and years for them to come fully online. This means that for the short term at least, Taiwan will continue to be an important role in the global semiconductor sector, and in the expected "Sino-American War".

Educational Reform is the Basis of all Reform

I have discussed in many of my previous lectures and articles that democratizing education is key to greater prosperity. In recent times, this has been fueled by the availability of digital technology which has invaded our lives, significantly changing the manner in which we live and transact with the environment around us.

I have highlighted the urgency for our traditional schooling system to be reformed in order to better cater for ‘digital natives’ i.e. the new-generation of students for whom technology is an existential part. They start using technology from the cradle with sophistication and finesse and by the time they are of school age, they have literally mastered its use! Therefore, traditional modes of education are no longer sufficient for such students who, quite literally, have access to more knowledge using online means than their teachers. The days of teaching with chalk and blackboard are well over.

The effect of technology on the way that education can be delivered is revolutionary, providing teachers of all grades with a new set of tools, to produce and deliver teaching content. Students can learn using a wide array of technology options and have a rich pool of online resources to supplement their learning. This is essential particularly in recent times where we all faced huge challenges in educating our children due to COVID lockdown. In the past, teachers were the sole purveyors of knowledge. Their role was to teach the students through books, references and other means to convey knowledge to students. However, the advent of internet has changed all that, producing newer, more innovative technologies by the day. Using digital technology such as laptops, desktop computers, online forums and resources, students can become highly knowledgeable in a fraction of the time. Computers that used to take up rooms can now fit into the palm of your hand, with a staggering amount of knowledge available globally in every sphere and domain.

Unfortunately in the Arab world, we are well behind the curve. Resistance to change in adopting and recognizing online education is greatly stifling our progress. We are struggling to cope with this shift and as a result falling way behind. Many criticized me when I had warned that the information revolution will make students equal to their teachers in knowledge; maybe even superior. We are now witnessing this with our very eyes as the information revolution accelerates. Education in all its specializations is now available from the comfort of our homes. All it takes is a click to access that largest information repository that man has ever created. You can literally teach yourself without having the need to travel nor pay expensive tuition fees. Education is now available at every doorstep.

I need to clarify here that I do not mean that teachers, education, or universities, as prestigious educational institutions, will vanish. They will always remain as a foundation for scientific progress and technical development. What I mean is that the role of teachers, schools, and universities has to change to keep pace with technical development. The teachers' role must change from knowledge purveyor to mentor, helping students to access and use online resources in a proper manner. Having such a massive amount of information available is overwhelming, which is where the skill of the teacher must come in i.e. to guide, direct and give students the benefit of their experience and wisdom.

Teachers must turn into navigators, guiding their students through this digital knowledge maze. This however, doesn't exempt those professions that require dexterous skills to obtain these from professionals in traditional settings. Areas such as engineering, medicine and many vocational subjects require students to gain available skills in labs, hospitals and technical settings, where one on one tutoring and direct examination is essential. With such specializations, remote learning can only play a limited part.

I have repeatedly said that the technological revolution and the development of online services will limit the need for monolithic building to serve people. This goes for governments as well as educational establishments who can drastically downsize their physical presence and provide leaner, efficient services in a transparent and more affordable manner using online means.

There is simply no need to have expensive buildings to operate out of, with technology eliminating the need for most of these.

I'd like to reiterate a point I brought up in the past which was that the education law in our country must be reformed to remove the need for Universities to have vast plots of land in order to obtain a license to operate. In this age it doesn't make any sense and is something that must be reviewed and reconsidered.

Educational reform is a process that requires a constant review of legislations and curricula and its alignment with market needs, so that we graduate students that have real skills that are required in the workplace. Education must allow students to explore the wider horizons of knowledge and avoid indoctrinating them into a fixed mindset. Flexible guidance that encourages innovation and creativity must be emphasized and students should be given greater freedom to explore and learn. We must move away from education that restricts thought and cripples the mind at all costs.

The message of education is a great one. It is the foundation of civilization and the basis of progress of any society. Any reform of any kind must begin with educational reform. Education builds humans. It equips people with science, knowledge, wisdom, morals, integrity, and responsibility and allows them to take part in building a healthy, sound community. It is from such communities that competent administrations and wise citizens emerge.

EDUVATION SUMMIT'22: Digital Transformation in Schools

To talk about digital transformation today, I borrow a phrase I was pleased to be described by “the man from the future” as a clear reference to my lifelong affinity to all products of modern technology, including digital transformation technologies.

There is nothing better than speaking about the blessings of digital transformation in schools and its clear effects in enabling educational institutions at all levels, from primary through secondary and university education, to graduate studies and even vocational education to benefit from specialized and mature educational experiences. Digital transformation technologies also enables schools to adhere to the highest standards of quality, and provide many modern tools for efficient learning and engagement across digital interactive learning platforms.

Digital Learning Technologies and Tools:

- Digital Devices (laptop, tablet, mobile phone) and their role in facilitating the process of digital learning and communication through interactive learning platforms, and are offered today by Talal Abu-Ghazaleh Technology - TAGTech within a wide range of specifications according to all needs.
- Digital Textbooks to enhance the learning experience, engage in more interactive participation, and strengthen the requirements for good documentation (TAG-Archive).
- Online Exam Platforms, which allows transparency and speed in submitting exams and obtaining results (TAG-Online Exam).
- Student Affairs & Management Systems, which helps to document student data and make use of it in the required form, and manage educational affairs such as choosing classes and scheduled material (TAG-SAMS).
- Cloud Services that provide sufficient space for data storage, backup and self-synchronization, and are not limited to local resources located in educational institutions. (TAG-Cloud).
- Learning Management Systems such as Talal Abu-Ghazaleh e-learning management system (TAG E-Learning).

- Internet of Things (IoT) integration into the school environment to enable smart building automation solutions that provide additional security and accessibility.
- Artificial Intelligence (AI) solutions that help teachers free themselves from office tasks such as administrative work, office tasks, answering questions and inquiries and other administrative tasks. AI helps in adding some adjustments in the educational process, such as improving the student's listening and concentration, and the ability to update the curriculum automatically and quickly.
- Big data and Data Analytics solutions that aid teachers in identifying certain trends, gaps, needs and accordingly develop customized learning strategies to optimize content delivery.
- Virtual/Augmented/Mixed Reality (AR/AR/MR) technologies that enhance teacher instruction while simultaneously creating immersive lessons that are fun and engaging for the student.
- Smart interactive displays to deliver digital content to the future student.
- High-speed Internet connectivity via 5G and soon 6G technologies.
- Digital Infrastructure which includes the enhancement of computers, computer networks, database management devices, data centers and networks, enterprise portals, systems, software and services, digital cloud, telecommunications and others.
- The Use of Smart Tablets, “mixed reality” applications and “smart learning stations” to encourage students to study science more effectively compared to traditional educational means.
- Cyber Security solutions and software that enable safe behavior in the use of the internet by students; helps to protect systems and hacking prevention techniques.
- Learning digital skills (such as the DIT Certification offered by TAG.Global).
- Digital Learning platforms and applications that help the student to learn better. These platforms offer interactive digital content related to the curriculum, and offer virtual classes that simulate regular classes; also enables the student to communicate with teachers more easily.
- Smart Cameras as a technological supervisor. The working of these cameras can be enhanced by artificial intelligence and the Internet of Things technologies.
- Online Payment platforms for students.

- The Right to Access the Internet (TAG Knowledge Centers).
- Gamification or learning by playing is very common approach. Starting from kindergarten, gamification enhances student engagement by allowing student to retain subjects and/or concepts permanently. It is also possible to take advantage of electronic tools that provide specially prepared forms for these purposes.

Digital Learning Policies and Strategies:

- Articulate clear policies that can be formulated within legislation or international agreements guaranteeing the right to target groups in the field of technology-based learning.
- Achieving the Principle of Equality in the technological empowerment of Arab countries by international organizations and communities as part of their donor and funding capacities.
- Creating a Framework for evaluating academic institutions by evaluating the integration of education with technology, the outcomes of which would be the development of accreditation standards for academic institutions, such as the number of academics and/or digital transformation techniques required for every one hundred students, for example.
- Continuous Review of Legislation and curricula to ensure that digital transformation applications and critical thinking is continuously injected to enhance such legislations.
- Digital Citizenship Education:
- Internet-based User-Identity verification
- Privacy protection techniques
- Tackling cyberbullying awareness programs
- Respecting Copyright laws
- Digital footprint management programs
- Providing Training Programs related to artificial intelligence skills, including identifying training needs, preparing training courses, and evaluating the trainer and trainee.
- Creation of Interactive Digital Content.
- The Use of Digital and Interactive Games to enhance student participation.

- Providing Digital Access to a variety of topics that cater to specific categories of students according to age and abilities.
- Training within Education in schools so that we equip our young people with digital skills in a way that ensures the integration of digital skills and academic education. And the efforts made should be covered by accredited certificates that enhance the professional and academic path.
- Providing a Distance Learning System, where the school provides educational and training programs on computers to guide their targets from their positions and gradually integrate e-learning technologies with traditional learning to prepare learners.
- Promoting the Commercial Nature of transforming patents into commercial products as relates to digital transformation technologies.
- Giving the Teacher the status of a Technical Adviser/Mentor to get rid of the status of indoctrination in education while ensuring that innovation is linked to educational processes with focus on enhancing research skills in a way that ensures the adoption of a technical mentor instead of the tutor, and the innovative digital human instead of a learned human.
- Learning of Programming and Digital Solutions should be imposed as a basic requirement in the early stages of education, to become part of the evaluation processes for the outcomes of each learning stage, and a criterion for evaluating academics in the same sector.
- The Goal of Education should be to Innovate and not just to memorize information. (Model adopted by TAGUCI).
- Making Human Knowledge Available to everyone digitally and free of charge as much as possible.

Reskilling in the Digital Age

The reliance on technology in every industry is calling for employees with up to date technology skills in order to continue to be of value in their workplace. This is in stark contrast to just 30 years ago where the main demand was for cheap, unskilled, manual labor for factories across the globe. But manual labor has since been replaced by automation in almost every industry, leading to greater efficiency and production, fundamentally changing the role of human employees from simple factory line workers, to more sophisticated roles involving the installation, calibration, operation and management of technology systems.

Globally, business has become highly reliant on technology which has led to a greater demand for technology fluent employees and has raised the bar of expectation, with companies now starting to invest in training and technology programmes to empower their employees with the skills needed to operate a modern business. Therefore ongoing digitization of industry means that those with manual skills are finding themselves with fewer opportunities. A clear case of this was seen during the lockdowns in 2020 where such workers found themselves in extremely vulnerable positions.

The magnitude of the change to digital is akin to the change from agricultural to industrial that occurred in the early part of the 20th century. This saw a major shift in the attitude, skills and opportunities for both workers and companies alike. Unlike that change, the newer digital revolution is happening at a much faster pace and the curve of change is much steeper. The transformation in earlier workforces took place over many years, if not decades, allowing a much smoother transition to a more skilled workforce as well as allowing companies to prepare their environments better for such changes. Today, this rapid reskilling is a challenge facing every sector, especially in light of the fact that millions of middle aged workers need to be reskilled quickly.

The International Labor Organization (ILO) has spent significant time looking into this and note that the challenge bridging the skills gap is a huge challenge which companies cannot address alone. An entire framework of re-training need to be put in place on national levels to develop robust re-training facilities to mitigate the digital skills divide.

What is needed is a multi-pronged approach and a strong private-public partnership in order to effectively address this. Governments must take a leading role and develop the hard infrastructure within nations for the digital economy so people can access knowledge resources. Up to date curricula and training schemes must be developed in line with the private sector requirements so that talented individuals are produced and inclusive policies and frameworks are designed to become conducive to digital skills development. Effective outreach programmes must also be established so that people can easily access such training which must be of the highest caliber and endorsed by the relevant training bodies.

All this must be done in conjunction with the private sector, in particular technology companies, to determine what skills are required now and what will be needed in the near future. It is crucial that people are re-trained regardless of age, gender, disability or race, within a coherent, transparent framework that avoids inequalities, with skills that are required in the marketplace.

For the younger generation, I propose that such training should be built into school education so that as well as receiving an academic education, our youth are empowered with digital skills and certificates from the get-go, so that we do not face the similar problems in the future. We need to promote lifelong learning and skills development through all strata of our educational hierarchy, starting from kindergarten all the way through to our Universities.

I find it unacceptable to hear that even after receiving degrees, many of our youth lack the necessary skills to work in the digital economy. This is a problem that we must address from its very roots as otherwise we will be setting up our future generation for failure, excluding them from the ample opportunities in digital economy.

As a glaring reminder to us all, this region's oil reserves will only take it that far, as they will run dry by 2050. We must use the resources we have to become leaders in the field of digital technology which can only happen if we are serious about change.

The only way that we can build our economies well enough to weather future storms is by building digital capacity and becoming beacons of technology innovation and excellence.

All Electric – New Energy Alternative

The world around us is rapidly moving away from traditional fossil fuels to sustainable energy sources in a bid to reduce climate change and meet carbon emission commitments that nations signed up to in the legally binding climate change Paris agreement in 2015. Developing a sustainable, carbon-free planet is of vital importance as the world population is projected to reach 9.8 billion by 2050. This will be catastrophic if we keep pumping pollution into the atmosphere and creating toxic environment for our future generations. It's clear we need to take drastic action now as time is not in our favor.

A major polluter of our environment is the transport sector, with cars, trucks, trains, aircraft and marine vessels contributing to 14% of global greenhouse emissions according to the United States Environmental Protection Agency. This is steadily increasing as the demand for transportation rises due to an ever increasing population. While combustion engines have commercially dominated the transport since the late 1800's, the world can no longer sustain high levels of carbon pollution. In recent years, the automotive industry has been instrumental in developing alternative technologies with hybrid cars (gas-electric) coming out in the early 2000's, with a clear move to only electric.

I see that electric transportation will be the next predominant technology and will be adopted by all transportation sectors in order to bring down emission levels. This technology faced a number of technical challenges during its early years related to battery charging time, limited mileage and charging locations. But within the last few years, electric technology has advanced significantly with a new generation of electric vehicles that can be rapidly charged with adequate mileage capacity, not less than petrol based vehicles. Technology is being standardized, bringing down costs and making the ownership of such electric vehicles more feasible.

While at the beginning, the needed infrastructures for electric cars –charging locations- was not sufficiently available countries like the UK, have had a massive push to equip their petrol stations with electric chargers, as well as installing in charging spots in supermarket car parks, shopping malls and other convenient locations around the country. The ownership of electric vehicles has also been incentivized by the UK government, allowing owners to drive in dedicated lanes for hybrid/electric cars, as well as subsidizing the purchase of zero emission vehicles, helping consumers to make the swap from petrol to electric.

We need similar ecosystems in other countries to promote purchase of electric cars. I have heard arguments that this is a short term ‘band aid’ as the term electric cars is an oxymoron as the electricity they use is produced by traditional fossil fuels. I don’t see this as a valid argument with the current availability of ample renewable energy sources. If the UK can generate 30% of its electric need using wind power alone, I believe many countries can use wind, solar power and other viable renewable sources to generate much, if not all, of their electricity needs. This is a matter of will and commitment for change, as this technology has been tried and tested and it is both available and affordable. Governments need to be serious in their efforts to accelerate change which can only happen from the top down. If the people see that electric is a real alternative and an attractive option, they will go down the electric route with confidence.

As well as passenger vehicles, I see that electric power will take over all transportation modes. As electric engines have much fewer moving parts than combustion engines, there is less to go wrong, which means lower maintenance costs. It has also been estimated that the cost of the electricity required to charge an electric vehicle is around 40% less than the cost of petrol for a similar sized vehicle driving the same distance. These factors account for major savings for transportation sectors and have huge implications on marine shipping, the airline industry and rail networks.

I see electricity taking over in all of these sectors, bringing down cost and producing greener environments. To show how serious this is being taken, I will give you the example of Airbus that has dedicated research to developing electric aircraft, and having much success in developing smaller electric aircraft. This will be a game changer and will soon see the advent of fully electric planes with zero emissions and almost noise free. I'm sure this will be met by electric innovations in other areas of transport as it gains further momentum.

We need to develop the needed policies, put in the needed infrastructure and train highly skilled technicians in order to develop similar success stories in our region.

Electric usage is no longer a fantasy and has now come of age. Those looking to secure employment and business in the future would be wise to develop capacity in this area, something I highly promote as the Chair of the Honorary Council of the Consortium for Sustainable Urbanization in the USA.

A Call to Our Arab Nations To Move from the Millennium Goals and Sustainable Development to Necessary Development

The most important lesson we can learn from this global chaos is that it is not wise to continue discussing sustainable development in our order-less modern world. National duties require every decision-maker to start working on the necessary national development goals.

I have reached this conclusion during my participation in the formulation of the Millennium Goals as the head of the United Nations Information and Communications Technology Task Force (UN ICT TF), which were supposed to be achieved by 2015, followed by my 2015 participation in formulating the sustainable development goals that the world aims to achieve by 2030 as the then President of the United Nations Alliance for Information and Communication Technologies and Development (UNGAID).

I also reached this conclusion when the Millennium Development Goals were not achieved in 2015, followed by the realization of the impossibility of achieving the Sustainable Development Goals in 2030, and that it is no longer acceptable to ignore this global failure due to the collapse of the global system, which led to the absence of a proper world order.

Therefore, until a new world order is established and a global leadership imposes its standards, we must realize that it is time to turn to the necessary development goals that can only be achieved through self-sufficiency in food, medicine, and technology.

This transition is based on reason, conscience, responsibility, and duty as it is the only way to achieve equal national interests in every country in the world. Needless to say, I participated in the World Trade Organization's Council of Experts to formulate the concept of the "Supply Chain", which has now been extinguished due to the unilateral sanctions imposed by countries on the movement of products and services across borders, thus canceling this policy (i.e supply) that was, for us, an essential tool for sustainable development, and it became governed by the wills and decisions of unilateral states.

It is my duty to call for abandoning the market principles that recommend that we import low-cost products instead of producing them locally. This idea that international organizations and global economic experts call for has become a thing of the past. Now, the best and most useful principle for every country is self-sufficiency, not only to face sanctions or blockades, but also to avoid the consequences of interrupted supply chains.

Every country in the world, regardless of its capabilities or resources, can produce the minimum required to achieve self-security in basic food, medicines, and technologies to ensure its independence from the injustices of this world that is ruled by the “survival of the strongest” instead of “survival of the fittest”.

AI Will Lead the Upcoming Technological Revolution

The world now is on the verge of a technological revolution that will change the face of humanity and its direction as Artificial Intelligence (AI) will be the main driver of such revolution. This is an unescapable fact. It is going to be a comprehensive revolution that will involve all aspects of life-- security, the economy, social life, and others. Capacity building therefore will be of vital importance to the longevity of our economies, if we want them to thrive at a faster pace. No technological invention in the history of humanity is more important now than AI. Preparing our younger generations and directing them to this technology will definitely have a positive reflection on the global economic recovery; the effects of which are showing already in a rapid pace we have to keep up with. We cannot turn a blind eye to that fact anymore.

There is no doubt that the Covid-19 pandemic has propagated the AI revolution on a larger scale. The world could see how the global companies were able to analyze the virus's epidemiology, crunch data, as well as manage to develop vaccines in record time using AI based technology. The rapid technological effects of the digital tools have proved that AI applications are accelerating and are intervening in countless human fields. It is difficult until now, however, to establish a framework, or conduct an objective assessment of the implications of the digital applications because they have various implications. They are also used for military and civilian purposes that vary according to the desired and intended goals.

I would like to highlight the Chinese experiment as an example of a country that made the best out of AI applications and directed the world to such applications and technologies in a creative manner. China made AI a mandatory part of its educational strategy to make the country a global leader in AI innovation by 2030. China is planting the seeds of AI education now and will be reaping the benefits in the near future. We need to be doing the same to ensure that we secure a place in the growing digital economy. According to Forbes, "AI will add \$15 trillion to the world economy by

2030”. This is four times larger than the GDP of the entire MENA region in 2020, which has been \$3 trillion only. We owe it to the younger generation to invest in such education, so that they have the needed digital, technological skills to help power the economic growth.

I had the privilege to speak at international AI technology events. A question I found myself constantly faced with was, “Won’t AI technology replace humans and take over their jobs?”

I have always seen a different scenario unfolding. I believe that AI will free workers to exercise better judgement and perform better tasks that are more valuable by using AI systems, providing greater accuracy and insights and in turn delivering greater value. According to the “Future of Jobs Report 2020”, published by the World Economic Forum, 85 million jobs may be displaced by a shift in the division of labor between humans and machines by 2025. But 97 million new roles may emerge that are more adapted to the new division of labor between humans, machines, and algorithms, which include AI systems. Rather than jobs being lost to AI, jobs will be created by it. With volumes of big data being produced by sensors, systems, and the mass adoption of the Internet of Things (Iot), there will be no alternative but to use AI systems to make sense of this huge amount of data in order to help decision-making.

I also see AI largely affecting the auditing profession. Auditing is the foundation on which TAG.Global was established. As an auditor myself, I can tell you that the auditing profession is going to be revolutionized by AI. The huge amount of data being produced by organizational systems will make it very difficult to perform manual audits, as there will be simply too much data to analyze. AI systems will be used to perform detailed audits that would otherwise be impossible to conduct. The profession will become more of an IT specialty. In the very near future, auditors will need skills in AI; both to conduct audits as well as to evaluate AI systems used by companies to provide assurances regarding their accuracy and transparency.

I have always called for reform of the education system globally and have been saying for many years now that our education curricula need to move into the 21st century, to empower our digital natives with the knowledge and skills to become knowledge workers. AI is among the forefront of disciplines that students must be taught. AI applications and technology have become the basis of developed economies all over the world. They are the reason for existence of some of the largest companies the world has ever seen, such as Apple, Google, and Amazon. The global economy is no longer bound by geographic boundaries and the fourth industrial era means that all people may become knowledge workers if they have the zeal and passion. Digital opportunities are available for the IT literates and we must take full advantage of this fact. We need to be producing AI literate ‘knowledge workers’ to meet the demands of the digital global economy. We must properly educate and foster an environment for technology innovation and creativity, empowering people with tools and laws to create an ecosystem to enable the future ‘Zuckerbergs’ to come about. Building capacities in AI will also allow us to build systems to help find novel solutions to problems the world is facing concerning climate change, water shortage, and food production. As Plato said ‘Necessity is the mother of invention’.

For our future generations and for keeping pace with the booming digital revolution, we need scientists, innovators, and thinkers to act responsibly with foresight and wisdom and invest in AI education, as it is a fruitful investment, widespread, and is set to revolutionize the world.

Digital Poverty: An Ongoing Challenge

The COVID pandemic has affected millions of people globally and has seen technology use rise exponentially in order for employees to work remotely, for children to continue their education and for families to be entertained in their homes through online platforms. Technology is providing a vital lifeline for everyone to achieve a level of normality as tablets, laptops and online services are seeing unprecedented use during our work and play.

We were all thrust into this new reality with lockdowns and curfews that quickly showed how bad digital poverty is affecting our societies. Even developed nations such as the UK were hit quite badly by this, with the pandemic revealing the true extent of digital poverty. A recent webinar held by the British Computer Society (BCS), the UK's Chartered Institute for IT, has emphasized how important digital inclusion was and it revealed that the digital poverty affects a significant percentage of the UK population, with approximately nine million adult being digitally excluded. This is a staggering revelation that shows there is much to be done to reduce this divide; something that I have been calling for, for the past thirty years.

One thing is clear. All the assurances, programmes and initiatives designed to bridge the digital gap in previous years have been lacking. If the UK in 2021 as the world's fifth richest country has such a terrible record, I dread to think how developing countries fair. This phenomena is clearly linked with income and education levels which also manifests itself geographically. There is a clear divide between the modern developed cities and the poorer rural areas. The BCS discovered that there is a clear north-south divide in the UK, with the south being the more digitally prosperous and the north lagging far behind. This is the case in most nations as infrastructure is pumped into major cities with the rural areas receiving little attention.

To me it is clear that tackling the digital poverty is an issue that requires all of us to work together as it is too large for one entity to take on alone. This is an issue that affects children and adults alike and can have severe repercussions if not addressed as the divide between the 'haves' and the 'have nots' continues to widen. This is particularly worrying as we are in no way in the clear yet and will continue to see infection waves recurring.

As I have previously said, this pandemic will remain with us at until 2025. This means we must learn to live with it and need to have the technological means to continue our lives, which is every human beings' right.

I am afraid that a lack of action will severely affect an entire generation of our children. We need coordinated action as there are many initiatives all working independently to try and address this issue with their own agendas and objectives. I call for them to combine their efforts and to work together. Our leaders must take this responsibility with the seriousness it deserves and they must ensure a message of digital competence filters through all levels of society, and that pragmatic measures are put in place to make a real difference with ambitious targets. I clearly mean that a tangible improvement in the technology capability of the ordinary citizens across the nation should be evident. A coherent plan for each nation should be developed as needs differ, with a key factors being transparency and long-term sustainability. We can no longer afford to engage in 'hit and run' projects.

I see that such plans should be four-fold. Firstly, tackling access to affordable computing equipment, be they laptops, desktops or otherwise. Secondly, to ensure that a decent internet speed is available to everyone at an affordable price. Thirdly, to have a comprehensive training skills programme in place for both adults and children on how to effectively use computing technology and access online resources in a safe manner. Lastly, there should be proper governance, compliance and risk management to provide a safe online environment for us all to work within.

Governments need to ensure they have skilled IT professionals in their teams to help develop and lead such national plans, delivered with, and across all sectors, with engagement from the private sector. This should include bringing together existing initiatives and charities which are passionate about digital poverty to bolster efforts in delivering real change, as well as engaging with experts in the private sector who bring a wealth of experience to the table.

A holistic, a far reaching and a sustainable approach, that must include green IT principles, must be developed.. We must take lessons from what we have gone through and be better prepared as it is only a matter of time until the next crisis hits.

Digital Competence: A Necessity in the Modern World

Our world is undergoing major transformation as technology permeates through every sector, business and process. These are allowing organizations to operate at an improved rate of efficiency, improving productivity, quality and output. The days of using humans to perform laborious, repetitive tasks are long gone and technology we would have used just fifty years ago, would now be considered obsolete. Moving into an ever-evolving digital world, we need to make sure that our human capital is invested in just as much as technology.

Without people businesses fall flat, as after all, even with the most sophisticated technology setup, skilled people are needed to develop, install, operate and maintain them. The economies of scale that innovation is bringing can be seen across the board with the introduction of robotics, artificial intelligence and greater process automation. This greater reliance on technology mean that the skills requirement is shifting as workers need digital skills to take advantage of these new innovations. This is effecting the workplace with some jobs being totally replaced by automation, while others requiring the upskilling/reskilling for employees to play a productive part in the new digital ecosystem.

What is worrying is the global shortage of such skills in the workplace and the growing mismatch between the skills that students possess once completing their education, whatever level this may be, and the skills that are required in the marketplace. This goes back to my long time view which I have been pressing for over 20 years that our education systems are well out of date and need to be modernized as presently they are not equipped to sufficiently prepare our youth for the digital economy. If this is not addressed, digital jobs will continue to be outsourced abroad, or attract skilled immigrants that have the requisite skills. This skills-gap could very well threaten the stability of national labor markets as countries fail to address such a fundamental issue, which has been the subject of debate for many years.

This is supported by a study undertaken by the European Commission which noted that 42% of Europeans do not have basic digital skills and that Europe lacks skilled ICT specialists to fill the growing number of job vacancies in all sectors. In order to address this startling gap, the EU launched numerous

initiatives to tackle national digital competence under their ‘New Skills Agenda’ that includes expert advice, training opportunities and career support. Is this enough? Only time will tell, but at the European ‘ball’ has started rolling in this vital area which is imperative to future prosperity.

I am a strong believer in proactive action and I call for Arab nations to adopt a similar approach and to develop a pragmatic skills programme that should form part of their national strategies. The UAE is leading in this area and has launched several initiatives to educate and improve the digital skills of their population under the diligent eye of HE Shaikh Mohammad bin Rashid, who is a very close and valued friend. Other Arab nations must follow suit and do the same as otherwise they will be left behind and have more unemployment to complain about as they find themselves digitally excluded.

Automation brings with it the threat of job loss which fuels animosity towards change, particularly among low skilled workers. A lack of digital skills equals a shrinking labor force that in turn raises inequality and poverty. This must be used as an opportunity to develop skills across the board so that each person can see a future in the digital economy. If this is done, the process of technology adoption and change resistance will be solved, as employees see they have a part to play in its success, have greater job opportunities in the future and will support digital transformation efforts. The digital economy does not discriminate and provides opportunities to those willing to take the risk. A clear plan of action with support from the top goes a long way.

Authorities should focus on developing a positive narrative around the digital economy and develop a tailored ecosystem in which public and private entities can come together to discuss what is needed from infrastructure, people, skills and policy perspectives. Gaining trust from the public is essential to foster change and the need for continuous and lifelong learning must be incentivized and encouraged.

Digital competence is essential at a time where we all are feeling the effects of the corona pandemic. It is a wake up call for us to change the ways we have been operating. Digital innovations proved to be vital during this period and will play a greater role in global prosperity. We must take firm action now to avoid any future decimation of our economies through lack of digital readiness and invest in a programme of digital competence for all.

Climate Change – You Cannot Manage What You Cannot Measure

As a financial auditor by profession, I can tell you that what is not measured cannot be effectively managed. Unfortunately, this has been the case with climate change from the beginning. The most recent report issued by the United Nations in April 2022 shows that the time is ‘now or never’ to seriously limit the carbon emissions that are polluting our atmosphere, and that we are heading to a world that will become uninhabitable.

Without effective control, the pledges made by countries are not worth the paper they are written on. There is a vast gulf between what was promised and what has happened in reality. Some countries have turned a blind eye to climate polluting industries and certain corporations have fudged their carbon emission figures to continue business as usual. Greenhouse emissions have increased across all sectors globally, with statistics being cleverly manipulated by many to show compliance. We cannot hold countries to account if we do not have an accurate way of measuring the efforts they are taking to combat climate change.

It is clear to me that the issue of environmental accountability comes from having proper accounting practices in place, where companies can effectively report the cost of damage they cause to the environment. Having this transparency in place allows for better accountability and for a true picture of what is happening to be developed, as after all, you cannot manage what you cannot measure. Polluters are getting away and accounting must be improved to enhance corporate disclosure, which is essential to the effective management of carbon emissions.

This type of environmental-damage cost is something I spoke about as early as 1999 when I led the production of a detailed report with international experts from every accounting body in the world called ‘Accounting and Financial Reporting for Environmental Costs and Liabilities’. This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and the International Standards of Accounting and Reporting (ISAR), under the instructions of the then UN Secretary General Mr. Kofi Annan.

This accounting specialization involves layers of detailed complexity and I felt the need to develop a report that provides assistance to enterprises, regulators and standard setting bodies on what is considered best practice in accounting for environmental transactions and events. The objective was to provide information about the financial position of an enterprise in a manner that is useful to a wide range of stakeholders in making decision and is necessary for the accountability of management for resources entrusted to it.

A company's environmental performance affects its financial health, while financial information relating to such performance can be used to better assess corporate financial risk. The management of such risk is a matter of concern to the board, shareholders, investors, and financial regulatory authorities. Owners are particularly interested because of the potential effect of environmental costs on the financial health of the company, that include elements such as costs associated with environmental damage, cleanup operations, property and waste disposal, fines and penalties, as well as other environmental liabilities.

The report was produced with great effort and diligence with input from experts across the world. At the time, Mr. Kofi Annan asked me to present the report to a special committee which included the US ambassador to the UN. After going through the report and successfully arguing its case, the US ambassador said that he could not accept the report as the US Capitol would not accept such regulation to be implemented across corporate America. The report was subsequently shelved.

The collective action by all countries of the World means nothing if the US and China do not put real action into decarbonization. China in particular, is guilty of being the world worst polluter with its massive manufacturing infrastructure, responsible for a frightening 30% of global emissions and burning half of the world's coal supply each year despite President Xi Jinping's zero pledge. The next biggest polluter is the USA, responsible for around 15% of world carbon emissions. No one is being held accountable and years of COP meetings have little to show.

During Trump's Presidency, he repeatedly denied the reality of climate change in a very flagrant manner. Biden has over promised and very much under delivered. In fact, for the past six decades the US has avoided doing anything substantial in the climate change space. Scientists warned Biden's

predecessor Lyndon Johnson in 1965 that the threat of the climate crisis was stark and that the world's countries were conducting a vast, dangerous experiment through their enormous release of planet-heating emissions and that remedial action was needed. The fossil industry has been quite successful in its misinformation war, and political as well as economic maneuvering in light of the threat of Russia and China taking global position may well have stymied US action to reduce its emissions.

We are at a point in time where the decisions we take now will have a direct effect on securing a livable future and the survival of future generations. It is still possible to reduce emissions by 50% by 2030 which is a crucial target to limit global warming to 1.5 Celsius by 2050. This however, necessitates a deep reduction of emissions and requires both China and the USA to work seriously to clean up their yards.

Unless action is taken now, some countries will soon be under water and we will see an unprecedented number of natural disasters including heatwaves, mega storms, greater water scarcity and the extinction of many of our natural habitats and ecosystems, along with the annihilation of many species of plant and animal life. This will upset the world ecological balance which is a truly frightening prospect and will have repercussions that no amount of money or power will be able to solve.

What is needed is a combined effort on all fronts, including a fundamental change including our lifestyles and habits, as well as the right policies, infrastructure, technology and accountability to aid us in this shift. All nations must reduce their fossil fuel addiction substantially, extend access to sustainable electricity, improve energy efficiency, increase the use of alternative fuels and use technology to help capture and store carbon in greater amounts.

As the Chairman of the Consortium for Sustainable Urbanization in New York, I say that we must demand greater action from our governments and develop a culture of sustainable living within our homes, business and cities quickly. We need to have standards in place to ensure there is compliance, as at present there is no accounting and little accountability.

By advancement and confidence, we gain control and influence

The various forms of tension between the American and the Chinese giants are increasing. So, what is the expected outcome of what is going on between them?

I have been repeatedly saying that the two giants have always been competing for controlling the world, and that their policies have been tailored accordingly. America spent billions to extend its military control over the oil fields to pave the way for extending its commercial control. China, on the other hand, followed a different path in its endeavor to gain control, namely the initiative of the “Belt and Road” project, to restore what was previously known as the “Silk Road”.

America did not stand still. US President Joe Biden, in cooperation with the British Prime Minister Boris Johnson, launched an initiative to counter the Chinese “Belt and Road” project. The initiative included two elements that they believed would attract attention to their project; punishing Beijing for what they described as human rights abuses in Xinjiang, and the democratic countries helping the poor people of the world.

But will China allow anyone to interfere in what is happening in Xinjiang? No. China also imposed sanctions on nine Britons and a few entities, accusing them of spreading lies and fabrications about Xinjiang.

The “American and Chinese” methods are similar, but they differ in their ways. Perhaps the classification of the world as “rich and poor” would eliminate democracy, keep the gap between countries, and reveal that the purpose of the “aid” is only to have a “foothold”. The loans or the projects the rich countries offer to the poor countries to build roads or railways or to construct dams, ports, airports, etc. is only to pretend that it is a “safe, open world”, as the Chinese President Xi Jinping has described it. But it is not. Just as poor countries will benefit from this, the rich countries will also benefit by increasing productivity, keep their factory lines running, employing their citizens, and bringing business to their companies.

Finally, the core of the conflict between the two giants is the upcoming “digital control”, represented by the “artificial intelligence” innovations, not the competition to demarcate a track for a new silk road. Economic superiority may not be sufficient to guarantee technological superiority. With China, focussing on its own interests, by inventing its own Internet and its independence from the world by having its own digital engines, it would be true to say that the new age is a globalization era except that it excludes China.

We hope that the new laws of the world will satisfy the ambitions of the two giants and that we will overcome the crisis between the two competing powers, particularly at a time that is different from the cold war era between the Soviet Union and America . We are in the era of the “digital age”, where differences between countries and societies disappear through the exchange of the same knowledge, data, and information among all the people all over the world. This would enable the weak to become strong. But that will only happen when there is a will, when there is confidence, and desire to rise to the ranks of universality.

It is hard to convince one of the two parties to concede to the other. The ultimate winner will be the one who will develop its performance, trust its resources and capabilities, organize its inputs, and know how to use its outputs.

The Americans should translate the slogan they have written on their dollar bill, “In God we trust” into the way they deal with the Chinese problem and the Chinese new version of the Silk Road.

What is Causing World Hunger?

Why is it that continents with the highest levels of biodiversity, abundant land masses and regular monsoon seasons such as Africa and Asia, suffer from one of the highest levels of food poverty on the planet? Why is it that the people who are growing our food and live in agriculturally rich communities in the 3rd world, are the ones starving and fighting to receive adequate daily nutrition?

The problem here lies in the way that the world's agribusiness has made food production highly reliant on expensive chemicals and costly seeds that together form a recipe for disaster and are creating food poverty. This situation is further exacerbated by companies that effectively control the world seed market, genetically modifying them to produce 'terminator seeds' that produce one-off yields to increase seed sales which is a multibillion dollar industry. Farmers are caught in a vicious cycle where they are battling to pay for expensive raw materials in a bid to make profit so that they sell their crops and feed themselves and their families. Food has become a commodity and a big lucrative business.

Unfortunately, due to the industrialization of food, modern farming practices use chemicals and promote monocultures to produce a lot of one crop for industrial agriculture. This creates nutritionally impoverished yield, making the produce more susceptible to disease, as well as pest outbreaks which affects the overall biodiversity. It seems that farmers of the past were wise to grow numerous crops in a polyculture setup, creating a rich environment where pests are naturally controlled by other predators and where crops compliment each other to produce more nutritious soil conditions. Using more ecological methods could significantly increase soil nutrition and in turn improve yields. It seems that farming using current practices for industrial farming practices to sell in international markets is a major reason for food scarcity in local communities.

I believe that we need to go back to promoting sustainable, local production for most of our food needs rather than relying on imports for our staples. We can see what reliance on foreign food sources has done with the war in Ukraine; limiting supply of essential food products and sending their prices soaring. We have become reliant on imports with little concern for where they come from, which poses a threat to the stability of nations across the world as no nation can go without food.

Unfortunately, it has been the policy of certain nations to deliberately control the supply of staple foods. This is a highly effective weapon to achieve control of countries through foreign policies deliberately causing food shortages and local hunger. If you control a country's food supply you control its decision making abilities.

The real culprit of hunger is the weaponization of food, the agendas of inhumane governments and the supply of it as a commodity which is carefully controlled by the agribusiness giants.

Food production needs to go back to basics to become a local and a sustainable affair as there is plenty of food being produced to ensure that no one goes hungry. Ecological farming techniques should be taught with the availability of good quality, cheap seeds and fertilizers. Access to food is a fundamental human right and must be de-politicized so that it becomes available to everybody in a sustainable manner.

Improving Renewable Energy Infrastructure

As the depletion of fossil fuels continues, the need to develop real alternatives has become an issue of paramount importance for global security and the prosperity of future generations. According to the U.S. Energy Information Administration (EIA), we have approximately 30 years to radically alter the manner in which we consume energy and make the shift to sustainable alternatives, as literally, there will be no fossil fuels left post 2050.

This means that every sector within our societies has no option but to take this looming crisis seriously and to use what fossil fuels we have left to develop robust renewable energy infrastructures to keep the world running. This problem is further exacerbated with climate change challenges and the push to become carbon neutral per the legally binding Paris Agreement signed in 2015 and the 2030 target of UN Sustainable Development Goals that include calls for urgent action to combat climate change and its impacts.

In my previous article on electric being the next major energy source for the global transport sector, I mentioned that we need to develop innovative ways to generate and store this energy so that we can accurately generate what we need, and store the excess so that it can be used later. After all, there is little use to generate electricity with limited ways to store and transport it.

The production of energy requires an ecosystem to be in place that covers its production, storage, distribution and access. We have such an ecosystem in place for fossil fuels, from production plants to consumer facing gas stations as well as the technical capability to provide support and maintenance for petrol based vehicles and industrial machinery. Since the invention of the internal combustion engine, we have had around 150 years to build this ecosystem which has developed and matured over time. The challenge we face now is to build a similar framework for renewables which is a mammoth task, as time is clearly not on our side.

The problem lies in the way we receive energy from renewables like solar, wind, geo thermal and others. These are intermittent sources of energy and the amount of energy generated is subject to weather conditions which can wildly fluctuate in some parts of the world. This leads to a shortage as well as an excess in energy as production is not stable and requires better, more reliable and cheaper forms of energy storage to collect this excess and release

it when energy networks face a shortage. Innovations in battery technology is growing in leaps and bounds, particularly with the greater push towards electric vehicles, making it more reliable, efficient and driving down cost which is certainly good news for everyone.

Additionally, our transmission networks must be upgraded as it is becoming apparent they are outdated and inadequate to cope in pumping energy across extensive networks. For example, this is a particular problem on excessively sunny days where networks will become overloaded with energy and simply do not have the capacity to transmit. This has been highlighted as a real concern by the United States National Renewable Energy Laboratory and will continue to grow as additional renewable infrastructures come online. Access to such energy must also be improved for consumer so that it becomes a real alternative to petrol.

Our renewable energy supply chains must also be improved and industries heavily reliant on fossil fuels must invest in the necessary technology and experts to help them make the transition in a cost effective and efficient manner. This is where the role of governments comes in who must themselves be renewable energy savvy and promote a culture of change. As well as having the needed experts in this field, a clear strategy for each sector in society should be in place with the relevant grants, subsidies and funds to help businesses make the shift.

There must also be a strong partnership between the private sector that has the expertise in this area and our education institutions so that we produce intelligent, bright minds that understand this technology and build the institutions necessary to support and maintain renewable energy infrastructure.

We need up to date technicians, scientists, energy experts and schools as we cannot afford to fall behind in this important field as we have done in the past, relying on external expertise which has held us ransom.

Arab nations must step up their game in this regard, as change is on the horizon whether we like it or not. There is no reason why we cannot become world leaders in this innovative field if we act with wisdom. We must prepare ourselves and our nations for what is to come and cannot afford to be slack in our efforts to invest and build in the new energy field as our survival literally depends on it.

Artificial Intelligence (AI) Technologies

“The Magic Key to Future Learning”

The rapid developments in the field of Information Technology (IT) impose on the Arab countries and their governments to reconsider the digital infrastructure and to make radical changes. They need to be able to keep pace with such developments and grasp the digital revolution after the Covid-19 pandemic, which has revealed the defects in their ability to use digital tools and the scarcity of their application. This has revealed the need to create new specializations in academic institutions. It also requires familiarity with a set of specialized knowledge and applied skills in the fields of (AI and technological innovation). This is especially needed in the educational process to meet the needs of the local market and to keep pace with global trends and developments in the fields of knowledge, in the fields of digital management and IT, and the overlap between them in many practical and knowledge aspects in a clear manner.

To address that, the efficacy of smart educational institutions and their ability to keep pace with digital leadership, technological innovation, and AI applications must be leveraged. All of this then should eventually be utilized in the educational process.

I absolutely believe in the role of all of the above in achieving a radical change in education at schools and universities alike in our Arab world.

I also believe in the great effect this will have on changing the way modern educational tools and digital learning methods are used and the process of preparing teachers in the future.

The Arab world also needs international support, to ensure equal access to digital empowerment and technological innovation, especially that our Arab countries are home to creative youth, who cannot find anyone to sponsor their creativity or turn it into innovative projects that generate income for them and their communities. There is also need to ensure equality in the dissemination of the “digital knowledge revolution”, which allows them

to adapt and embrace a creative approach to enter the digital labor market.

So, what exactly do the educational institutions suffer from?

They suffer from the scarcity of training programs related to AI, trainers, and experts in this field. What do we need to do about that?

We need to introduce targeted training programs, to make AI skills and applications accessible to all, facilitate the use of creative solutions, and adopt a “digital transformation” process concerned with the educational process. We also need the international and Arab community and all the experts and individuals active in the fields of AI related to education to consider establishing clear policies and standards. The aim is to define clear, scientific texts that contribute to spreading knowledge and not monopolizing it by the academic institutions. We will then pass it down to students and build an open source that provides data for free.

I would like to draw the decision makers’ attention to the fact that the accelerating technological era requires the formulation of clear policies to ensure protection for the target groups in the field of technology-based learning, to reduce the obstacles and risks the AI may cause in the field of “digital learning”. They also need to establish clear policies for the AI ethics.

I recommend, out of my concern for the interests of our educational institutions and students, that the international organizations and communities working in this field establish the principle of equality while working on the technological empowerment of our Arab countries.

I would also like to highlight the importance of establishing a framework to assess the academic institutions to measure the Arab countries readiness in terms of the digital infrastructure and its ability to grasp the AI technologies in the fields related to education. It is also important to study the strengths, weaknesses, chances, and challenges the Arab countries face in these fields and find solutions for them. This includes offering comprehensive, fair, and quality training and education opportunities in digital and e-learning in the virtual space for all students.

There is no doubt that AI contributes to enhancing the technical skills required to qualify an empowered and conscious generation in the era of digitization. This requires reconsidering the ability of policy and decision makers, educational leaders, academics, and target parties to reconsider its importance and the role of its digital tools in supporting the advancement of technological innovations.

I would like to draw the decision makers' attention to the fact that the accelerating technological era requires the formulation of clear policies to ensure protection for the target groups in the field of technology-based learning. They should also aim to reduce the obstacles and risks the AI may cause in the field of "digital learning", reduce the gap in technological equality, and encourage globalization and openness to the digital world. This is extremely important since the fourth goal of the Sustainable Development Goals stresses the need for countries to respond to all opportunities and challenges posed by AI, to accelerate progress and keep pace with the massive technologies flowing into the world.

It is essential for governments now to make merging education with technology its top priority and to guide its strategies so that they keep pace with the modern, digital developments to build the future and elevate the status of the Arab states on the global level.

Egypt's Information Technology

Egypt has made significant progress in the infrastructure field, particularly in the area of information technology, as a result of the state's ambitious drive to modernize its telecommunications infrastructure.

The presidential initiative, “Egypt Manufactures Electronics”, is an ambitious Egyptian plan to advance the design and manufacture of electronics by constructing three complexes with integrated electronics labs outfitted with the most up-to-date tools and equipment for the production of multi-layer printed electronic circuits, electronic prototypes, and modifiers to support the Internet of Things and smart cities. These integrated labs support all design stages for electronic systems and products, from the initial design concept through implementation, manufacture and assembly of printed circuit boards, production of prototypes for the product's exterior frame, and eventual mass production.

Qualifying Egyptian Cadres

One of the key aspects of the Egyptian government's digital strategy is the qualification of Egyptian cadres. In addition to offering a number of programs for youth and startups that have been implemented through the Information Technology Industry Development Authority and the Center for Technology Innovation and Entrepreneurship to support young people's innovative ideas, assist them in developing value-added products, and establish numerous training programs, have been established to develop young people's capabilities in all industrial and information technology fields. 10,398 trainees went through several initiatives, training programs and more

Moreover, the presidential initiative “Africa Games and Digital Applications Forum” was launched at the Cairo International Exhibition and Conference on ICT to qualify 10,000 Egyptian and African youth to develop digital games and applications using the latest technologies and establish 100 Egyptian startups in this field.

These were not the only initiatives held during that period. The “Wazifa Tech” initiative was launched with the tagline “Learn Now and Pay Tomorrow” in cooperation with tech companies to provide specialized training to qualify young people for job opportunities. The training fees are covered by the Ministry of Communications and the Tahya Misr Fund, paid in installments through the Nasser Social Fund without interest. Then the trainees pay from their salary after their recruitment in installments for up to 3 years. The number of available jobs has reached 1500 in 28 specialties, with monthly salaries ranging from 3,500 to 10,000 EGP.

For nearly three years, Egypt has been adopting a project to build integrated databanks by linking 60 databases from different sectors. The Administrative Control Authority and the Ministry of Planning are cooperating on this project to digitize more than 20 government services and avail them through various channels to achieve digital justice.

Numerous other projects aim to strengthen the digital society, such as creating a digital platform for Egyptian cultural content, which includes all the activities of the Ministry of Culture, whether audiovisual, publications, documents, and blogs, and preserves the copyrights of creators.

Ministry of Education

The Ministry of Education has witnessed significant development during the past ten years. Through cooperation with the Ministry of Communications, they developed the educational system by establishing an infrastructure for communications networks to provide high-speed Internet services using 4500 km of fiber-optic cables from the telecom exchanges to 2563 secondary schools across all governorates.

This will positively impact access to information technology services in schools and nearby public facilities. Additionally, 100 integrated community

technology centers have been established to provide training services for young people in various governorates.

To empower highly capable individuals, there have been remarkable developments in previous years, as an initiative was launched to provide access to e-portals for government institutions during the seventh annual International Conference and Exhibition on ICT.

Hence, the Technical Center for Persons with High Capabilities was established as the first center of its kind in Africa enabling the use of appropriate assistive technologies for each case. The National Academy of Information Technology for Persons with High Capabilities was established to provide the necessary training for persons with high abilities in the Arab world and Africa. The first phase of the Egypt Information Portal was completed, in cooperation with the Information and Decision Support Center of the Council of Ministers, to provide information and essential statistical reports for people with high capabilities.

Development Projects

Regarding infrastructure projects, numerous third-generation towns have been established, such as New Assiut, New Qena, New Sohag, New Fayoum, and New Cairo, providing a decent life for citizens supported by an infrastructure dependent on communications services.

The construction of fourth-generation cities, i.e. smart cities, also began over the past ten years, creating a boom in the field. The cities of New Mansoura, New Alamein, New 6th of October, New Obour City, and New Port Said have all been provided with high-speed Internet, up to 100 MBps, with the ability to increase the speed in the future. Local government e-services were also provided, along with a comprehensive monitoring system with cameras and remote sensors that will aid in applying modern technology, such as big data and artificial intelligence.

As part of the government's efforts to improve the infrastructure of their ICT sector, or what is known as e-government services, 800 government buildings in Port Said have been connected to the fiber-optic network through Telecom Egypt. Work is underway on a project that links all government buildings across the country to the fiber-optic network at the cost of up to 6 billion EGP.

As for civil society, the Ministry of Housing, Utilities and Urban Communities has begun to include optical cables in new homes and buildings within the building specifications across the country by updating the Egyptian building code to include a communication networks code with a section on providing a communications infrastructure. To ensure the improvement of ICT services, the National Center for Quality Control of Communications was inaugurated as a subsidiary of the Telecom Regulatory Authority to evaluate telecommunications services in Egypt and improve transparency by issuing monthly reports on the results of those evaluations.

On the other hand, to achieve the principle of integration between the academic and the business communities, technological innovation complexes were established at 8 regional universities as a first stage, including South Valley University in Qena Governorate, Aswan University, Menoufia University, Suez Canal University in Ismailia, Minya University, Sohag University, Zagazig University and Mansoura University

These complexes aim to connect company owners with university professors and students who are able to devise solutions to these problems. Each complex includes tech labs specialized in software production, electronics design systems, business technology incubators and co-working spaces for emerging companies, in addition to offering specialized training events in various fields, including artificial intelligence and data and information security sciences.

The Economic Impact of the ICT sector

All these accomplishments led to a major boom in the ICT sector. The number of companies operating in this sector increased from 3,813 in 2010 to 8,019. Consequently, the sector's share increased to 4% of the GDP, valued at 93 billion EGP for the fiscal year 2018-2019 (according to the latest report issued by the Ministry of Communications and Information Technology) compared to 3% in 2011

Technology exports amounted to about 3.6 billion dollars in 2019 compared to 0.9 billion in 2010. The capital of companies operating in the ICT sector amounted to 369 billion EGP in 2020 compared to 44.74 billion EGP in 2010. This sector constituted a source of income in local and foreign currencies for the country. Mobile companies in Egypt paid \$1.1 billion and 10 billion EGP to the state treasury in exchange for obtaining 4G licenses for mobile and virtual landlines. The same period also witnessed the entry of Telecom Egypt into the wireless services market, becoming the first integrated national operator to enter that field in return for paying 7 billion dollars to the state treasury.

Egypt Restores its Global Status

Egypt's ICT sector efforts have successfully restored its position regionally and globally. This became evident as Egypt hosted several important international events and conferences, including the World Radiocommunication Conference and the Radio Communications Assembly in Sharm El Sheikh. This was the first time this meeting was held outside International Telecommunication Union (ITU) headquarters in 20 years. The important conference constitutes a platform that guides global development in the telecommunications sector in general, the wireless communications sector, the mobile phone industry, and digital broadcasting systems and satellites.

On the other hand, Egypt was elected to chair the Specialized Technical Committee on Communication and Information Technology of the African Union for a period of two years, hosting the activities of the tenth session of the African Post, organizing the activities of the African Week to provide technology for people with high capabilities with the participation of 7 African countries, and heading the Executive Bureau of the Arab ICT Ministers' Council, and gaining the membership of the Administrative Council of the International Telecommunication Union (ITU) representing the continent of Africa during the period from 2019-2022.

This comes in addition to establishing the United Nations Regional Laboratory in the Smart Village to foster technological innovation in Africa in 2017 and develop the skills and capabilities of researchers and technology workers from across the African continent. Furthermore, innovative technical solutions have been developed using open-source software and open data to deal with global challenges and achieve sustainable development goals to serve the Member States of the United Nations. This center specializes in waste management and environmental preservation, facilitating education for people with high capabilities, epidemic prevention, medical tourism, and rationalizing water consumption in agriculture.

The Growing Problem of Electronic Waste

Societies have turned increasingly wasteful, as a result, not just of an insatiable appetite for technology, but also for a frenzied race to upgrade to the latest devices,, has led to a global problem of increasing electronic waste (e-waste) and a massive knock on effect on the environment. Calls for carbon neutrality and a switch to renewables in order to lessen the harm to our environment is a prime focus that many countries are working on. Climate change is accelerating and our greater consumption has led pollution levels to rise to the extent where we are witnessing frightening damage caused to our environment, resulting form melting ice glaciers, rising water levels and a noticeable increase in temperatures around the world. This is playing havoc with the natural environment and it is clear that we need to change the way we work, rest and play.

Now, I am all for people purchasing electronic devices to help them become part of the technology revolution, as I myself am a producer of such devices through the recent technology brand I established under the brand TAG-Tech. What I find disturbing however, is the extent to which technology firms are relentless in their drive to bring out newer devices, pushing consumers to ditch their current technology prematurely and purchase new ones.

This ‘planned obsolescence’ is not a new phenomena and can be traced back to the 1924, where well-known international bulb manufacturers set up a cartel which agreed that the lifespan of bulbs would not exceed 1000 hours in order to increase sales and turnover. This cartel was dissolved in 1939 when Eastern European manufacturers started producing low cost bulbs.

However, unlike bulbs, e-waste contains many harmful chemicals that is exacerbated by the huge amounts of e-waste we are producing. Statistics produced by the International telecommunication Union (ITU) show that in 2019 the world generated a staggering 53.6 million metric tons of e-waste, of which 17.4% was officially documented as properly collected and recycled! This is equal to approximately \$57 billion USD and includes metals such as iron, copper, and gold as well as toxic chemicals including lead, mercury, cadmium and others. This is a catastrophe of epic proportions and a disaster with huge repercussions. It is clear that we as consumers have a role to play in this and that we must exert self-restraint in order to curb our appetite for regular technology change. Consumer action however will only go so far.

E-waste is a real contributor to pollution levels globally and raises concerns about air, soil and water quality, the energy and landfills needed to process this waste and the human cost in terms of cheap labor and exploitation in countries that are willing to take this waste on to process. Even e-waste exportation has become a major problem, where richer countries simply export their e-waste to poorer countries for cheaper processing than could be done locally. This often is done in environments that have no regard for health and safety and typically exploit informal labor.

This must be reformed into a circular, sustainable sector where equipment manufacturers bear the brunt of the responsibility to make their devices repairable, open official training facilities for technicians to be properly trained and make spare parts available and affordable. This will create a new revenue stream for them, provide new employment opportunities for our youth and generate a pool of sustainable talent in this space. Establishing proper refurbishing facilities is another opportunity that should be explored, as many citizens of the world cannot afford to buy new devices. There is a booming market for second hand devices in many countries which manufacturers could leverage as part of their CSR and outreach programmes.

Governments have a vital role to play in all of this including limiting the export of e-waste, putting in sound recycling facilities that discard chemicals and component safely and pushing through legislation to push manufacturers to make their technology repairable. They should actively engage themselves in the initiatives such as the Sustainable Cycles Programme (SCYCLE) created by the United Nations University, to promote sustainable societies by supporting the sustainable production, consumption, and disposal of electrical and electronic equipment as well as other ubiquitous goods.

We also need local movements like the ‘right to repair’ programme established in the UK to make parts, schematics and expertise available, which has led to technicians and consumers coming together in communal settings to repair devices, making consumers more technology aware while at the same time reducing the amount of national e-waste.

The Problem with the Metaverse

I have written in the past about why calls to establish a Metaverse, the augmentation of our physical worlds through virtual and augmented reality technology to create a new reality for everybody to live in, can be problematic. While the idea of augmented reality in general has its merits, the current dialogue around it seems to be dominated by Mark Zuckerberg's aspirations and vision of what, specifically, our digital future should encompass. Zuckerberg has created the new 'Meta' umbrella brand, pledging to spend \$10 billion US dollars to build his version of the Metaverse and claiming that Meta will develop the fastest AI supercomputer in the world.

My concerns with this are manifold, including the risks outlined by my daughter Jumana, an innovator, patent owner, prolific technology writer, and founder of the non-profit Pivot For Humanity in an article she posted on Medium.com.

She highlights that Zuckerberg's Metaverse promotes gamification in all aspects of our lives, making it an addictive world to be in, effectively turning our daily lives into games. Unfortunately, yet predictably, pretending our lives at home, our relationships, our work and everything else are merely a game will inevitably lead to withdrawal from reality, leaving each of us to live in their own private Metaverse, fully customized to their habits, likes, opinions and online profiles.

Everyone living in their own, individual Metaverse poses serious existential questions around human existence, social and societal norms and the very concept of community. If everyone is going to be stuck in their own Metaverse in a 'coma' like state, will future, 'Metaverse doped', generations even be able to deal with real life situations as simple as taking out the trash? Jumana discusses how the Metaverse promotes a concept called long-termism. In her own words:

- "Long-termism, as a philosophy, basically states that the only thing that matters is to keep the human race going—not to keep it just, just keep it going... long-termism trivializes real and present dangers, dismisses

the foreseeable future, and minimizes anything that's not literally apocalyptic as mere bumps on the road to glory of the most evolved."

This is a truly frightening prospect, where the aim is to keep people 'just alive' so that they can continue their animation in the Metaverse, rather than live full, complete lives as human beings in the real world and deal with challenges that pose a real threat to our existence, Metaverse included!

There is no reason why the Metaverse cannot be a positive place for an augmentation of our realities to occur, but this must be done now using deliberate thought with the input of technology companies and regulatory bodies during its initial development; not something left to whims or chance.

The Metaverse is coming, and we must make sure that it is built in a collaborative fashion so that it is not dominated by one person's vision and inherent biases, doesn't cause further division and is, instead, a healthy, regulated environment with well-defined boundaries and the means to hold developers and owners responsible and accountable for the wellbeing of people within the digital environments they render.

As such, I believe it is important to bring the efforts of companies working in this space together to develop an integrated Metaverse, not silo spaces. Many minds are better than one and may well mitigate some of the ill effects that a single person's tunnel vision may cause.

With outspoken technologists like Jumana, I believe the future of the Internet, the Metaverse and other technology is in the safe hands of the wise.

Geoengineering – A Possible Solution for Climate Change

The effects of climate change are causing serious damage to our environments and habitats across the world, with weather patterns being seriously affected. Just this year, we can see the devastating effects of climate change in countries around the world with crippling hurricanes, floods, droughts and wildfires; a situation set to get much worse in the future.

Over the previous years there have been many COP meetings held across the world, numerous calls from the present and previous UN Secretary Generals that we are heading for disaster, and a multitude of reports from the UN and other environmental agencies across the world that we simply cannot continue as we are. The problem is that very little has actually been done by polluting industries to really deal with carbon emissions in a manner that is really making a difference.

The risks of carbon emissions were highlighted as early as 1965 to US President Lyndon Johnson by a team of experts at the time that warned of them heating up the atmosphere. It was these scientists that initially suggested the possibility of altering the atmosphere to deal with carbon pollution which has received little attention, but something that is certainly worth pursuing as all our other attempts are showing limited signs of success. Even if the developed world pulls back on its emission figures, developing nations are still very much reliant on fossil fuels as a cheap source of fuel and likely to use it long into the future.

The world's atmosphere has already absorbed a huge amount of greenhouse gases that have accumulated over time which are warming the planet. Therefore, even if carbon emissions are reduced, we cannot get away from the fact that extreme weather changes are here to stay. What we need is to use innovative methods that help suck the gases out of the atmosphere so that our choking planet can get rid of the toxins already present, cool down and breathe. Growing trees and decarbonizing our oceans so that they can absorb more carbon are great long term strategies, but we need something more immediate as these will take years to implement and show results. A more radical solution is required to deal with the emissions trapped in our atmosphere.

Geoengineering in the form of solar radiation management is an interesting concept that deserves more attention. A technique that has been studied the most is to introduce sulphur particles into the atmosphere to reflect sunlight and cool the planet. While additional sulphur in the atmosphere brings its own problems, work by physicist David Keith highlighted in The New York Times in October 2021, shows that the benefits outweigh the risks of this cheap and fast acting solution. Any such implementation should come with a strict regime of monitoring to check on the adverse effects this could have such as oceanic acidification and be reduced as needed. According to Keith, this technique known as Stratospheric Sulfate Injection (SSI) could be done using a manageable amount of sulphur and reflect enough light to cool the planet by one degree. While this not may seem much, in climate terms this is huge.

As well as SSI, I call for other technologies to be researched in greater depth such as albedo enhancement, which increases the reflectiveness of clouds or land so that more Sun is reflected into space, and the possibility of using reflectors in space to achieve the same result.

Some have said that such an approach would lead to industries abandoning carbon alternatives as there would be little incentive to invest in carbon neutral technologies. I say that they must be mandated to continue with their efforts while alternatives are explored and tested as any option involves tradeoffs. We must look all technologies that can help us extract the carbon from our drowning atmosphere.

As well as these measures, we need to be investing greater into longer term solutions such as afforestation, ambient air capture, ocean fertilization, enhanced weathering, ocean alkalinity enhancement and other techniques. By diversifying into many solutions, we can build a resilient world that can deal with future carbon challenges.

As the Chairman of the Consortium for Sustainable Urbanization (CSU) in New York and a longtime advocate of climate change matters, I say that we must look into geoengineering methods of tackling this issue as pledges and promises in international meetings are clearly not adequate to deal with what is a real threat to our existence.

Xi's Challenges During His Third Term in Power

President Xi Jinping has secured a third term in power, surrounding himself with those loyal to him in the Chinese Communist Party's (CCP) 20th congress. The event was attended by over 2,400 delegates who rubber stamped Xi's reshuffles and constitutional changes. He has solidified his grip on the CCP and secured his place as China's most powerful leader since Mao Zedong, the founder of the People Republic of China. The CCP Politburo, which is the decision making body of the party, has been filled with loyalists close to the President; a display of Xi's dominance over the party.

Xi is known for his ideology over growth policy where his political thought has been written into the party's charter, further cementing his autocratic leadership of China. This increased autocracy may see some pushback from the USA and other western nations as it increasingly become a country where only one voice is heard. His full control means that he and his team will be fully responsible for the repercussions of policies for the world's second largest economy which faces a number of domestic and international challenges.

China has now released a set of postponed economic figures which shows that all is not well, despite the words of the Chinese Premier. The Yuan has weakened against the dollar and stocks have slumped over concerns that Xi will continue with ideological policies rather than focus on economic growth. China is experiencing slow growth and seems to be a shadow of its former self where it experienced hyper growth for thirty years from 1980 through to 2010. It is way below the rate of expansion it has seen for decades and some way off the 5.5% 2022 target that was set in March.

The Chinese net-zero policy on COVID outbreaks in the country is having severe repercussions on productivity with never ending lockdowns and authorities trying to trace every infected person. This is affecting the movement of people, their ability to work and in turn businesses and overall Chinese productivity as a result. China is a vast country with the world

largest population and enforcing such a policy is highly resource intensive, costly and comes at the price of reduced growth.

It seems that this policy is here to stay with Xi saying in his opening speech at the 20th congress that Beijing had launched a people's war to stop the spread of the virus.

A slowdown in the Chinese property market is another crucial challenge for Xi, which by some estimates is responsible for close to thirty percent of Chinese GDP. The development of the vast Chinese real estate market in recent years has caused high prices and growing developer debt, creating a housing bubble which will be disastrous should it burst. Mega Chinese real estate developers are also in big trouble with many failing to meet interest payments to international investors, with one being labelled the most indebted property company in the world.

The Chinese private sector is struggling due to the increased costs of raw materials, higher borrowing costs, leading to millions of private Chinese bricks and mortar businesses going bust. These businesses make up sixty percent of the Chinese economy and eighty percent of urban employment. China has also been facing growing US export control for some time now which poses a huge challenge to it both at home and abroad as the US tries to squeeze it out of the global technology sector and hamper its ability to compete internationally.

Xi may have won a third term in power, but these growing domestic problems and international challenges will not just disappear because he doesn't want to acknowledge them. This is a critical juncture for China where Xi needs a highly competent management team experienced in economic reforms to patch the domestic market, and one that understands how to handle international relations particularly with western countries.

Accounting and Financial Reporting for Climate Change

Because climate change is an issue that has serious affects on our world, the United Nations has been repeatedly highlighting this concern. It is clear that we need to take this threat seriously in order to build a sustainable world for our future. Countries have actually started to take significant measures to reduce carbon emissions, and to put in the foundations capable of building sustainable economies as part of their commitment to the 2030 United Nations Sustainable Development Goals. This is the pertinent point that I have been raising for some time: the need to have rigorous climate change accountability, embedded into the way that corporations produce their annual accounts. Such accounts should clearly reflect the scale of damage the operations of such corporations cause to the environment, and accordingly their share in repairing such damage.

Having sat on many international accounting boards since the 1980's, as well as having my own international financial auditing firm, TAG-Audit, it is clear to me that the issue of environmental accountability comes from having proper accounting practices in place, where companies can effectively report environmental costs. Having this transparency in place allows for better accountability and for a true picture of what is happening, as after all, you cannot manage what you cannot measure. Polluters all too often are getting away with the harm they cause the environment. Therefore, accounting must be improved to increase corporate disclosures, which is essential to an effective management of carbon emissions.

While interest in this issue has only recently been highlighted, environmental damage costi is something I spoke about as early as 1999 when I led the production of a detailed report with international experts called 'Accounting and Financial Reporting for Environmental Costs and Liabilities'. This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and International Standards of Accounting and Reporting (ISAR).

This area of accounting involves layers of detailed complexity. In response to this, I felt the need to develop this report in order to provide assistance to enterprises, regulators and standard-setting bodies on what is considered best practice in accounting for environmental transactions and events. The objective is to provide information about the financial position of an enterprise in a manner that is useful to a wide range of stakeholders' decision making process, and it is necessary for the accountability of management for resources entrusted to it.

How an enterprise's environmental performance affects its financial health and how financial information relating to such performance can be used to better assess corporate financial risk. The management of such risk is a matter of concern to the board, shareholders, investors, and financial regulatory authorities. Owners are particularly interested because of the potential effect of environmental costs on the financial health of the company that include elements such as costs associated with environmental damage, cleanup operations, property and waste disposal, fines and penalties as well as other environmental liabilities.

This is just the tip of the iceberg and is not something I can adequately address in this short article. The report I produced goes into great detail and can be used as a guide for those looking to ensure better financial environmental reporting. I call on all international accounting bodies such as the IFRS and others to benefit from the work I produced in putting together better comprehensive standards as this is an area receiving greater international attention.

US Intensifies Onslaught on the Chinese Technology Sector

Judging from the recent US action, it seems clear that weakening China is more important to the US than working with it. Actions from the US are aggressively targeting the Chinese electronics sector by denying it access to the valuable semiconductors it needs to produce the electronics it exports globally. The recently passed US CHIPS Act promoting US onshore chip production, the 'Chip 4' alliance designed to exclude China from the global semiconductor ecosystem, denying China access to EDA semiconductors design tools and stopping the export of modern chip devices manufactured by ASML Netherlands to China, are all steps designed to stagnate and derail the Chinese semiconductor sector. It seems though that the US is not content with this and wants to send China back to the Stone Age in a new raft of wide-reaching controls designed to completely freeze China's semiconductor development and cut Chinese companies off from industry expertise.

Having access to modern chips is essential for any modern economy, particularly China as so much of its national production relies on this technology. This particularly is the case with advanced processors, which are needed, in broad range of sectors including AI, military and automotive. The actions forbid US companies and citizens from working with Chinese entities on advance semiconductor research, design or production. This is a damning move because many of the people that work in the industry are dual Chinese/American citizens that work in some of the most important positions in the industry.

This 'cold war technology' is intended to unhinge the Chinese electronics industry and put the US ahead in the semiconductor sector, something which it has left on the back burner for quite some time. It is only after the processor crisis we saw during the pandemic that the US seems to have woken up to the fragility of this sector and the compromising position it finds itself, with Taiwan dominating it internationally and China aspiring to reintegrate it as part of its homeland.

In order to reassert its dominance and mend this broken wing, some would say that the US had no choice but to take such drastic moves to reestablish itself as world leader in processor manufacturing and block the development

of China's technology power by any means. The US is going back to its premise of staying a few generations ahead of its rivals and maintaining relative advantage over its competitors in key technologies which it has let slide over previous years.

This export control seems to be more expansive than those applied in the Cold War with Russia and China that were aimed at their military capability. Concerns are not only over China's military modernization, rather that China is using this technology to monitor, track and surveil its own citizens. The US has said that it will protect US national security and foreign policy interest, while also sending a message that this is about values and not just technology.

The battle here is how you can fit smaller transistors onto chips that are measured in nanometers. The smaller the nanometer size, the more advanced the processor. Modern AI chips for example tend to fall in the 7 nanometer or less category. The US's goal is to freeze Chinas ability to produce anything under 14 nanometers.

As expected, the Chinese are not taking this sitting down, rather considering this action a serious threat. Chinas largest chipmaker Semiconductor Manufacturing International Corporation (SMIC) has made impressive strides in producing 7 nanometer processors using different production techniques. From this, it is clear that Chinese research and development can produce alternative ways of designing and producing advanced processors. This is the linchpin of the Chinese electronics industry, which it cannot afford to lose. Also, export controls on the whole have a habit of being leaky and it is possible that China may be able to get its hands on competitor technology through third party countries or industrial espionage.

Who will win? Only time will tell.

One thing that is clear is that the technology cold war is heating up. Niceties are being thrown out of the window as the US and China battle it out for pole position in the global technology sector.

The Future of the Internet

The technologies of the fourth industrial revolution are coming together in ways that are producing systems and innovations that are transforming our public and private lives. Technologies that I spoke about at length in my book 'Brave Knowledge World' published in 2019, including artificial intelligence, big data, blockchain, the internet of things (IOT) and others, are now flourishing, each with its own sophisticated ecosystem, tightly integrating with one another to produce value chains that are revolutionizing the way we work, play and learn.

The basis of the internet was planted by DARPA (Defense Advanced Research Projects Agency) in the U.S. and successively built upon by researchers such as Vint Cerf and Bob Kahn who developed the TCP/IP communication system which fuels internet communication, and Tim Berners Lee who laid foundation of the modern internet we see today.

Linking global communities in ways that were previously never possible, the internet is seeing massive growth as technologies, connecting billions of devices together and millions in developing countries across the world. This expansion is requiring the internet to become more resilient, for more servers to come online, more storage devices to be made available which in turn is leading to a greater demand for IP addresses and domain names to meet the growing appetite for internet enabled goods and services.

The IoT will push the boundaries of the current internet as it will require a huge number of new IP addresses to deal with the massive explosion that will come with it, with the research company 'Statista' predicting that 76 billion IoT devices will be online by 2025. With billions of devices coming online, providing more IP addresses will be critical which means that initiatives like the adoption of IPv6 will be accelerated, as current IPv4 technology only provides 4.3 billion IP addresses. IPv6 will provide over 340 undecillion IP addresses, in other words 340 trillion followed by 24 zeros - enough to give every atom on 100 Earth size planets an IP address.

Due to the decentralized nature of the internet, it is arguably larger than any government or institution we have ever known, from which nefarious elements are now rising. The internet needs a dynamic type of regulation without hindering the very reason it was created; to transparently share

information and allow meaningful interactions to take place; whilst at the same time allowing law enforcement fair access to such information in order to better protect nations from those looking to do harm. All too often today, we are seeing that fake news or grossly over sensationalized misinformation being disseminated through social media channels. The influence of the internet over popular opinion is great and needs to be better controlled in order not to negatively affect it. This can be seen in recent times with uncorroborated news regarding the COVID virus and its various vaccines spreading like wildfire.

As online services increase, so has the amount of personal information being collected relating to peoples internet habits. This has become a goldmine for retailers and online advertisers who use such information to put their advertisements in front of larger, more targeted audiences. While this is good business, the consumer has little awareness of the consequences of sharing such information. Tedious and complex online terms of service which consumers agree to, are never actually properly read nor understood. The consumer needs to be put back in control of their information in an easy and functional manner and internet giants like Google and Facebook must make it easy for consumers to do this.

The proliferation of e-commerce in the internet has led to a multitude of online sites opening up, selling goods and service to consumers over the globe. This number is continually growing and the ease in which online businesses can be set up is unsettling, as the checks and balances to do so are very lax. This has led to many dubious outfits setting up shop in the cyber world, jeopardizing consumer trust, evading regulation and possibly putting financial information of consumers at risk. All the latest technical controls to protect consumers are almost rendered useless as the weakest link in the chain is the consumer who may unwittingly buy from a rogue trader whose online presence looks convincing. This requires a multi-stakeholder approach to be effective, ensuring that global cyber security laws are established, proper trade governance is implemented, safe financial transactions are recognized and enforced by central banks, and that sufficient legal deterrents are in place. Governments need to become more internet literate and must have the mechanisms to track, deter and prosecute online criminals, as well as inform, educate and promote citizens about internet issues.

A democratic, safe internet must be realized.

During my time leading the UNICT Task Force, the UNGAID and the Global Compact, I called for the establishment of a fifth mode of trade, to govern online trade and services. I also called for the negotiation of an Internet Economy Agreement with the goal of creating a Free Trade Zone for the internet. The World Trade Organization (WTO) that governs international trade, was set up in an era prior to the internet and needs to have a mode for dealing with new forms of commerce on the internet which should regularly be reviewed and improved.

Cyber security is a vital key that need to be comprehensively addressed if the internet is going to survive. The internet has brought along with it high value targets which criminals are targeting in ever more sophisticated manners. It has been estimated by cyber security firm McAfee in Dec 2020, that cybercrime costs the world over \$1 trillion yearly. Cybercrime can severely damage and can even cripple companies and governments alike, adversely affecting innovation, trade and economic growth. The most efficient manner to deal with this threat will be to develop cyber security AI systems that will analyze and evolve according to the constantly changing cyber threat landscape. As this phenomenon is affecting every strata of society, global public-private partnerships and inter-governmental alliances are needed to combat this growing threat which is a multi-faceted problem involving people, governments, law-enforcement, businesses, technology companies and internet providers. The threat of internet crime needs to be taken seriously and dealt with within a global manner as the effects of it are far reaching and seriously threatening the new internet landscape in which we all live.

Crime on the internet has been fueled by a new phenomenon called the Dark Web. This in effect provides anonymity of access to a private internet via specific programs. While this may be seen as a good thing in the case of those that require concealment to conduct their work; such as military agents, journalists, etc.; it is also now being used as a vehicle through which organized crimes are reselling their services and products. The Dark Web requires law enforcement agencies to be technically savvy enough to be able to monitor its activity in order to better protect national interests in a more comprehensive manner.

The need for pragmatic, global cyber policing is clear.

Moving forward, greater strides must be taken to improve the underlying networks through which the Internet operates. As I mentioned earlier, the prosperity of today's technologies are dependent on a more secure, resilient, faster and intelligent network backbone infrastructure to serve the needs of a growing Internet population. Technologies such as IoT, autonomous vehicles, smart cities, AI and more will need intelligent connectivity; networks that are functionally compatible and massively scalable in order to provide a seamless experience for end users.

Anything internet enabled will be intelligently connected through this invisible system of connected people, places and things. This will help give context to all the digital information and services that surround us, allowing the plethora of Internet enabled services and devices to act as an intelligent whole, delivering more value to users. The Internet of Everything (IoE) is an even larger concept than IoT, potential connecting every data, process, person and thing to the internet, especially with the falling cost of IoT sensors and increasing flexibility. Some companies have even printed IoT sensors on paper and plastic that opens up a whole new world of possibilities.

As a businessman and chair of numerous international committees on business, ICT and sustainability, it will be very interesting to see how the internet matures to provide opportunities, never previously seen, and provides novel solutions to challenges facing the human race. This means we must develop a strong foundation now and put in place the relevant processes, regulation and technologies to enable the internet to grow and mature in a safe, secure and pragmatic manner and have skilled knowledge workers that can effectively harness it.

The Importance of Digital Transformation in the Industry

When COVID-19 hit the world, countries began to focus on digital transformation. The pandemic proved that digital transformation has become a crucial necessity due to the remote control and monitoring technologies it offers, and the coordination between distant industrial facilities.

Digital transformation ‘digital applications’ contribute to improving the operational and economic performance of the refining and petrochemical industry by enhancing production processes, managing maintenance programs, and quickly responding to market fluctuations and changes in product demand. This is according to the study ‘The Role of Digital Transformation in Improving the Performance of the Refining and Petrochemical Industry’ by the Organization of Arab Petroleum Exporting Countries (OAPEC).

The importance of using robots in maintenance operations in hazardous areas comes into play, along with the application of artificial intelligence and monitoring systems to manage corrosion issues and alert operators to indicators that warn the operator of potential malfunctions. This allows them to take preventive measures before problems escalate, contributing to a higher level of compliance with occupational health and safety regulations and reducing environmentally polluting emissions.

Additionally, digital technologies such as ‘augmented reality’ play a significant role by integrating the actual work environment with relevant information about that environment. This aims to enable users to visualize it more clearly and comprehensively. This technology is utilized in various fields, such as maintenance operations at work sites, where virtual instructions appear on a display board showing the stages of inspection and repair. Simultaneously, live images are transmitted to maintenance experts, illustrating the damaged parts or those requiring repair. The experts then send text messages supplemented with diagrams that clarify the stages of the repair process.

Augmented reality technology is also used to train operators while on the job by organizing remote training sessions conducted by specialized experts. This technology displays the locations and forms of equipment

in 3D imaging that simulates the real world. The study presented some practical examples of digital transformation projects implemented in the refining and petrochemical industry in various regions around the world, as well as in some Arab countries, highlighting the benefits achieved as a result of their implementation

The importance of data lies in assessing the current condition of refining and petrochemical facilities and identifying the factors that may affect production processes. Thus, the selection of the best possible solutions to avoid malfunctions and improve the operational and economic performance of the industry.

The application of digital transformation in the industry contributes to the development of the production process, reduces waste of production inputs, maximizes revenues, and lowers costs. It also emphasizes the importance of linking national industries with educational institutions and research centers to provide solutions, innovations, and initiatives for developing the industrial sector.

Digital transformation significantly reduces costs and effort, enhances operational efficiency, and organizes it across all production sectors. It also improves quality and simplifies service acquisition procedures, additionally, it provides innovative and creative services, reaching a larger segment of customers and the public.

The Fourth Industrial Revolution offers significant opportunities for countries that rely on supportive policies in line with these developments. It indicates that digital transformation requires the preparation of qualified youth in various technological fields, especially in light of the increasing applications of the Internet of Things and artificial intelligence across all production and service sectors.

Digital transformation obliges government institutions and private companies to benefit from the Internet of Things, which enhances their ability to predict, adapt, and innovate to achieve the best results. This contributes to improving the efficiency of institutions and agencies in delivering services and facilitating access for beneficiaries. It also strengthens communication between government and private sectors, enabling them to carry out joint tasks with flexibility and integration.

Digitizing quality management aims to align the quality system with the technologies of the Fourth Industrial Revolution to enhance the efficiency of institutions, performance, innovation, and business models. Digital transformation helps organizations improve their industrial processes and use their resources more efficiently, while also opening up broader horizons for dialogue among different sectors and strengthening partnerships.

Digital transformation contributes to the transition of ministries and institutions to operate according to a working system that relies on digital technologies and a smart technological information infrastructure based on knowledge, creativity, and innovation in delivering services and products to clients efficiently and effectively, indicating that digital transformation enables citizens to access services securely and easily through various digital technological means.

The system for building Digital Egypt includes the development of technological infrastructure and the Internet, launching the Digital Egypt platform, establishing the Government Information Center, and initiating data purification and correction processes. In addition to connecting government databases and utilizing smart applications, as well as constructing smart cities and creating secure and smart issuance complexes.

With the spread of internet technology everywhere, traditional companies must rethink their products and services to thrive in the fourth industrial environment or risk being left behind by smarter digital competitors. This inflection point represents a real opportunity. Many leaders recognize the need to adapt to the new model of the Fourth Industrial Revolution but are unsure how to achieve this quickly. In a recent survey of 2,000 global leaders, the top three challenges in changing strategy to meet the requirements of the Fourth Industrial Revolution were the lack of vision, numerous technological options, and organizational or geographical silos.

The Fourth Industrial Revolution and the Industrial Internet:

First, let's talk specifically about the Fourth Industrial Revolution to prepare the economic community for digital industrial transformation. As some global publications highlighted, the Fourth Industrial Revolution works on transforming how organizations operate by bringing real-time data and intelligent information into their processes.

This transformation is the transfer of value from physical products to software, and from processes or functions to data. For example, a smart thermostat costs significantly more than a traditional thermostat and requires much greater setup, but it provides real benefits derived from consumer data, including reduced energy consumption, improved comfort, and learning to anticipate the preferences of owners. Consumers are willing to pay for data-driven insights, and increasingly, so are businesses.

The transformation in the Fourth Industrial Revolution has led to the emergence of many IoT-based applications in the industrial space. From inventory planning to predictive maintenance, digital transformation can significantly enhance operational efficiencies and capital across entire ecosystems.

What is digital industrial transformation?

To take advantage of this shift to the Fourth Industrial Revolution and to effectively create and invest in Internet of Things (IoT) solutions, organizations must integrate new digital technologies and capabilities into their legacy assets.

As with most fundamental transformations, implementing this change is easier in theory than practice. Engaging in a digital industrial process involves fundamental shifts across all aspects of the business. Specifically, to create value throughout the customer lifecycle, the organization must redirect its business model from linear to continuous.

For example, customer service in traditional business models begins only when a customer encounters a problem that needs to be resolved. In digital industrial models, service teams can track usage and performance remotely, predict when a problem will occur, and proactively communicate with the customer to resolve it, thereby reducing downtime. This requires a significant shift in mindset and processes, and the challenge becomes more complex when companies attempt to balance their old businesses with emerging offerings and new business models.

This awareness may explain why 94% of executives in industrial companies view digital transformation as a strategic priority, yet only 14% are fully confident that their organizations are ready to harness the changes associated with the Internet of Things in the Fourth Industrial Revolution.

Industrial Digital Transformation

Many high-tech companies and industrial firms have collaborated to help advance their digital industrial transformation agendas. Most of them have focused on retooling their operations and integrating advanced analytics into their products. For example, one railroad operator implemented information and communication technology solutions to develop an in-vehicle monitoring system that spans over 1,500 vehicles across 30 locations. By analyzing the data collected from this monitoring system, the company was able to achieve a reduction of more than 10 percent in fleet costs through fuel consumption savings, reduced idling, and improved purchasing habits. Furthermore, safety incidents and breaches dropped by over 90 percent.

However, some leaders in industrial manufacturing see greater opportunities in the market and have adopted more ambitious perspectives. They aim to develop their business models to help others adapt to the Fourth Industrial Revolution and expand their product portfolios to offer smart solutions. For example, some companies have embarked on a multi-year transformation from hardware-focused businesses to a business-as-a-service model, enabling them to integrate digital transformation into their current operations.

Whether retooling internal processes or transforming your business to compete in a market of Internet technologies and digital transformation, effective transformations should be based on digital industrial business models.

With digital transformation, the manufacturing industry, new technological opportunities, and business models face significant challenges. Especially after the digital industry opened up new ways to organize production, logistics, and delivery, providing better means to serve and satisfy consumers. Mass production is characterized by increased flexibility, personalization, and resource-friendliness to better serve customers.

It also allows for real-time monitoring and control of production to reflect dynamically changing customer demands. On the other end of the chain, consumer trends are collected in real-time with increased levels of accuracy. Big data is produced, traded, and shared, with a significant portion of the entire business value present in this big data.

Required Jobs in the Fourth Industrial Revolution and Digital Transformation:

There are hundreds, if not thousands, of different types of jobs in this rapidly growing industry. Here are some examples of broad categories of roles; this is by no means an exhaustive list. A more detailed classification of sectors and available roles can be found on the digital job portal.

Such as web, app, games, software development, user experience, interface design, analytics and insights, testing and quality assurance, and project management.

Along with digital marketing, advertising, sales, business development, consulting, e-commerce, project management, analytics, chief economists, account relationship management, and social media

The industry helps vendors enhance general employment skills. Additionally, having a foundational knowledge of HTML and CSS, along with some understanding of things like analytics tools—whether for social media and/or web, such as Google Analytics—can be a definite advantage. You will also need to demonstrate a genuine interest and enthusiasm for the sector and all digital things

There are key areas for job growth in the digital sector, largely based on where they have recently witnessed an increase in demand from employers. Content Management and Production: Search engine optimization has become more challenging due to changes in search engines and their algorithm updates, so high-quality content has now become a major driver of traffic to websites

Social Media and Community Management: Roles in this area have become more comprehensive than just social media; they have shifted significantly towards community management, which involves engaging with and developing relationships with key influencers, customers, and other stakeholders.

Digital Communications: There is less of a distinction between digital and traditional forms of communication; marketing, advertising, public relations, communications, and related fields have become more integrated and centralized for all businesses.

The importance of digital transformation technology will contribute to distinguishing companies based on their success and the speed with which they implement this technology.

The key benefits that can be gained from implementing digital technologies in the oil refining and petrochemical industry are as follows...

1. Improving profitability through the application of real-time optimization systems that integrate production control systems with the production planning process.
2. Enhancing the efficiency of production processes by applying artificial intelligence in traditional control systems.
3. Improving the reliability of equipment and production units, thereby reducing the chances of breakdowns, attributed to the implementation of predictive maintenance solutions based on artificial intelligence and machine learning technology.
4. simplifying supply procurement procedures and transactions, eliminating intermediaries, and accelerating access to materials and supplies at lower costs.
5. The recent COVID-19 pandemic has proven that digital transformation has become a necessity due to the remote control and monitoring technologies it provides, as well as the coordination among dispersed industrial facilities.
6. The process of predicting breakdowns relies on analyzing historical data, not just from a single site but from multiple locations. Therefore, governments need to establish legislation that facilitates data sharing among oil refineries and petrochemical units operating in the member countries of OAPEC.
7. One of the indirect benefits of implementing digital technologies in the refining and petrochemical industry is the reduction of emissions harmful to the environment due to improved energy management efficiency in production processes and the early detection of corrosion issues in equipment and pipes containing hazardous materials, allowing for preventive measures to be taken before they lead to hydrocarbon leaks into the environment.

8. Despite the importance of technology in the digital transformation process, it cannot be relied upon alone to manage any project involving the application of information technology. Investing in technology alone is costly and does not achieve the desired results if it is not accompanied by a clear and precise definition of project objectives or return on investment, enabling the investor to determine the economic feasibility of the project or obtain the necessary funding.
9. To ensure the success of outcomes and achieve the desired goals, the implementation plan for the digital transformation project must be on the strategic agendas of refining and petrochemical companies.
10. Digital transformation, like any other significant change, requires the care and attention of senior management in companies. This includes establishing a clear vision, allocating the necessary funding and resources, promoting digital culture, and supporting a culture of innovation and a willingness to change among the company's employees.
11. Strengthening cooperation and coordination among OAPEC member countries through coordinating meetings and seminars to discuss opportunities for applying digital technologies, and exchanging views and experiences on implementing joint projects to reduce the burden of high investment costs that each refinery may incur.
12. The lack of talent and qualified personnel hinders the implementation of new initiatives, and companies must recognize their needs for expertise and skills by assessing the current capabilities of their employees and developing a strategic plan to address any personnel shortages in line with the future projects they will implement.

A Call for: A Democratic International Order

Our contemporary world is witnessing an astonishing exacerbation of conflicts, wars, natural disasters, economic crises, and the spread of extremism, violence and chaos. All this takes place despite the progress of science, the development of civilization, and the increased awareness of states, peoples, and even individuals, of the capabilities and wealth available on this planet to achieve a decent life for every human being without discrimination, providing them with a safe, stable, prosperous life, free from all the dangerous elements that plague our contemporary world.

Before we determine the means to liberate our world from the current situation, we must point out the causes of these crises and this civilizational regression that we are suffering from, which is exacerbated by the day.

The foremost reason is the decline of the international organization's role, to the point of complete inability to carry out the tasks for which it was established as determined by its founding Charter. Its main goal was to manage world affairs after World War II, foremost of which was achieving full equality among member states, resolving any disputes through negotiations and peaceful methods in accordance with international law, and devoting all the wealth of our planet to the well-being of human beings and ensuring their safety from any natural or man-made hazards.

However, the United Nations simply stands back as the devastating war between Russia and the Western world (the United States, Canada, the European Union and others) in Ukraine rages on, as well as the continuing Arab-Israeli conflict that has been on its agenda since its establishment more than seven decades ago, and the spread of conflicts throughout the Middle East; in Libya, Syria, Yemen, Somalia and Sudan. This is in addition to the hotbeds of tension in other known locations that threaten to explode at any time.

The United Nations and its specialized bodies also fail to overcome other challenges, such as the severe damage caused by humans to the climate and its resulting disasters, such as epidemics and other natural hazards.

Moreover, the main reason for the deterioration of the world's security is the international organization's impotence caused by its inability to achieve democracy among its 193 members.

The existing international system is non-democratic and cannot restore the organization's influential role without achieving full democracy among all its members, as stipulated in the Charter.

It is not enough for the member states to achieve democracy for themselves (although many member states have not). The international system must also be democratic to end the domination of powerful states over small and less powerful member states in the organization.

Attempts have been made to reform and modernize the international organization's rules on which it was founded in 1945. Still, they failed because of the monopoly of the greater powers (who resisted any reform) armed with the veto, thwarting any international action to address any crisis with no rhyme or reason.

There are many severe consequences of this entrenched and deepening domination.

Therefore, through this Summit, we call on the leaders and wise men of the world to confront and reform this situation and enhance the international organization's ability to carry out its duty. Its democratic and fair decisions and rulings should be the outcomes of the will of most of its member states. Then, and only then, the path will be corrected, and the capabilities of human beings and the earth's wealth will be devoted to building, not demolishing, and facing the challenges and crises that countries and peoples suffer from.

The Effect of the Pandemic on Economic Behavior

The arrival of the COVID virus in early 2020 sent the entire world into a frenzy, with lockdowns, quarantines and curfews affecting business globally. In order to continue operating in such an unprecedented circumstance, businesses and employees had to adapt, using new ways of working and communicating. Now that a comprehensive program of vaccination is underway in most countries, life is getting somewhat back to normal, but the behavioral changes that COVID brought seem to have made a permanent imprint on the way we live and work and could stay for good.

Businesses and employees adopted remote working methods to continue operation during the height of the pandemic. Now, companies are looking to adopt remote working as a permanent working practice as it saves on company energy bills, on renting large office space, on commuting time and cost, as well as leads to greater productivity as employees can work in a more flexible manner. Software sophistication of collaboration has made team working easier, as meetings with clients can be held online through a number of different platforms, making businesses more fluid. The pandemic forced companies to adopt such technology and allowed them to experiment with new business practices that have gained traction and proved effective.

Digital technologies helped companies in numerous sectors to adopt augmented reality technology during the pandemic to help train employees and help with diagnosis using remote experts. This provided a safe, COVID compliant environment for work to continue and it is something that will be adopted by many as a long-term practice. The savings and convenience of adopting such technologies are many and has changed the ways in which businesses operate.

Working from home also had a knock on effect where employees started investing more in their homes to develop work areas through the purchase of additional furniture. As homes became places where families spent a lot of time together because of lockdowns, they also invested more in entertainment systems, exercise equipment and technology devices to make the experience more bearable as this was the first time many experienced prolonged periods of stay at home. Moving forward, a hybrid work plan for employees seems to be feasible for most employers as they have faith in the technology and have seen productivity remain the same, if not better, with a reduction in business expenses.

Online education provided millions of students with the opportunity to continue their education. While it is true that schools struggled at the beginning, most eventually got up to speed and adopted online technology to deliver classes. However, this does not remove the need for schools and colleges, especially where dexterous skills are required, but did prove to be a valid alternative especially where standard education would suffice. The maturing of online education will continue and this crisis was the push it needed to develop. We heard many calls to adopt online education before the COVID crisis but little action was taken. The pandemic forced our education system to change which is a good thing so that we develop a more dynamic and a more democratic schooling system ensuring availability for students globally.

During the pandemic, many people could not access their local supermarkets and opted for online alternatives. This provided convenience to consumers and pushed retailers to create new shop and deliver mechanisms where employees would shop on the consumers behalf and deliver the goods for a fee. This created more jobs and a new revenue stream for retailers and a lifeline for those that could not get out to shop.

The appetite for greater public hygiene has largely increased with the use of sanitizers, masks and social distancing and made people more aware of their surroundings. I see that this will help in reducing the effects of any future virus and will help contain infection rates, as many will continue to follow these effective practices that make people feel safer.

The public is also demanding more from the social media giants in the wake of COVID fake news which is an agenda both consumers and government should be pushing.

These behavioral changes translate into new business opportunities. It is a chance for organizations to reassess customer needs and for governments to review their policies and to invest in greater digital technology infrastructure to help consumers, businesses and employees get through this period and plan for a more integrated digital future.

Discontent with Democracy

In the words of Abraham Lincoln, the United States government, as the greatest democracy in the world, is ‘a government of the people, by the people for the people’. As a ruling system, there is no questioning the great benefits democracy has brought society, but in order for it to survive in the future, it must be reformed to continue serving people in a fair and equal manner.

In our modern age, democratic systems have become bureaucratic monoliths. This often dictates currying favor to secure votes by focusing on short-term goals to appease the electorate and to improve elected representatives’ chances to stay in power, rather than truly caring for the needs of the people. Therefore anti-establishment movements are becoming more widespread across the world, which brings into question how well our democracies are really functioning.

Anti-establishment movements have appeared across the world, challenging the norms and values of democratic institutions, and assessments of how democratic functioning varies considerably across nations. According to an assessment done by Pew Research Center, most of those interviewed from nations across the globe believe that elections themselves bring little actual change and that politicians are corrupt and out of touch with the people’s needs, with courts being seen as not treating people fairly.

Dissatisfaction with democracy is primarily related to economic frustration, the status of individual rights as well as the perception that the political elite are corrupt and do not really care about the needs of the people, with such sentiment being higher in emerging nations than advanced economies. In emerging economies, those with higher levels of education and income are more dissatisfied with democracy than those with lower levels of education and income.

Populism seems to be taking over in many countries across the world as a reaction to democracy failures. This is not a clearly defined ideology and strives to appeal to the emotions of ordinary citizens who feel they are not being listened to and that their concerns are not being addressed. On the whole, populist movements consist of anti-elitist rhetoric, focusing on anti-establishment and anti-immigration themes.

Right-wing populist politicians have taken power or have threatened to do so in many European countries, Brazil and the United States. According to Shawn Rosenberg, a professor of political science at the University of California, Irvine, “democracy is devouring itself, and it won’t last”. He also states that the right wing overall populist share of the popular vote in Europe has more than tripled from 4% in 1998 to approximately 13% in 2018. People are looking for representation which is not necessarily a democratic principle.

I would like to draw attention here to President Biden’s recent remark where he said the US faces difficult challenges with China, as the Chinese system is more flexible than US democracy. There is something to be said about authoritarian regimes that can implement decisions quickly. Now, I am not calling for a replacement of democracy with authoritarianism, but we can certainly learn some lessons from our Chinese friends.

What is the future of democracy?

One thing is certain: democracies cannot continue as they presently stand. Our political systems must bring back the human factor into democratic rule and put people and their needs first. If they do not, they will have failed their citizens and the very basis for which democracy was established which is to serve the interests of the people.

If nothing is done, populism and discontent will increase and people will be very easily swayed by emotion, particularly in difficult times such as those we all experienced over the past two years. We need healthy democracies where people are well informed and where their welfare is given top priority.

Building Trustworthy AI Systems

As Artificial Intelligence (AI) systems proliferate across the world, the need to build such systems that are trustworthy is paramount in order to better promote safety, transparency and auditability, particularly as they start to play a greater role in helping humans with analysis and decision making. The potential this technology holds for improving our lives is immense and is already seeing greater adoption across many sectors. As with any technology, the potential for abuse also exists and many AI researchers have voiced their concerns about rapid, irresponsible development, which could harm rather than benefit.

Building trustable AI systems is essential as it starts to play a greater role in our lives with greater demands being placed on such systems from technologies such as robotics, 5G and IoT. The amount of big data generated from these systems can only fathomably be processed using intelligent AI machines to help us make sense of this information in a meaningful manner. The falling costs, availability and maturity of AI technologies is providing value that otherwise would be nearly impossible to derive using traditional methods as the variables and interactions are far too many for humans to analyze.

This in effect means that AI systems will help play a greater role in enabling us manage important systems and networks which must be done in a manner that is safe, reliable and that can be explained. For example, the logic as to why an AI system has taken the decision to intelligently reroute electricity in a power plant must be clear so that there is a proper audit trail. This obviously is more critical in settings such as healthcare or in the case of nuclear power plant management where the consequences could be catastrophic, but is also valuable to online marketers for example to know why an AI system has recommended a specific product to a certain user on the internet.

In order to build trustworthiness in AI systems, I see that there are three areas that must be focused on, namely:

- Developing explainable and safe AI systems
- Training AI systems using unbiased dataset
- Improving the security of AI technology

Allow me tackle each one of these areas in brief.

AI systems must be developed with explainability in mind. The increasing reliance on AI systems to analyze and process data to deliver better and faster insights will mean that they will come under scrutiny to ensure they are functioning correctly and transparently; which is the goal of explainable AI (XAI). This poses a challenge as AI systems are complex black boxes which really only a few understand, and that brings about the need to have the ability to backtrack and understand why AI systems came to the conclusion they did.

As well as explainability, they should be developed with hard coded safety features to ensure that there are guarantees around human safety that cannot be violated regardless of the conclusions reached.

The second part to the AI trustworthiness puzzles is the need to train such systems using vetted, unbiased information. Any AI system needs to be trained on sets of data in order to build correlations, which it then uses to makes predictions about future situations it is presented with. If AI systems are fed with datasets that are biased or contain prejudice, the resulting outcome will be a system that reflects the same bias. Checks and balances need to be in place to ensure that critical AI applications in particular are trained with vetted, unbiased information.

The final part to achieve trustworthiness is to ensure that AI systems are properly secured using evolving AI based security systems. The field of cyberwarfare is rapidly changing and it would be disastrous to have such systems compromised. Malicious actors are becoming more sophisticated in their attacks and are building AI based attacks which we must have answers for.

Building trustworthy AI systems must occur by governments working hand in hand with the private sector to properly understand this technology to develop national policies and capacity in this area so that a holistic ecosystem can be built in which this technology can thrive.

Feeding 8 Billion People

The United Nations has projected that the world population will reach 8 billion by 15 November 2022 and that India will surpass China as the world's most populous nation in 2023. This increase is happening due to longer life expectancy because of improvements in public health, hygiene and medicine, as well as continued high fertility rates in some nations. We are now living longer than ever before, a reality which implies serious repercussions on feeding such a large population. That also means that the current food production levels need to increase to keep pace with the steady population growth.

Other huge implications relate to global agriculture and it is clear that our farmers need to be empowered to do more and with greater efficiency, as the growing burden of feeding these numbers will strain global resources. In my mind, this can only be done through the implementation of smart technologies to help reform our agricultural practices to meet the looming challenges that an increased population will require, and to decrease reliance on foreign imports which was not seen as an achilles heel until the Ukraine war happened. The UN predicts that global population numbers will reach 9 billion by 2037.

The only way through this major challenge is by the greater adoption of innovative farming technologies, and by transforming our farmers to knowledge workers. We need to be investing more in smart agricultural technology and to create smarter farmers. In particular, I see that digital technologies will play a growing role in enabling smart agriculture. Vast fields of crops and cattle, coupled with a huge array of factors governing the health, growth and harvesting of produce, means that intelligent management is the only way forward, particularly as climate change takes hold, bringing a new dimension of complexity to the global food equation.

Innovations in areas such as telecommunications, drones, IoT sensors, artificial intelligence (AI) based systems and big data, are starting to be used by farmers to make better decisions to improve their operations by giving them access to more meaningful information. This brings more certainty, predictability and control into farming as more informed decisions can be made based on live data, providing for better outputs and increasing yields.

The application of smart agriculture technologies allows accumulation of data from across an agricultural estate which can be correlated and analyzed through AI systems giving workers insights into all activities, ranging from equipment health, crop growth, weather conditions, right down to soil moisture levels. This technology must be used more to make intelligent decisions and rolled out in poorer nations that desperately need greater help.

Land can be quickly and easily monitored with the aid of drone technology, which together with IoT data, provides for a very useful suite of technologies for smart agriculture to come about. Computers are far better at correlating and analyzing masses of data than humans, allowing workers to make informed judgements using correlated information. Better forecasting and accurate knowledge on how much farmers can produce ensures that supply chains and end users are better informed of the quantities they have. This means that produce is not left to rot in local warehouses and allows for better distribution to take place.

Proper control over production also allows for better management of expenses and it reduces waste. By having technology that provides predictive analysis, agricultural workers can proactively work to mitigate risks facing livestock and yields by being better informed. Increased process automation allows for greater industrial efficiency and frees workers to engage in important tasks than just physical labour. This also allows for better yields to come about as a greater amount of land can be managed, fertilized and harvested through automation which ultimately results in greater revenue.

The quest for greater food production is critically challenging, at a time where the amount of arable land per capita is decreasing and greater deforestation is occurring, and because that impacts soil quality and causes degradation, it further complicates our ability to meet the global demand for food.

The only solution to this problem is the move toward data driven smart agriculture. This must be made affordable and available to all if real changes are going to be seen on a global scale. It is little use for only developed countries to have access to this technology. This must permeate through the entire fabric of global farming if we are to stand a chance of feeding billions of extra people in the future.

Reflections on our Digital Future

The pandemic in 2020 saw many sectors adopt technology in order to continue operation during what was testing time for all of us. Technology was seen as a useful tool to help ensure operation while limiting the number of employees in office spaces. The advantage of leveraging technology and benefits of remote working has led to many companies to adopt this as a permanent strategy for business operations, allowing companies to save on energy bills and for employees to save on travel time and cost. This has forced many to skill up in order to be in line with the times, as a strong technology skillset becomes a requirement for many to continue in their jobs.

Many industries have seen much benefit from greater automation, such as unmanned operations in manufacturing and energy plants where many have achieved remote operation and monitoring, which is no easy feat as such operations are critical and highly complex. Work is now being reengineered to be done more remotely as internet of things devices start to mature and provide real life solutions which are integrated with AI and blockchain technologies to optimize business operations.

There has been a lot of generated momentum to adopt, use and innovate greater technologies in areas such as AI, blockchain and others to achieve greater efficiency in business operations that previously were not possible. The pandemic forced us to become a digitally based workforce.

However, this greater reliance on new technologies has implication on data security and the need to provide greater assurance in all aspects of the technology development and operation chain. We cannot afford for these to remain black boxes that only a few understand as we are becoming more reliant on them.

These systems need better security, particularly around datasets being used for these systems to operate in order to remove bias from them to ensure accurate output and decisions. They must be better protected as malicious actors become more sophisticated in their attacks.

The time for monolithic solutions is over as the lines between technologies starts to blur to established integrated ecosystems of technologies to better serve the need of business and man. Now that we have undergone a lot of

trial and error during the pandemic, we understand better what technologies work and which ones need improvement. This is affecting the pace and direction of change leading to better adoption and evolution of technology.

The applicability of blockchain as a super distributed ledger is applicable in many industries with the need for good, correct data being imperative. An essential element is for us to be able to keep control over our data and provide access to it on a need-to-know basis, have knowledge workers that understand these technologies, how to audit them and how they can be enhanced.

What is happening now is a consolidation with most technologies now having an element of AI in them. A democratization of digital technologies is taking place where silos are being broken and concerns are being looked at collectively as the future of them lies in taking an integrated approach to collectively make best use of them for business and people. Moving forward this will provide new ideas and models that we have not thought of yet and will certainly see new ways of doing business coming about.

This requires forethought with proper governance in place and an environment that promotes learning and innovation as we must build the new generation of knowledge workers with not just a digital skillset, but with a much greater level of technical knowhow so that we may benefit from, and contribute to, this growing field.

This leads to a matter that has been close to my heart for many years which is reforming our education system to produce technology specialists who can harness this technology in an expert and ethical manner. We need to move away from traditional modes of education and learning that have led to regression, and establish educational systems that are truly modern and help students navigate that labyrinth of online resources.

We must focus on building technical specialists to survive which is the only way in which we can achieve a renaissance of this regions past, where great scholars contributed to many sciences in the past and left their mark in history.

A Vision in Administrative Reform
13 Facts, 13 Conclusions
If America does it, we should also do it:
“Economic Protectionist Policies and
Support for National Industries”.

Facts

1. The realities of the local and global American situation drive the U.S. administration and its various branches to reconsider most aspects of its deep-rooted policies by adopting protective measures to avoid the decline in its economic, political, and even military status. These measures are taken regardless of the interests of allies, friends, and dependents, including the European Union, which has viewed these protective laws as a blow to its economies and an abandonment without any consideration of its interests, especially at a time when the EU is facing consecutive setbacks due to the war in Ukraine.
2. The United States has approved a package of laws, regulations, and measures to address the global energy crisis (oil and gas) aimed at transitioning to clean energy, including the disruption of a proposed UN system that I was at the forefront of establishing with a group of experts. This comes after Washington spent decades opposing climate conferences and any direction that would restrict or regulate the astonishing American pollution of the climate and environment, arguing that such actions would limit and ‘diminish’ the profits of the military-industrial complex in particular and American industries in general, under the pretext of serving the interests and welfare of the American people
3. The details of the law, along with its justifications and reasons, reveal that there are states and regions in the United States living below the poverty line, while U.S. military bases cover vast areas of the globe to preempt any potential changes, not only at the expense of its interests but also at the expense of its broader concepts of life, society, politics, economy, and more
4. The law acknowledges the absence of clean energy in America, as it calls for ‘accelerating the deployment of clean energy, clean vehicles, clean buildings, and clean manufacturing.’ It also recognizes that parts of the United States are often neglected and deprived of services and that there are disadvantaged communities that will receive 40% of the

- total benefits from climate, clean energy, and infrastructure investments
5. The law also acknowledges that there is an existential threat from the crises of climate change and inflation, allocating \$370 billion to address it (which indicates the magnitude of the climate crisis). There is a need for clean energy solutions across all sectors of the economy, to reduce energy costs for families and small businesses, and to accelerate private investment in clean energy solutions across all sectors of the American economy
 6. The law stipulates the existence of historically disadvantaged communities in America that endure chronic pollution and suffer from economic and traditional distress—namely, areas inhabited by Indigenous peoples. These communities are marginalized, burdened by pollution, and lacking in essential infrastructure and services, which also deprives their small businesses of services
 7. The executive summary of the law acknowledges that pollution in the United States has increased by 100% since 2005, which necessitates reducing it by 50-52% by the year 2030, bringing it back to the levels it was at that year.
 8. The question that should be directed to allied countries and those referred to as friends of the United States is: Will Washington remain capable of assisting while seriously transitioning to clean energy, which implies exerting tremendous pressure on the military-industrial complex and industries in general, amid declining profits and revenues, alongside the rise of China, the BRICS axis, and the beginnings of a rift with the European Union and others?
 9. Is the United States, which suffers from all of the above, capable of finding solutions for the world while it squanders its unbacked paper dollars and exploits the resources of its dependents through wars, conflicts, interventions, and support for Israel?
 10. The European Union is presumed to have sufficient capability to defend its interests, even if its major capitals have expressed their dissatisfaction with this abandonment and their status as prey to the energy crisis and its repercussions, facing it alone. Moreover, there has been a disastrous American rush to reap the benefits of the crisis, primarily resulting from successive American actions taken by multiple administrations that did not take into account the interests of NATO partners, global capitalism, or the interests of their dependent states, but rather adopted an adversarial stance toward some competing blocs.
 11. If the United States, in its greatness, acts in such a protectionist manner to preserve its interests while ignoring decades of partnerships with its

closest countries, friends, allies, and dependents, isn't it more appropriate for marginalized countries to behave similarly? Furthermore, isn't it the right, indeed the duty, of competing countries, powers, and blocs against American leadership to prioritize their strategic interests in return? Especially since the world witnesses the injustice perpetrated by the West, led by the United States, on a global scale

12. It is strange that while the world is reacting to the American protectionist trend through similar measures focused on protecting their economies, some senior officials declare that the priority in government contracts and purchases is given to major foreign companies rather than to protecting and supporting national companies to enhance the value added in local products and stimulate competitiveness, a point we have advocated since the mid-1990s. The experiences of major companies such as Apple, Samsung, and Huawei show that without the support of their governments, they would not have become trillion-dollar companies that produce billions of dollars annually.
13. The coming days will be more difficult for the world and us if we do not act strategically and quickly

Conclusion:

We, like Jordan and any Arab country, are in greater need of such a law from America to protect our national industries and services. Therefore, I recommend the following:

First: Countries need to reread and reassess their political, economic, and social positioning, taking into account the American direction. This means adopting protectionist policies for their economies and social orientations and doctrine in line with their interests, sovereignty, stability, independence, and progress.

Second: Stop accepting Western handouts in exchange for absolute dependency, which will inevitably come to a halt in light of new internal and external realities. Instead, seek alternatives for genuine growth that arises from their competitiveness

Third: Enhance national income by achieving self-sufficiency (in industry, agriculture, and technology), food security, developing agricultural production, promoting smart agriculture, diversifying agricultural manufacturing, and raising the skills of the local workforce—both technically and professionally—while employing local labor instead of exporting it and instead of bringing in foreign labor as a substitute for our human capital.

Fourth: Encourage cooperative work in all fields to maximize the accumulation of national capital capable of implementing major projects.

Fifth: Use foreign currencies to import the necessary equipment for growth and development, and enhance the local production of consumer goods while importing only what is essential for development.

Sixth: Support the construction and industrial projects that consume less energy and are less polluting, warmer in winter and cooler in summer

Seventh: Reduce energy costs for national factories, which are energy-intensive, as this will provide the local market with what it needs and reduce pressure on foreign currency, thereby dispensing imports.

Eighth: Invest in the development of renewable and clean energy production, launch the private sector in this field, provide it with the necessary facilities in Jordanian territories, finance it, and accelerate the deployment of clean energy technologies.

Ninth: Develop climate science and tools for monitoring climate changes and rainfall patterns, preserving and developing water resources by protecting them from waste, constructing dams, safeguarding springs and water basins, and putting an end to their theft, whether from outside or within.

Tenth: Encourage and support the diversification of exports, avoiding reliance on traditional and Western markets, opening new markets, and prioritizing exchanges with neighboring Arab countries to reduce dependence on foreign currencies.

Eleventh: To solve the transportation problem, there should be an integration of bus operating entities, a merging of fare structures to align with operational processes, the implementation of intelligent transportation systems, and the development of a traffic management program that includes managing parking, restricting vehicles, imposing fees for causing congestion, and establishing a national road safety plan, in addition to master plans for pedestrian and cyclist pathways.

Twelfth: Rationalize the public sector by eliminating redundancy and nepotistic appointments, appointments from outside the fundamental employment principles, and putting an end to conflicting authorities and the duplication of institutions with similar functions.

Thirteenth: Encourage digital transformation in the operation of factories and all sectors.

“My dear homeland... The greatest of homelands”

I have had many discussions with prominent Western and American figures during the past fifty years. None of them was conducted through coincidence. Instead, I was always the founding member, active member, or honorary president of this or that conference. I was always privileged to deliver a meaningful speech and to direct it sometimes in a gentle and courteous manner, to avoid exacerbating the conflict in opinion and viewpoints between the East and West.

There was always one common denominator between all those I interviewed and debated with logic, reason and objectivity. I credit my knowledge and culture with the dynamism of dialogue and the flexibility of discussion that God has blessed me with, as I mentioned before.

More importantly, the phrase that resonates in my mind and that was frequently used to address me directly in every circumstance is: “You, the Arabs”. Now, I have taken in this term with my whole being, and I repeat it with pride, “We are the Arabs”, and with even more pride, “Yes. We are the Arabs”, we are a homogeneous mixture of language, geography, destiny and civilizations.

The descendants of the Pharaohs, whose civilization in Egypt withstood Arabism, are proud of their Arabism. The descendants of the Assyrians and Babylonians in fertile Iraq are proud of their Arabism. The descendants of the Arameans, Sumerians and Palmyrene in Syria are proud of their Arabism, the descendants of the Canaanites in Palestine are proud of their Arabism, and the descendants of the Phoenicians in beautiful Lebanon and green Tunisia are proud of their Arabism, and the descendants of the Holy Prophet in The Kingdom of Saudi Arabia and the Gulf states are proud of their Arabism, and the descendants of the Edomites, Ammonites, and Moabites in the Hashemite Kingdom of Jordan are proud of their Arabism. Likewise, the brothers in the proud and free Maghreb, heroic Algeria, despite their geographical distance from the Arab countries and their closeness to European countries, especially Italy and Spain, and their fluency in the French language, did not hinder them from feeling a sense of belonging, pride and honor in their noble Arabism. Also, the people of Yemen, the land of diverse civilizations whose origins go back to the “Sahidi” civilization, are proud of their deep Arabism. Even in Comoros, its honorable people are proud of their Arab affiliation... If I had to mention all the civilizations of the aforementioned Arab countries, I would never finish speaking; I would need to dedicate hundreds of pages to the

topic. I will say that we all proudly belong to different origins and roots from ancient histories and civilizations, proudly written, recorded and consecrated in stones, and passed down through lessons and tales, all of which have withstood the test of time...

We revisit them as their righteous sons, inhaling the fragrant history and the secrets of times gone by so as not to be alienated from these immortal histories through ancient edifices and monuments entrenched with antiquity, pulsating with dynamism, passion and familiarity; their value is recognized by all those who approach them, celebrating them with beautiful care and noble concern. They are the focus of everyone's attention from the farthest and closest continents, regardless of their different peoples and cultures... Everyone regards them with the same look, describes us with similar qualities, and addresses us with a beautiful title that is very dear to me, my soul, and my conscience. It enhances my strength and consolidates my presence when I adopt the plural form and say, "Yes, we are Arabs", and not simply "I am Arab".

I do not want to address the terrible disparity in the reality of the Arab situation, stop at the horrific political failures that brought the nation to a miserable state, or address the barriers that deepen the gap between one Arab country and another... I only want to restore that enthusiasm that was Arab nationalism. I want to confidently repeat the immortal anthem of Arabism/ The countries of Arabia are my homeland from the Levant to Baghdad, and from Najd to Yemen to Egypt and Tetouan.../ I want to sing along with the song / My beloved homeland... The greatest homeland, day after day, its glories multiply. Its life is rife with victories, my homeland grows and becomes free, my homeland... my homeland/ I want to sing the anthem: Oh my homeland, my homeland, Glory and beauty, sublimity and splendor are in your hills... / and many other great songs that describe the concepts of homeland and belonging...

Arab nationalism is a cascade of feeling, passion, conscience, sense, harmony, enthusiasm, and reminiscences.

Arab nationalism is a deep well of sacrifices, heroism, stories, lessons, stances, impact, altruism, and wealth.

Arab nationalism is a towering mountain, steadfast and solid, no matter how many trials, catastrophes, and invasions it undergoes. It does not bend or break and does not disappear.

We, the Arabs, are the sons of adversity... Perhaps we have slightly abandoned moved our nationalism, occupied by our ambitions and endeavors, but we

must return to this vast and great homeland. How can we minimize our homeland that extends from the ocean to the Gulf and content ourselves with the fragmentation of Arabism? The sky is wide open, and there are no barriers or borders to our Arab skies. Let us reestablish a land that resembles it, regardless of the frameworks, barriers and boundaries instated by the Sykes-Picot Agreement. The whole world today has become one small village, with communication available between everyone, so why do we no longer hear activists on social media calling for Arab nationalism? Why did we stop this generation from inheriting the Arab nationalism that the predecessors founded and worked hard to perpetuate? How did the well of Arabism dry up before we could use it to end our sorrows and pains? How did we turn our backs on the mountain of Arabism and draw our strength from it... It does not matter to find the answer; the important thing is that we restore our Arab awareness, recover our Arab momentum, and consolidate Arab cohesion. The expected storms are many, and their impact is disastrous for both peoples and countries, and as long as our sense of Arabism is fragmented, it will be easy to defeat. We are strong with each other, and any recklessness in strengthening the unity of the Arab ranks is a direct threat to each of us and an opportunity to violate each entity separately.

The path of Arabism may not be as open as it should be, but it is extended as we dream, hope, wish, and more. We can provide students with exchange opportunities as we have the most prestigious universities in the Arab world. We can offer the Arab world all its requirements by exchanging crops and industrial products, enhancing trade and restoring the solid economic ties, which are witnessing unprecedented deterioration at all levels. Arab governments must put constructive plans in place by opening the doors of “tourism” between Arab countries and opening the doors for work and employment like before by borrowing skilled workers from one country to another instead of alienating and displacing Arab competencies.

The talk of reviving Arab nationalism is very long, and today’s reader is always in a hurry, especially since he has become a prisoner of urgent news between rumors, falsifications and constant updates, not to mention the shackles of the image that has woven itself everywhere.

This lengthy article will only attract a few who believe in Arab nationalism. However, they must extend a hand to help revive Arab nationalism for this beautiful nation and its wonderful people, good land and lofty sky that befits every proud person who refuses to bow no matter the pressure.

Every Company Must Become an IT Company like TAG.Global

I have been a strong proponent of technology for all my life having taken my first computer course at High Wycombe, UK in 1965 that was hosted by IBM on their new data processing mainframe which was the size of a large office room. Ever since, I have been adamant that IT form an integral part of TAG.Global and have invested greatly in technology and the technical human capacity, as well as encouraging a culture of technology throughout the organization.

In today's digital age, there is no getting away from technology. In order to face a chance of survival in what are unprecedented times, every company must become an IT company as technology has become an integral part of almost every business operation. It has become necessary to compete in the modern world, an opportunity to become leaner and greener, as well as to serve customers better, stay ahead of the competition and remain operational during difficult times.

I often get asked how TAG.Global was built into an IT company and would like to share certain prescriptions that I see as fundamental in order for any enterprise to succeed in this endeavor.

1. Employing IT Literate Staff

Organizations are hierarchical structures which are run by managers and their staff. They understand the intricacies of how the organization functions and how operations can be improved as this is their daily work. They are in the best position to advise on how IT could be implemented to help achieve better efficiencies. This is why in TAG.Global, I have made it a condition of employment to only hire those that are highly fluent in IT and English; the default language of technology. It is only through an educated workforce can you hope for any technology implementation to succeed. It is fundamental to employ leaders that understand IT, lead technology implementations and

can promote a technology culture among departments which in turn filters down to employees. I did this initially with my Intellectual Property firm AGIP and rolled this out to the rest of TAG.Global which has paid enormous dividends, resulting in a technology based organization with all the efficiencies that come with this.

2. Develop an IT Mindset

As one of the main purposes of becoming an IT firm is to achieve efficiency, one must be ready to take a long, hard look at ones operations to improve departments and alter processes so that they become more efficient. This is an important exercise in order to identify inefficiencies and ensure that the inputs which feed into technology implementations are sound. Organizational data must be also be identified, organized and normalized for it to be used meaningfully in AI and business analytics solutions. No matter how good the technology is, it will only automate what you already have in place, which is why it is imperative to clean up shop before embarking on a digital journey. Having an IT mindset means recognizing the central role that it plays in business and adopting a culture that values continuous improvement and innovation.

3. Wise Technology Selection

Technology should never be implemented for technology's sake and does not mean a total overhaul in a firm's technology portfolio. What it means is to accurately pinpoint what will be of most benefit and look for low barriers of entry to explore the disruption with minimal effect on running business. The Cloud is greatly facilitating this as the majority of solutions are now cloud based, allowing an organization to explore possibilities with low investment. Quite often, it is a combination of technologies that can deliver a positive experience. This is why it is essential to have qualified business personnel that understand IT well. It is only by having such professionals can opportunities across the technology spectrum be recognized and leveraged. At TAG.Global, I have a variety of IT consultants, software developers, business analysts and projects managers to help the firm navigate and

decide on what technologies are most suitable for the firms needs to avoid unnecessary spending, as IT implementations are costly and time intensive. This includes understanding what value technology will bring to the firm and its customers.

4. Change Management, Reskilling and Communication

Technology implementations bring with them uncertainty particularly among low skilled workers. This must be used as an opportunity to develop skills across the board so that each person can see how they fit into the company's future. If this is done properly, the process of technology adoption and change resistance that plague so many digital projects will be minimized. Employees feel engaged, understand where they fit into the company's future and will be more likely to support technology projects. It is also important to employ effective communication and keep all staff aware of developments so that they feel a part of the overall process.

I am proud to say that these prescriptions have served TAG.Global well on its journey to become one of the largest professional service firms in the World which has IT at its very core. I welcome others to benefit from our great success.

The End of the US Oil Shale Industry

American exports of oil to Europe during the start of the global energy crisis last year were testament to American vital role in keeping Europe alive during an extremely troubling time. But when Russian energy supplies were embargoed, Europe founds itself in a troublesome predicament as it had been reliant on cheap, plentiful energy from Russia.

The implementation of sanctions on Russian oil and the Russian decision to cut off gas supplies to Europe, has in fact handsomely benefitted US oil exports, which rose exponentially, to hit a new record in 2022. The US was able to meet foreign demand largely because of the shale revolution over the last 15 years which has allowed it to control energy prices. Therefore and with massive global demand and affected energy supply chains, the US was able to calm volatile crude oil markets and somewhat neutralize the effect of Putin's war.

Huge investments in shale oil production in the US over previous years have made it immune to global energy fluctuations as shale output has given it a great deal of freedom. The abundance of shale supply has sheltered Americans from exorbitant energy prices allowing it to maintain a competitive advantage over other countries. However, according to many analysts, this age is drawing to a close due to the high costs associated with shale drilling, labor shortages, new wells yielding less oil and existing ones naturally producing less oil over time, meaning new wells need to be constantly drilled.

The US shale industry saw many shale bankruptcies during the pandemic, tens of thousands of workers being sacked, expensive equipment going into disrepair, rigs needing major maintenance and many even closing. The costs of drilling and wages have also gone up significantly making it a problematic investment. At one point, shale was the alternative that was competing with OPEC, with the US in control of the price of oil for some time.

OPEC countries now stand to benefit as there is a strong demand for oil globally and there are no alternatives. The US stands to lose its influence

over oil prices and it seems what was once a huge supplier of oil may be nearing its end. In their heyday, US shale producers produced too much oil, significantly lowering the cost per barrel, which over the last 10 years has meant losing major investors. Even traditional US crude oil production is not at the level that it once was.

It seems that a return to the previous world order in the oil industry is on the cards, putting oil power back into the hands of OPEC countries. In addition, as decarbonization is now a major theme across world economies, investors are unlikely to invest in expensive, carbon intensive shale projects that take years to pay off. They would rather put their efforts into ones that are already established. With US shale and Russia out of the picture, the only option left are OPEC nations that have the infrastructure in place and the reserves to meet global demand.

In an attempt to control the price rather than leaving it to market forces, the Biden Administration has released millions of barrels of crude oil onto the market, and has asked Saudi Arabia for more supply and it loosened sanctions on Venezuela's oil sector.

The problem here is that rather than weaning the world off fossil fuels, it may be fueling this addiction further, which doesn't play well with decarbonization efforts around the globe and the need to limit our emissions to save the world from the effects of climate change.

Arab Cooperation

“Exemplary Vision of Common Destiny”

The Arab nations have a long, common history and strong ties like no other. The question is; why do they not use them to forge an “exemplary” “Arab vision” that shapes a “common destiny”?

The figures reveal massive trade exchange between the Arab states and a “common vision” that does not regard every state as independent from its “neighboring countries”. It still puzzles me how the European states that do not descend from one “race”, do not have a common “language”, and have had past rivalries have been able to unite while we, the Arabs, have not. “The current Arab disunity is definitely not pleasant to the Arab citizens, who still dream of a united ‘Arab world’, despite the current borders dividing their countries. You can feel that once you have a heartfelt conversation with any Arab citizen.”

The “Arab League” has taken serious steps towards forging a “holistic Arab vision” since its inception in 1945, by establishing various Arab “federations, organizations, forums, institutions, and bodies” that work together to create an Arab bloc that benefits every Arab citizen and boost “Arab-Arab” cooperation in the economic, social, and touristic areas. They will also help make completing the transactions faster and support the Arab dream of having an “Arab passport,” which is a personal dream I have always had and I do not understand why anyone would stand against it!

I believe there are no obstacles in the way of such dream, especially with the massive “smart digital technologies” we have around us that have turned the world into a small village. I realize that circumstances have forced us to collide, but we have to take a quick decision to enact Arab cooperation.

Finally, my faith in the Arab capacities is limitless.

It is not based on emotions, but on the success the Arabs have achieved in foreign countries across all fronts. I still think of the Arab world as one, great nation that will eventually overcome all the challenges it is facing. Some think of the factors that “divide us,” but I prefer to think of the factors bringing us together. We may follow the example of the Gulf Cooperation Council to achieve urban, social, economic, commercial, and touristic development. As an Arab citizen, I am always hopeful we can achieve that.

Arab cooperation is a must in order to restore our nation’s glory and prestige and face our enemies. We had enough pains and alienation. Let us abolish those borders and establish common factories and markets to sell the products, in order to turn the dream of having the phrase “made in the Arab world” into a reality. Let us put all the disputes behind our backs and make our decisions based on the interest of Arab citizens and countries. We should also avoid all the mistakes, problems, and crises that destroy the lives of our youths and force them to immigrate. I do not need to say that the biggest loser in case the Arabs do not unite is the Arabs themselves. “It is time for the ambitious young generation to prosper in their wealthy, vast Arab homeland, with both dignity and pride.”

Abu-Ghazaleh Outlines the Society Policy in Money Laundering Control

We have worked thoroughly at the Arab International Society of Certified Accountants, in collaboration with Talal Abu-Ghazaleh Global, to develop a guide for combating money laundering and the financing of terrorism ('the Guidelines'). The aim is to guide the accountants involved in delivering services that are subject to anti-money laundering and counter-terrorism financing legislation in the Arab region. The Arab International Society of Certified Accountants has adopted these guidelines

I directed the Executive Director of the Society, Mr. Salem Al-Aouri, as the supervisor of the preparation of this guide, to ensure that the guide targets all those working in auditing, accounting, tax consulting, credit, and corporate services in the Arab region. Additionally, it should be approved by the Arab International Society of Certified Accountants (IASCA) and subjected to continuous updates.

Therefore, the content of this guide can help accountants comply with their obligations imposed by the anti-money laundering and counter-terrorism financing laws and regulations in Arab countries, in addition to the guidelines and recommendations of the Financial Action Task Force in this regard. This is aimed at preventing, recognizing, and reporting money laundering activities. However, courts must refer to local laws, regulations, and international guidelines to assist in deciding whether a violation has been committed by a company subject to those laws and regulations.

Money laundering is the process of 'legitimizing' illegal financial profits resulting from various crimes by funneling those profits into regular economic transactions to conceal their illicit sources. According to the definition of the Financial Action Task Force (FATF), 'money laundering' is the processing of crime profits to disguise their illegal origins to give legal status to the illicit gains derived from criminal activities.

There are no accurate statistics that specify the amounts of money that have undergone laundering processes globally. In 2021, the United Nations Office on Drugs and Crime issued an estimate that this money ranges from

2-5% of global GDP, or \$800 billion—equivalent to \$2 trillion at the current value of the U.S. dollar.

Money laundering was primarily limited to financial institutions and was carried out through the misuse of the financial and banking sectors to conceal the criminal nature of certain funds and cover them up. However, this phenomenon has expanded to include specific non-financial businesses and professions (including legal professions such as accountants, lawyers, credit service providers, and corporate services) that are exploited for the same purpose. This prompted the Financial Action Task Force, in 2003, to expand the scope of its recommendations regarding the fight against money laundering and terrorist financing to include certain non-financial businesses and professions, specifying the obligation of those professionals to comply with anti-money laundering requirements. This planning or expansion was not general but rather limited to specific activities conducted by these professionals that involve risks related to money laundering and terrorist financing.

In general, countries have criminalized money laundering and terrorist financing and imposed penalties on offenders due to the significant risks associated with these activities. However, to comprehensively address money laundering, a preventive approach must be followed alongside a deterrent criminal approach. This involves imposing duties and responsibilities on financial institutions and on specified non-financial businesses and professions (including accountants) to comply with to reduce the occurrence of money laundering or terrorist financing, detect them, or identify offenders. An effective anti-money laundering and counter-terrorism financing system requires the integration of both the preventive and deterrent approaches.

Accountants are subject to the standards of the Financial Action Task Force and anti-money laundering and counter-terrorism financing measures due to the financial and advisory nature of their work. They may have a greater opportunity to encounter money launderers or deal with illegal funds resulting from money laundering or terrorist financing. Those involved in these activities may exploit the support of accountants without the accountants' awareness. In other words, the expertise of accountants can be exploited to conceal illicit transactions and present them as legitimate—hence, financial criminals target the accounting sector.

There are three key indicators that accountants should be aware of (1) An existing client behaving strangely or making unusual requests. (2) If a client asks you to execute financial arrangements that do not seem commercially reasonable. (3) If a client requests services outside the scope of your work, with this request being repeated on multiple occasions

Accounting firms (ranging from sole proprietorships to large corporations) and their employees can contribute to combating money laundering and terrorist financing. Therefore, firms and their employees need to understand the risks and crimes associated with money laundering and terrorist financing, as well as their role in reporting suspicious or actual activities in this regard. Firms also play a role in combating the financing of the proliferation of weapons, although this role is limited to targeted financial sanctions under anti-money laundering and counter-terrorism financing legislation.

We urge accountants and other professionals to understand the risks associated with anti-money laundering and counter-terrorism financing in broader sectors and fields. Given these risks and the recommendations of the Financial Action Task Force, governments have chosen to involve professionals in the concerted efforts to deter and detect these crimes. The more observers there are to monitor the indicators (or warning signs) that point to these types of crimes, the harder it becomes for criminal activities to thrive. By expanding the anti-money laundering and counter-terrorism financing system to include professionals, governments aim to better empower them to protect themselves from clients involved in money laundering and terrorist financing. We also recommend that countries developing their checklists assist accountants in complying with both local and international anti-money laundering and counter-terrorism financing rules and regulations. Most importantly, these checklists should help accountants assess the risks they face related to their sectors, clients, and jurisdictions in which they operate, as well as checklists to assist accountants in appropriately applying due diligence measures toward clients.

Digital Transformation: A Catalyst for Change

With the advent of technology, we are seeing a vast change in the way that we work, rest and play. Technology has become the leading transformative force in our time and has given rise to opportunities and made changes that would not have been conceivable even 20 years ago. This transformation has accelerated in the past two years in the light of the COVID pandemic where technology became essential and has caused a fundamental paradigm shift in our existential reality.

While technologies have indeed created new opportunities and helped us recently cope with being locked down, they also presented new challenges. To me it is quite clear that we need a revamp of national policies to accommodate for the digital world. Just like our physical world need policies and regulation, so do our online activities as we increasingly switch in favor of online methods to conduct all our dealings.

We must analyze and realign our policies and institutions with the growing digital economy in order to make it a safe and attractive place to be. This includes having strong digital regulatory frameworks, robust technology infrastructures, appropriate legal and tax safeguards to protect both businesses and consumers, developing an attractive digital marketplace in which business can be conducted, as well as implementing training schemes to help workers become digitally literate.

As a businessman, I am highly concerned here about the monopolistic tendencies that technology companies are displaying and the need to create a robust international framework that limits potential abuses in the areas such as tax avoidance. The market concentration of a handful of companies forming an oligopoly to further their financial aims at the expense of the end user is not a good scenario to have if a balanced digital system is going to be created. These institutions must be held to account in a transparent manner so that a democratic and competitive digital marketplace is created with all the necessary safeguards in place.

The lifeblood of any digital economy is its data. This needs pragmatic policies so that data creation, use, storage and destruction is regulated from start to finish with the end user in control of how and where it is used. Empowering the users' with their data is essential, as peoples trust in the technology giants has started to waiver in the face of complex end user agreements which no one really reads nor understands. I'm not against technology companies making money, but its clear their control needs to be managed and reeled in as a handful of them dominate our online lives and profit from it handsomely. Our online identities, just like our real life identities are valuable and need adequate protection, particularly in the digital medium which is still in its infancy.

Maybe there needs to be some type of financial compensation for users to share their data in order to receive better, targeted content as advertisers pay immensely well and having highly specific data allows for the creation of very targeted ad campaigns which reduces carbon emissions as they take less resources to develop and launch. In fact, Mediatel News from the UK estimates that a typical online ad campaign might emit 5.4 tonnes of carbon dioxide, close to being under half of the average annual carbon footprint of a person in the UK. It also mentions that digital advertising has a larger carbon footprint than the airline industry.

All this is quite concerning for me being the Chair of the Consortium for Sustainable Urbanization in New York and needs careful consideration in a growing digital environment. We need a digital space that is as ecofriendly and sustainable as possible and not one that repeats the same ecological blunders that traditional heavy industries have fallen into.

If any of this is going to happen, our national infrastructures need to improve to realize the vision of technologies such as AI and IoT technologies, all of which require robust networks and processing facilities to be available across our nations. In this regard, I believe it is vital to engage closely with the private sector to benefit from their expertise and also help to improve access in underserved areas in order to help bridge the digital divide and collect the data needed to deliver the benefits of digital transformation technologies.

In order to implement a functional and forward looking digital society, our governments need to become technology savvy and build the requisite experience in order to understand the challenges, options and solutions. A smart country requires a smart government with e-government services development as a priority.

Another important issue is investment in digital education for citizens to develop a generation of citizens that are digitally literate who have the skills to interact with its digital government and possess the digital skills needed for employment. Inequalities in the education system must be addressed and technology education must be given priority, particularly to low income groups that have traditionally suffered the most.

Encouraging wider participation in the digital economy will certainly fuel greater opportunities, which will lead to further economic growth; however, serious reforms are needed in our present system to fully enable this. Digital transformation is not just a matter of technology and requires reformation on many levels that together, will lead to growth, inclusion and greater economic prosperity.

The Internet: Between the Fake Democracies and the Boundaries of Responsibilities

I always praise and thank America for granting us the ‘Internet’.

However, the ‘Internet’ is no longer exclusively America’s domain, as China has invented its own version of the ‘Internet.’

Internet, as a global topic, is linked to knowledge exchange, scientific collaboration, and the extension of cross-border and undersea communication networks, per the common heritage of humanity law upheld by the United Nations. This will benefit the state, its citizens, and the world alike.

As I previously mentioned in a program aired on Dubai TV via Roya program in 1999, titled ‘The Internet, E-Government, and E-Commerce,’ there is a need for a radical transformation in the relationship between the state and the citizen, focusing on providing faster, better, and more transparent services, free from bribery, favoritism, and corruption. This is what countries will strive to achieve, known as e-government.

The growing power of China is the ‘geopolitical’ motive that has excluded it from the Indo-Pacific Quad, which consists of [the United States, Australia, India, and Japan], despite being the largest competitor! They have issued a list of ‘common principles regarding technology,’ emphasizing shared values, fair competition, and the provision of an open and secure technological ecosystem...

I previously chaired an international coalition at the United Nations on information and communication technology for development and organized a conference in 2000 to discuss Internet affairs at an official global level, discussing the ‘governance of the Internet system,’ meaning its proper management, without relating it to ownership or administrative decisions.

At that time, I also established the ‘Internet Governance Forum,’ which had since been holding an annual conference to discuss the internet as a ‘topic and an inevitable future.’

We now see ‘extremism’ in the use of the Internet, contributing to the spread of divisions and hatred among people. The term ‘technological globalization’ arose with the desire to invest in it to achieve freedoms, yet we find ourselves drifting away from that, as oppression and closure overshadow freedoms and openness under the pretext of ‘securing the national defense line against any potential risks posed by the Internet.’

The world has been divided into competing ‘nationalities’, and ‘ideologies,’ and ‘cybersecurity’ has emerged, along with ‘data governance.’ The competition for world leadership has intensified, and everything democracies create is justified in favor of that leadership.

finally, ...

We now see the necessity of ‘Internet governance.’

At Talal Abu-Ghazaleh Global, we can register domain names as one of the seven centers in the world for registering and protecting subscriber names.

Narrow political interests should not hinder the ‘international strategy for cyberspace’ from becoming global and settling for a fragmented Internet, depriving large segments of the world’s population of access to advanced applications and richer knowledge content. This should transform slogans into realities we don’t tire of hearing, such as ‘global rules for the Internet,’ ‘a global online marketplace,’ and ‘an open technological environment,’ what prevails is a ‘closed intellectual fence’ and ‘dictatorships indifferent to freedoms.’

It is crucial to emphasize the importance of subjecting the ‘Internet’ globally to rules and principles that impose restrictions on what its platforms should contain... and what they should not.

The Importance of Smart Tourism

Technology has proven to be a vitally important tool in making our societies more efficient, transparent, while at the same time serving as a democratizing access to services and a promoting instrument for social inclusion. With the advent of cities that have developed smart infrastructures, consumers can benefit from services using online means due to the convergence of technologies in many areas, providing unparalleled insights and access to services in a way that was simply not previously possible. Technology has had a spillover effect and has spurred further innovation with the development of unique portals and applications that leverage smart city infrastructures to provide greater value to residents and tourists.

Smart tourism is one such innovation which has taken advantage of the proliferation of mobile phone and mobile applications. Applications like Uber, AirBnB, JustEat, TripAdvisor, EventBrite, Booking.com, no cashier stores such as Amazon Fresh, Google Translate and rich systems such as Google Maps, street views as well as local attraction and restaurant reviews, are fueling smart tourism. These together with many other apps, local blogs and review sites are powering the development of fluid ecosystems, providing a network of functionality allowing people to interact with a city in a digital manner and gain much greater insight into, and greater value from city offerings.

Increasingly, the success and usefulness of these smart tourism technologies lies in greater integration between them, as well as in providing a rich mesh of complementary functionality across a city, by providing greater touch points with consumers; thus increased marketing opportunities. As these are all private innovations, governmental tourist agencies must ensure the accuracy of the provided information. They must also provide an operational framework in conjunction with other departments for these innovations to operate.

The combined use of these platforms is allowing smart tourism to take shape. During the pandemic, 'staycations' became a big thing where people were forced to take vacations locally due to travel restrictions and they benefitted from such applications to plan their journeys. As travel restrictions ease, the same is now being done by tourists who can access these applications in their local languages. The key here is for people to develop trust in

these applications and websites, which should provide personalization, interactivity and security for online payments. Reputation is everything in the online space and those that get this right will corner the market.

Consumer safety must be a prime concern and there must be oversight and regulation from authorities, as well as a website that classifies the usefulness, maturity and safety of such apps, which may vary from country to country. For those countries that are further along in their smart tourism journey, a multi lingual tourism portal integrating with these apps, with tourism providers and with other local resources including virtual reality and augmented realities tours of attractions, would further increase tourism satisfaction.

Those cities that are even more ambitious could look into developing unmanned tourism centers, smart tour guide information boards, interactive tourists information kiosks placed strategically across the city, as well as free WIFI access. I see the issue of internet access as key factor here as quite often tourists do not use their mobile internet due to high roaming charges. Free WIFI would resolve this and provide an essential tool to access online smart tourism resources. Such technologies have already been implemented by Seoul, which is a leading smart tourist city. Smart tourism also provides the opportunity to gather tourism big data which aids cities in better forecasting as well as in tourism development. In the digital age, this needs to be an ongoing effort and the smart tourism offering must be a dynamic one that is kept up to date.

All this starts with a comprehensive smart tourism strategy that must be developed with input from stakeholders across the board, as well as a willingness from government to invest in technology and infrastructure. Budgets will vary from country to country, but what is certain is that all countries can make at least some progress in developing and improving smart tourism in their cities. This is a great source of much needed revenue after the decimation caused by the global pandemic; thus it must be given due attention by cities across the world.

The Future US Needs a Weak World

US global dominance has relied on the primacy of the dollar as the reserve currency of the world. Global financial markets use the dollar as a basis for their financial transactions making it the most powerful currency in the world. Because the US dollar is the preferred currency with which to conduct trade, countries need to stock up on US dollars in their foreign reserves. This gives the US a very powerful role in every aspect of world politics and economics as it weaponizes the dollar through its myriad of policies and sanctions.

The dollar domination however is increasingly coming under threat as the present crises facing the US economy have never been so many and so challenging. The US real estate industry is starting to falter, inflation in the country is at a forty years high, it has an enormous debt of trillions of dollars that continues to rise, its stocks and bonds markets are falling in value and there are less buyers of US treasuries, which is US debt. All of this points to fundamental flaws in the US system that have been brewing for years.

This is being exacerbated by the new blocs such as BRICS+ that are coming of age and are presenting alternative methods of doing business on the world stage, something that is threatening the hegemony of the US dollar as the number one global currency of the world. The US needs a plan to reassert its authority as global leader while facing geopolitical rivals such as China and Russia. Such rivals are finding ways to circumvent the dollar. The US needs to combat such challenges. This includes keeping Europe weak so that 'friendly' competition can be eliminated; thus it can continue to be dominant on the world stage.

The supremacy of the US dollars was established during World War II, where the US supplied arms to help Europe fight Nazi Germany. This heavily fueled the US economy, helping to bring it out of the Great Depression of the 1920's. The US saw a chance for the dollar to thrive as many post war countries would need to be rebuilt. Once victory of the allies was close, it established the Bretton Woods agreement in 1944 which was a system of economic order agreed by 44 countries. This was designed to promote the US dollar as world currency during a difficult time where many countries economies were decimated.

The agreement was designed to promote global exchange rate stability and economic growth by pegging currencies to the US dollar, which in turn was pegged to a fixed rate of \$35 per ounce of gold, using the gold standard to create a fixed currency exchange. This was to give guarantees that buying the dollar was as good as buying gold.

After the war, this meant international trade was done using the dollar with hoards of gold was physically transferred to the US federal reserve from countries around the world. This allowed the US to amass a huge fortune of gold in its reserves until 1971, when President Nixon decided to remove this arrangement and announce that the dollar was not backed by gold anymore. The US kept the gold and the world was left with a massive circulation of paper dollars. This sudden return to fiat currency led to a fall in the dollar and huge inflation, with the price of oil growing by five times by 1979.

What can be called the second Bretton Woods came about by the birth of the petrodollar in a bid to make the US dollar relevant once again on the world stage. The US used primarily Saudi Arabian oil to save the dollar by making sure that oil would only be sold in US dollars. A massive new international market arose making the US dollar once more the currency of the world and very relevant on the international stage once again.

Today, America needs a third Bretton Woods to deal with all the growing challenges it is facing. This can only occur if all other countries are weaker and accept the rules like they did in 1944. The war in Ukraine, the mess that European industry is in, the technology cold war with China and its aspirations to reintegrate Taiwan, and an entire globe concerned about rising inflation and oil prices are all topics I have spoken about in recent weeks. These are all leading to instability that makes the world a weaker place and may just be the circumstances the US needs to come out as savior once more.

Egyptian Gas Pipeline to Europe

“Massive Arab Project for World’s Most Important Energy Product”

Egypt is seeking to become a regional hub for exporting liquefied gas. Why? Because of the increasing global demand, particularly in European and Asian countries, where pressure on the Russian supplies foreshadowed a major crisis. This prompted Egypt to seize the opportunity.

There are two factors helping Egypt achieve that goal. The first is that Egypt is the fastest growing exporter of liquefied gas. According to the Organization of Arab Petroleum Exporting Countries (OAPEC), Egypt has exported about 1.4 million tons of liquefied gas in the second quarter of 2021. The second factor is the discovery of new gas fields in the Mediterranean and in the massive Zohr field, which has raised Egyptian reserves to 77.2 trillion cubic feet, according to the figures of the American Energy Information Administration. That is In addition to the scarcity of gas suppliers to Europe.

As such, Egypt has placed itself as one of the major global liquefied gas exporters and a strong competitor that has a major share in the European energy sector. This will definitely stimulate the Egyptian economy and create many opportunities to adopt the energy supplies across other sectors, such as engineering, technology, and others.

It is also known that natural gas trading prices differ; in future markets they are not the same as in spot markets. In the first case, the price is limited to 6.07 dollar/million BTU, while in the second it may reach 29 dollar/million BTU. This has benefited Egypt, as it sells its shipments in the spot market, not in the future market.

How did Egypt manage the situation so successfully: boosting the supplies of the second most important energy product after oil, and grabbing the attention of the entire world? It was not easy, but it was not impossible either.

First, it played a major role in establishing the “EastMed Gas Forum” in 2019 and enforced it as a full-fledged intergovernmental organization in 2021, with its main office in Cairo.

Among the most significant provisions of the forum’s charter, is the full cooperation between members regarding the “establishment of a regional market for liquefied gas” and achieving their mutual benefits while exporting and importing it. Thus, the Mediterranean gas exporting countries now have a systematic platform for dialogue, which has contributed to the development of the Mediterranean gas market, and has allowed them to make use of it as an important resource for all the member states, including (Egypt, Palestine, Jordan, Italy, and Greece).

The provisions of the charter also include working to implement the “decarburization of gas” and “liquefied gas as a fuel for ships” initiatives, in line with the global environmental trends.

Egypt has also reopened the liquefied natural gas complex in Damietta, the main gas exporter to Europe. It has also scrutinized the new developments in the supply and demand for the east Mediterranean gas. The forum has also established specialized committees to assess the “gas market” on a daily basis, in order to utilize it as a source of energy.

Finally, the figures show that Egypt’s natural gas exports have tripled in 2021, earning 564 million US dollars.

We congratulate Egypt on its endeavors to become a regional hub of liquefied gas and to implement the three phases of the Arab gas pipeline to Europe in 2003, 2006, and 2009, starting from Lebanon to Jordan and then Syria. We also call for more Arab-Arab cooperation, under the leadership of the great country of Egypt because Arabs deserve the best.

Infrastructure Challenges: “American-Chinese Comparison”

Nations' sufferings can have two aspects, natural and human; both require adequate planning to be avoided. We saw with our own eyes the devastation that storms, fires, floods, and melting polar ice has caused to America's oil and gas infrastructures, which requires billions of dollars to rebuild. The question that comes to my mind is “How do American presidents deal with such events?”

American presidents have been utilizing infrastructure rebuilding and national debt repayments, caused by such events as part of their election campaigns. We witnessed similar statements during the election campaign of former President Trump in 2016 and from the current President Joe Biden in 2020,; both struggling with US financial deficit.

The U.S. has been suffering from the deteriorating infrastructure for some time. That caused enormous damage to American reputation. As a result the U.S. position as the world's largest economy has declined compared to its economic competitor, China. That raises an important question: “Has the Chinese surplus exceeded the deficit of the USA?”

The monetary promises of American presidents have encountered many hurdles, including financing, its impact on inflation and the increasing deficit in numerous areas. There are many reasons for this including the coronavirus pandemic, which was an emergency that required immediate financial injection; an unexpected expense not accounted for in the national budget. President Trump pumped money to achieve recovery that increased American debt. By the end of his presidency, this debt reached \$23 trillion, divided into a public debt of \$17 trillion and a governmental agencies debt of \$6 billion, raising the overall deficit to \$984 billion in 2019. China on the other hand, did not go through this and was able to meet its needs from the surplus it has.

When Joe Biden proposed rebuilding national infrastructure and investment in renewing the diverse economic streams of the nation, he once again faced the issue of additional rise in the national debt, that had already reached

108%; and if the situation remained as it was the deficit could reach 30 trillion by 2026.

China did not face the same issue and did not need to finance the rebuilding its infrastructure as was the case in the U.S. We have not seen the same numbers in China as we have seen in America.

Based on this, we can conclude that the solution does not lie in pumping money and financing without accountability or supervision; but rather in improving infrastructure, boosting readiness and reforming investment laws. This is what really keeps countries above their competitors, forcing others to lag behind.

Rebuilding America's economy, removing weaknesses, and creating new jobs are issues that are imperative for every American president, and they are not easy to deal with. The current US budget deficit in 2021 may be described as the largest since 1945, with the exception of the record deficit of 2020, which has amounted to 14.9%.

Finally, the world is actually suffering a serious state of panic and unprecedented fear about its future. Countries have already begun planning their expenditure for the next 20 years, drafting plans, financial contingencies and solutions that could avoid future economic disasters, as this has become the greatest threat ever seen to the human existence in our time.

Democracy is at Risk

As a form of governance, democracy can be traced back to ancient Greece as a system that puts the interest of the people first and can be summarized as a government mechanism by the people, for the people. There is no questioning the great benefits democracy has brought society, but in recent times it has suffered major blows, threatening it as an institution for law and order that prioritizes the need of the many. In order for it to survive, it must be revitalized and strengthened, as it has become a sluggish and partisan vehicle that is only serving the needs of a select few.

Modern institutions of democracy seem to have become vehicles for short term, gain rather than the sustainable welfare of a growing population. They have become establishments that focus on a zero sum game, focusing on winning at all costs which has overshadowed the need to work together for the common good. This has led to an inflexible, hardline approach that often drowns out the voice of minorities.

Politicians are concerned with the short-term political time horizon and securing their seats. They try to make as much political gain as possible by focusing on issues that are resonating with voters, rather than long-term issues that are essential for sustainability and growth. The agenda of special interest groups, lobbies and corporations further exacerbates this problem, which hugely influence political decision making through the funding of electoral campaigns and other dubious methods. This corporate hijacking of politics means agendas are focused on furthering the interests of their financial backers, with long-term issues falling by the wayside.

This is dividing politics in our time which is highly problematic in the light of the common, existential challenges we all face. Disillusionment in democratic establishments is troublesome as it gives a voice to ideas such as extremism and populism which are gaining popularity in numerous nations across the World, particularly among the youth who feel disenfranchised as they feel no one represents their interests. This is the reason why a growing number of youth are joining activism programmes, as the democratic system simply does not give them a manner in which to voice their concerns.

Populism is taking over in many countries across the world as another knee jerk reaction to failing democracy, striving to appeal to ordinary citizens who feel the elite are not addressing their concerns. This has led to the radicalization of minds and encourages anti-establishment and anti-immigration agendas, leading to building prejudicial societies which are harmful to global peace. Many commentators have said that democracy in its current form will not last.

In order to reinvent democracy, I believe we need to encourage active participation of all members of society in them, particularly our youth. We must ensure that democratic governments are not compromised and that they function in a free, transparent manner without undue influence from any one group. They must encourage participation through free, fair elections and encourage dialogue through open meetings and public forums to promote engagement. Free speech should be protected at all costs. We need to build democratic institutions that are flexible, rapid to change and promote the rights of all citizens.

We cannot afford to let our democratic institutions fall, which for decades have been the cornerstones of globalization and multilateralism, bringing great prosperity and much needed international collaboration. We must resist the temptation to let our societies fall into isolationist mentalities that breed suspicion and xenophobia.

Democracy provides for cooperation and collaboration which in turns fosters peace and stability, qualities that we all need particularly in the difficult times in which we are passing through. If we fail to take action, we will have failed our citizens and the very basis for which democracy was established which is to serve people in the best way possible.

The Chances of War Between the US and China Increases

I have been analyzing the geopolitical tensions between China and the USA for many years now and said previously on many occasions that there is a great risk of both countries going to war with one another. For years, the tension between China and the United States has been growing, with a conflict over Taiwan, a self-ruling island that Beijing claims as its own territory but seen by Washington as an independent state, becoming a more likely possibility.

The potential for war between China and the USA over Taiwan has been growing in recent times due to its strategic importance. Strategically located off the coast of mainland China, Taiwan presents both countries with a vital advantage point in terms of access to air and sea routes for trade and military operations. It is also home to TSMC, the world largest semiconductor manufacturer. As such, it has become one of the main flashpoints in East Asia, where each side is attempting to gain advantage over the other.

In addition to protecting its interests in East Asia from Chinese expansionism, Washington has also been attempting to chokehold China by limiting its access to advanced technology in order to slow down its development and prevent it from becoming an even greater threat. This policy has only heightened tensions between both countries leading some analysts to believe a military confrontation in the near future might be likely due to increasing levels of hard line rhetoric on both sides combined. There have been Chinese naval build-ups in Taiwanese waters looking for provocation opportunities, while US Navy vessels have patrolled Taiwanese shores showing solidarity with Taipei.

A leading Republican in the US Congress said recently that the odds of conflict with China over Taiwan are very high, with US General Mike Minihan Head of Air Mobility Command sending a memo to the US administration saying that he feels that the US will fight China in the next two years.

The new Chairman of the Foreign Affairs Committee in the US House of Representative Mike McCaul said that odds are very high that we could see a conflict with China and Taiwan. In this case, the US administration would have to respond, not forgetting that NATO would also get involved.

Both countries understand that all-out war could have devastating consequences not only for them but for other nations as well, with less severe tactics like cyber warfare already well underway.

Apple's Reliance on China

Apple is undoubtedly one of the most successful technology company in the history of the world and an inventor of innovative and high quality technology products. These have penetrated every corner of the world, producing a company that was the world's largest technology company by revenue in 2021, generating \$294 billion.

Apple has invested hundreds of millions in research and development and works in close proximity to Chinese manufacturing facilities to embed its processes into their operations, as well as pioneering new manufacturing techniques and strictly controlling supply chains to produce high quality products. Its attention to detail has led it to controlling the quality of the smallest part, leveraging its power to dictate how components should be produced to the minutest of detail.

This has pushed Chinese manufacturers to their limits to meet Apple rigorous and tight production deadlines, resulting in a highly complex supply and manufacturing operation in China. This has become so specialized and intricate that it has transformed the country, with Apple investing billions of dollars on customized machinery, specialized processes, intellectual property and building an extensive supply chain with many local firms, keeping close tabs on the entire operation to ensure compliance to its standards. The expertise now available in China has been a direct result of Apple going in and building huge technical competence which has allowed it to develop economies of scale, technical superiority and efficiencies that are unparalleled.

This success can be largely attributed to Apple's CEO Tim Cook, who moved their operations from the US to China and focused on tight control of the supply chain, dictating the quality and processes to be followed by Chinese firms, as well as negotiating heavily on margins. Building a close relationship with Apple was highly beneficial for manufacturing giants such as Foxconn who saw huge increases in revenues and expanded vastly as a result of the global demand for Apple products.

Such heavy reliance on China is however a double edged sword and comes at a price. Apple's success in China has also become its Achilles heel.

The manner in which Apple is intricately woven into the fabric of Chinese manufacturing is making it difficult for it to diversify its production into other countries. Others simply do not have the expertise nor the detailed supply chain that is available in China which has developed a highly evolved technical ecosystem with a great many specialized subcontractors, suppliers and vast amounts of technically astute workers.

With increasing tensions between the US and China, this has become very problematic for Apple which is a US company. Technological competition between the countries has sharply risen over previous years, and Xi's authoritarian regime is not at all sitting well with the US administration, with heightened geo-political tensions between the two. Apple is caught in between and is under intense pressure from US politicians to move its operations elsewhere. It is however, having great trouble disentangling itself from China.

It is fair to say that no other tech company shares such a close, symbiotic relationship with China as Apple does. Samsung, the only company that sells more smartphones than Apple, closed its Chinese plants in 2019, manufacturing 75% of its phones in Argentina and Vietnam. Apple on the other hand makes virtually all its hardware in China.

India might be a valid option as Apple is already producing its lower end iPhones in the country, but the leap to produce all of the Apple range is still far off as India still has to import everything from China. It has to build up all the sophisticated expertise, flexible supply chains and exceptional standards China has developed over the years, which simply cannot be done overnight.

I fear that Apple has become so reliant on China that there is no other solution for the quagmire it finds itself in. It would take decades for any rival to come up to speed and the detailed component supply chain which is integrated within China, as well as the technical mastery it has, is almost impossible to replicate elsewhere. In certain technological areas, China is the only place where the expertise exists. It is simply too difficult to find the technical and human skillset that China has developed over the years in any other country.

The New Battle for Internet Search Supremacy

Internet search engines have been a world window providing billions with rapid access to a wealth of information, revolutionizing our understanding of the world, paving the way for the rise of technology companies worth trillions of dollars to arise and new business model to emerge. The fight for internet search supremacy has been a key factor in the success of companies like Google which has dominated the internet with its powerful indexing of internet websites. As a result of its huge user base, iGoogle has become a leading marketing platform with its mother company Alphabet posting a revenue of \$283 billion in 2022 and a market capitalization of \$1.3 trillion.

The world of technology is cutthroat and companies need to keep abreast of technologies and trends in order to maintain a competitive advantage. The history of technology is littered with examples of companies that failed to keep pace, such as Kodak and Nokia, which ended up massively losing market share and paying a heavy price for their inability to adapt when they were at a technology crossroads.

Today, the world is at a new technology crossroads, which is the application of AI in search technology. The recent launch by OpenAI of their ChatGPT platform has given end users a taste of what AI is capable of, synthesizing information from across the internet using natural language prompts, in a much more intelligent and structured manner than the standard search engines we have been used to. Since the launch of ChatGPT on November 30, 2022, it has been an internet sensation, attracting over 100 million users so far, indicating that internet users want something new and that the time for a new generation of search engine has arrived. Microsoft invested \$1 billion in OpenAI in July 2019 and has recently pledged over \$10 billion in extra funding in order to accelerate OpenAI's growth, as well as recently announcing an embedded AI feature based on ChatGPT in a new version of its 'Edge' internet browser.

Google has long been working on its own AI engine called LaMDA and was put in a tight corner when OpenAI released ChatGPT late last year. Clearly, this sent Google's administration into a frenzy, playing catch up and pressurizing them to release their equivalent called 'Bard'. In what can only

be described as a dramatic turn of events, Google launched a promotional video of Bard in action which produced inaccurate information, sending shockwaves across the internet community which led to \$100 billion being wiped off Alphabet's value.

It is clear that everything is at stake in the new world of AI search, and first mover advantage will see the company that is the most innovative survive. Google is now playing catchup in a world where it historically faced little competition. This shows that no one, no matter how dominant, can afford to rest on their laurels, as there are always companies with zeal and passion out there ready to grab pole position in what is the most lucrative industry of our time.

What systems like ChatGPT have showcased is only the beginning and this region needs to secure its portion of the global AI pie. I am a strong believer of proactive action and therefore I call on the Arab countries to develop a pragmatic AI skills program that should form part of their national strategies. There is much to be gained in the internet economy. Just one innovation in AI from this region is enough to generate immense value and prosperity.

Digital competence in AI is essential at a time where we all are feeling the effects of the global squeeze. This is a wake up call for us to change and develop a robust AI ecosystem that can help to fuel future demand in this specialization which is set to grow immensely.

Talal Whispering to Talal's Mother

I have never experienced disappointment in my life except when I was exhausted and sought a remedy. I asked the doctor for 'my mother's fingers' medicine. He looked at me in surprise and asked, 'What is this medicine?' I explained, 'When I was a child and felt tired, my mother would stroke my head with her fingers, and I would fall asleep. She also stroke my heart, calming it down.'

Yes, there is always something new. Whenever I hear Mahmoud Darwish's poem in which he addresses his mother, saying: 'Mother, I can no longer stand. I am old. Give me back the stars of childhood. That I may chart the homeward quest. Back with the migrant birds, back to your awaiting nest!'

I'll share a secret: I miss the dawn of your mornings when you would say, 'Good morning.' I remember how each morning would gently touch me with rough hands, nestled between a father weighed down by his homeland and a mother burdened with worries for her children and their future. My father nourished me from his own body, leaving himself hungry from hardship, while my mother nourished me with her tears so I could quench my thirst from the waters of deprivation

Mom, do you remember our home during our time of refuge in beloved Ghazieh? Do you still keep the first story I told you? I can no longer greet that gentle breeze flowing through the cracks in the wall of our house. When I would wait for Dad on the sidewalk, feeling his approaching footsteps as they struck the ground forcefully, and hearing the clatter of pots in your kitchen—as if you were punishing yourself by cleaning—I sensed that they were releasing their pain through small, trivial matters. These were things they might not notice, but I felt and perceived every movement they made.

I have grown old, Mom, yet I am still a small child searching for you. I have aged, but I remain a mischievous child trying to elicit laughter just to see you smile. I have grown old, Mom, yet I still adore you, for love has no limits or age when it comes to you. I have grown old, and despite the vastness of the universe, I find that the entire universe is contained within you.

Lebanon: Caught Between Banking Secrecy and International Guardianship

I was deeply distressed when the President the Arab-American Center in Washington, suggested to place Lebanon under UN trusteeship as a failed state in an article he recently published. But I was more concerned when I heard the statement of the Lebanese Deputy Prime Minister Mr. Saadeh Al Shami in an interview with a TV channel, stating that Lebanon will not be able to return all depositors money; a highly irresponsible statement from a supposedly responsible government official.

As a refugee who fled Palestine at the age of ten with my family to this beautiful land, Lebanon, from the Zionist aggression, I have a deep-rooted sense of loyalty and love for this country and its people. Hearing such news, also as a depositor myself, moved me profoundly to support depositors' legitimate claims for their money, as I have been entrusted by numerous Lebanese entities to act on their behalf to recover losses of their assets that they have worked hard to make for years.

By virtue of my previous positions on the International Federation of Accountants Council (New York), the International Accounting Standards Board (London), as well as being the Chairman of the United Nations Committee on Standards and Reporting (New York) and the Arab Society of Certified Accountants (London), I am concerned with the current and future reputation of Lebanon and its noble people.

Considering that the contract between the contracting parties is legally binding, resolving the financial crisis in Lebanon and returning depositors' money requires the annulment of the Banking Secrecy Law. This will allow the judiciary to identify those responsible for seizing depositors' money and returning it to them, thereby establishing due-process and justice, as well as restoring confidence in Lebanon as a state. Given that there are binding contracts between the banks and its depositors, the "haircut" and "capital control" absurd ideas are nothing but futile attempts that only reflect the unrealistic dreams of those introducing them.

In light of the above, I reiterate my full readiness to sue any party that infringes the rights of the depositors and I emphasize that there is no legal

distinction between small and large depositors according to the law and the binding official contracts. No state has the right to annul any such agreements that have been made, and deposits must be repaid in full with the accrued interest.

Since individual depositors as well the Depositors' Outcry Association have entrusted me with their cause, which is also my cause, I will file a collective lawsuit against the current financial system in Lebanon, to redress the damage and return the money to their owners. The money did not evaporate into thin air. It was moved from one account to another.

I would like to note here with much appreciation the cooperation of the Minister of Displaced Affairs Mr. Issam Sharaf El-Din, who has taken efforts to support my mandate to lead this cause that includes more than 500,000 depositors within a legal framework. This demands the collection of frozen funds and their accumulated interest held in Lebanese banks for many years.

To ensure this is achieved through the long arm of international law, I have commissioned Talal Abu Ghazaleh Legal, as well as a team of lawyers in Lebanon, France, and Jordan at my own expense. They shall conduct the necessary studies to document the crimes committed against the depositors and shall take the case before international judicial bodies and human rights organizations.

The team of lawyers in charge has begun collecting information and documenting the human and social conditions of the victims, as well as documenting legal materials and international agreements. This includes the Genocide Convention, the Rome Convention, and the Convention against Corruption and Money Laundering, in order to specify the criminal activity in detail, including its legal description and what falls under it.

The team in charge will file a class action lawsuit in Lebanon, France, the United Nations, and any other concerned country as soon as the necessary documents are completed. These include charges of corruption, money laundering, and smuggling, in addition to considering it an international financial crime against humanity.

The Blockchain – A Powerful Digital Transformation Technology

A reflection on how the recent virus pandemic affected the world saw us all rushing to adapt to new ways of living and working to retain some level of normality in what were uncertain times for all of us. During this time, we turned to information technology as a savior to help stem the flow of bleeding, allowing us to operate, communicate, work and live during a time where we saw many of our freedoms quickly slipping away. As our reliance on information technology will only continue to grow, it is only right that we demand greater accountability from technology providers regarding our data, our online lives and our virtual identities, all of which are becoming as important as our physical ones. As the volume of this big data increases, so does our expectation in technology to provide us with greater security and accountability. It is clear that a better form of data storage, security and traceability is needed as a foundation to drive further digital growth.

Distributed Ledger Technology (DLT), more commonly as the blockchain, is offering robust services in the areas of transaction processing, data security, auditability and data sharing. The blockchain was originally designed as a secure, distributed ledger to store cryptocurrency transactions in a transparent and auditable manner. The application of the blockchain however, is far wider and is proving to be a real game changer in environments that need to provide data security and assurance in a transparent manner with full traceability.

The blockchain provides a shared, immutable ledger that facilitates the recording and tracking of transactions and assets and can be thought of as a modern day version of the old paper ledgers. This is allowing anything of value to be tracked or traded, such as intellectual property rights, copyrights, land deeds, accounts, personal information, etc. This is a time stamped digital ledger, managed by a group of distributed computers not owned by a single entity, bound to one another through advanced encryption which makes it resistant to unauthorized modification and highly secure.

The key with the blockchain lies in the ways that transactions are secured and how the ledger is distributed across different computers on the blockchain network. Each one of these holds a copy of the entire blockchain

transactions. Any changes require the agreement of all other nodes, making fraud virtually impossible. These changes are then reflected across all copies of blockchain that nodes hold. This on top of highly encrypted data with low operational overhead, is making the blockchain a favorite to store millions of transactions. This provides levels of data security, integrity, and availability that simply were not possible prior to the advent of this technology as no one person controls it and there is no single point of failure. Having such features are making it an attractive proposition for any sector that needs to store and retrieve transactional information in a secure and rapid manner.

Blockchain technology can bring a faster, more transparent way for the financial sector to conduct its activities with almost instant settlement and a trusted audit trail with lower fees. Banks are already tinkering with blockchain technology to facilitate interbank transactions using lower costs and faster transaction times.

Insurance processors currently need to manually wade through many pieces of information including client history, fraudulent claims, fragmented data sources, to name just a few in order to process claims. This makes it a very slow activity which leaves room for human error. The blockchain provides a perfect system for risk-free management and transparency. Its encryption properties allow insurers to capture the ownership of assets to be insured and quickly share insurance information with one another in a clear and simple manner.

Any type of commodity involving ownership such as property, land, vehicles, intellectual property, stocks, etc. can be securely stored in blockchain databases. Such ownership can be stored on the ledger along with contractual details of others who are allowed ownership. The decentralized ledger becomes a system for recording and managing ownership rights, increasing trust and enabling better efficiency.

With increased transparency of transactions, the blockchain is an ideal medium to record results of election campaigns, which have been the source of many disputes in the world. Once a vote is cast, the blockchain will hold a permanent record of this transaction, making it a trusted source of results that cannot be tampered with. This will go a long way to eliminate election meddling and provide all parties concerned with the confidence that results are accurate and valid.

Delivery of goods and services including tracking and delivery confirmation are now key differentiators for companies in the logistics world. Online as well as offline retailers are using blockchain technology to keep track of delivered goods and services as well as inventory, providing greater visibility into end to end processes and the status of shipments.

Manufacturers and suppliers are also using blockchains to trace components and raw materials through the manufacturing process to ensure that they can be traced back to sources of origin in case of problems. This in turn is fueling greater advances in business analytics as this real-time data is being used by AI based technologies to help management take better decisions by using more precise information.

The blockchain will have a huge impact on the way in which the Internet of Things (IoT) will be delivered. The idea of any item becoming an Internet connected utility will form the basis of future smart cities, but with billions of transactions, there needs to be a fast and secure way to hold and retrieve information what transactions have occurred, and those that have been scheduled for a future time. The blockchain will be a critical element in the IoT ecosystem providing transactional security that can be offloaded onto the blockchain and not be embedded within IoT systems, allowing cheaper IoT devices to be developed.

Smart contracts are the new concept of having automated contracts that are self-executable based on defined criteria. The blockchain will waive the need for third parties to manage such contracts and can find use within many industries, such as financial derivatives, insurance premiums, property law, legal agreements and others, to ensure that all participants know the contract terms, which are implemented automatically once conditions are met.

The blockchain could also be used to store passport information, birth certificates, hospital records, work records, criminal records and any other information related to an individual or entity. It would provide governmental entities with a comprehensive repository of such information allowing them to create their own private blockchain implementations in order to offer citizens better services and intelligence agencies with timely information.

Protecting the online identity of citizens has become an area of paramount concern. Online identity theft, selling consumer information and the misuse of such information has been a cause for concern in recent times. Consumers need to feel they are protected and the blockchain is a tool that can help achieve this. Securing personal, identifiable information on the blockchain will give consumers back their rightful control, allowing them to secure their data and disclose it only to parties they elect, thus protecting them from spammers and adverse marketing schemes.

As this technology continues to mature, I see that:

- New governance models need to be developed to help standardize datasets used in blockchains.
- Greater interconnectivity and interoperability needs to come about so that blockchains across different sectors can talk to each other.
- Supportive technologies will grow to better enable blockchain to provide greater value through the use of AI.
- Greater validation and security tools will be developed to better secure blockchain information and to help combat fraud.
- New audit tools will be developed in order to better audit such systems.
- We will need a new wave of technology experts to be able to hold this technology to account. As an accountant by trade, I can see future accountants will also need to be technology experts to be able to audit blockchain technologies.

The application and adoption of blockchain technology will continue to grow and provides a great opportunity for those wanting to join the global digital revolution. I would urge anyone wanting a place in the digital future to invest in learning about this technology as it will be a fundamental pillar for many looking to undergo digital transformation and will play an important role in many sectors.

Victory Over the Occupation Lies in Steadfastness Against it

We are currently discussing the Israeli occupation at a time when it is facing a significant crisis. The extreme-right has committed to enacting legal amendments, aimed at protecting itself from any consequences related to corruption and fraud cases it might encounter. They are working to establish basic laws that can be easily altered according to the whims of the right, requiring only the vote of 61 members in the Knesset to amend any basic law. To clarify, basic laws serve as a substitute for a written constitution in Israel; they are among the few unwritten constitutions remaining in the world. This stands in stark contrast to the British unwritten constitution, which is rooted in numerous statutes that uphold human rights and civil liberties, beginning with the Magna Carta, the great charter that recognized freedoms and rights in 1215 AD. This marks over eight centuries, whereas the constitution of the occupying state is merely a new arrangement, akin to the state from which it emerged.

These proposed amendments seek to restrict the judiciary in numerous detailed ways, most notably by attempting to abolish the principle of reasonableness, which allows for challenging government decisions deemed unreasonable. Those with legal and political expertise recognize that the history of this entity in promoting the Jewish character of the state and excluding the Palestinian Arab people—the rightful owners of the land and its history—has transcended mere reflection of its racist policies. Instead, the focus has shifted to an absolute preference for the far-right and its social base, primarily consisting of settler factions. Recent statements by Finance Minister Bezalel Smotrich presented a proposed map of Israel that encompasses both Palestine and Jordan, while another minister, Itamar Ben Gvir, made comments that disregarded Jordan's vital role in safeguarding Islamic sanctities in Jerusalem, attempting to export the acute Israeli crisis beyond its borders.

In light of this assessment of the Israeli reality, the resilience of the Palestinian people continues to strengthen, garnering admiration from all honorable and free individuals worldwide. These people, who write new chapters

of struggle every day, stand as the true victor and the embodiment of the future, just as they have always been integral to history and civilization, enduring like the olive tree. Talal Abu-Ghazaleh Global Group supports this vision through various tools of struggle and resilience, with the core being the ‘We Are All Palestine’ Association. This non-profit organization was established on the firm belief that the struggle in Palestine cannot be complete without preserving Palestinian memory, particularly the memory of Palestinian creativity, evident in the crafting of the Canaanite loaf of bread and extending across all fields of creativity, including poetry, music, politics, and entrepreneurship. We carry eight thousand biographies within this memory, confident that they represent just a small fraction of the layers of Palestinian history. The association is rooted in the philosophy of Jordanian-Palestinian solidarity to strengthen resilience.

The association has undertaken significant efforts to estimate the number of the Palestinian Arab population based on the 1948 census of Palestine. Official data from the Government of Palestine recorded 1.36 million Palestinians on the eve of the Nakba. This figure has been further refined using scientific standards for population growth rates, excluding migrations from countries such as Sudan, Egypt, and the Gulf Cooperation Council states. United Nations reports indicate a 4.72% annual growth rate over 75 years, resulting in an estimated 40 million people of Palestinian descent scattered around the globe. Given this number, we can only trust that these multitudes will return to their beloved land, like the white almond blossoms, sweeping away the darkness of occupation. This demographic bomb will ensure they once again constitute the overwhelming majority in their homeland.

Discussion on Criteria for Ranking Countries

- Economic criteria is often utilized worldwide to classify countries and learn more about their economies, whether for general knowledge, to conduct academic and applied research and studies, or to invest in those countries and conduct business activities. Such criteria vary and usually include a timeframe of one or more variables combined to create a unified standard. Some criteria use annual economic growth rates to determine the movement of economic activity in the country over periods of time to know the level of overall performance, trends and the impact of global, regional and local variables.
- Some may use the criterion of the size of economic activity according to the gross domestic product (GDP) to determine the size of the total market in a country compared to other countries. For example, China was not even among the first ten countries in the world in terms of the size of the economy in 2008. In 2022, it ranked second after the United States, and it is now expected to rank first in terms of the size of the economy.
- While this information is considered necessary in several respects, researchers or observers may also wish to know the average income per capita. To do so, the GDP is divided over the number of residents in the countries being compared, so the results differ from one country to the other. For example, Luxembourg has a relatively small GDP (85.51 million dollars) and is classified as the highest in income per capita (GDP divided by population), which reached \$138 per person in 2022, according to purchasing power parity.
- If we want to compare the purchasing power of income or spending between countries, the spending rates are compared to the spending rate in the United States as a base point. Hence, the purchasing value of other countries is measured as less or more in comparison. Some may use the “Big Mac” index (the cost of buying a Big Mac burger sandwich at McDonald’s) as developed and used by The Economist magazine since 1986 to measure whether the exchange rates in the market for the currencies of different countries (78 countries) are overvalued or undervalued. Interestingly, the accuracy of the production of this sandwich guarantees its similar production in all countries and so it can

be used as an indicator of prices in different countries. According to the index, the most expensive country among the 78 classified countries is Switzerland (the price of a Big Mac sandwich is \$6.71), and the least expensive is Venezuela (\$1.76).

- Others monitor the investment flow rates relative to the GDP, which indirectly indicates the ease of doing business, the attractiveness of a country compared to others, the country's capabilities or absorptive capacity for investments, and its stability over the years, as the legislative stability factor and the institutionalization of decision-making (and not their unilateralism) are very important for attracting investment. Researchers may want to directly look into the Business Report to find out the ease of doing business in any country compared to others. They may support their decision by using competitiveness and different criteria of economic freedom (many criteria of economic freedom differ in terms of inputs and results). These criteria are based on complex economic indicators and standard and statistical methods, some of which are objective, and others are subjective (usually by surveying the opinions of groups of people in different countries).
- The criterion of the size of the GDP and its growth has faced much criticism for its use to measure well-being in a country that calculates the GDP in several different ways, including:
 - The sum of consumer spending, investment spending, government spending, and net exports (exports minus imports) in one year.
 - It may be calculated based on the total goods and services produced in the country minus the value of the goods and services used in the production processes, i.e. the sum of wages and profits for that year or what is called the added value.
 - It may also be calculated through the total income obtained through economic resources (raw materials, capital, labor, entrepreneurship) in one year. They are mathematical methods that must lead to one criterion, which is (GDP) since economic theory assumes that consumption, income, and production are equal.
- Many economists do not believe in the ability of the GDP or income per capita as criteria to measure the level of well-being in a country compared to other countries. For example, the growth and volume of GDP may not measure the extent of innovation in a country, nor is it indicative of the

growth of the real economy if the researcher uses the size of the nominal economy, nor does this criterion measure the pollution that occurs in the environment, or how equitable the income distribution in the country is, or the size of the unorganized economy (the term unorganized economy is applied to economic activities that are not subject to taxation and are not monitored by the government, so they are not included in the gross national product), or the size or increase of human capital, or the diversification of the economy and the complexity of the products. Furthermore, an observer cannot anticipate and determine future risks or measure the extent of happiness in the country, the penetration of monopolistic practices, and many other things.

- Despite all this, the GDP provides a standard figure to indicate a country's economic situation. It is necessary for setting economic policies and macroeconomic analysis, as it is compatible with international production standards. The GDP often uses well-established international accounting principles. Therefore, despite the emergence of new criteria, such as the World Happiness Report, which measured the extent of happiness in all countries worldwide and was produced by (Bhutan), the GDP remains the first and most important reference.
- As a result, the researcher may choose one or more of these criteria. I did not mention here, each according to his needs, whether he is a producer, a consumer, an investor, or a policy maker. Note that the latter's task requires that he rely on a mixture of numbers and benchmarks, an analytical approach, wisdom and common sense to see which groups in the country or abroad will be affected and where the impact will be more profound and more lasting before making an economic decision.

The Metaverse - The Future of the Internet

The Internet can undoubtedly be labelled as the greatest invention that man has created, going from humble beginnings in the early 1990's, to the intricate web of technologies, services, websites and payment systems we see available in the every corner of the globe today. It has fundamentally changed the way we live, work and play and the rate of its growth is something that truly astounds me. It was this that led me to write the 'Brave Knowledge World' in 2019, which I wrote as a journey through technologies that would change our lives and pave the way to our digital future.

The book covered numerous fourth industrial revolution technologies that I saw as key to developing the building blocks of our digital destiny. This was written after consultation with technologists around the world, through my dealings with experts at the United Nations and in consultation with my own technology experts at TAG.Global.

Apart from key technologies such as blockchain, AI, IoT and others, I was certain to include sections on technologies such as augmented reality (AR) and the manner in which the boundary between these technologies would eventually blur to bring about totally new digital ecosystems, delivering value by merging reality with the digital world through different mediums and interfaces. Almost three years later and this is precisely what is happening, with the rate of technology adoption rapidly rising during the pandemic as society turned to technology in a bid to continue operations during long periods of lockdown and quarantine.

At the end of 'Brave Knowledge World', I wrote a section on how a day in our digital future could look like with all the technology touch points in our lives and the integration with the digital world, particularly augmented reality technology and the use of avatars. This is what is now being touted by technology leaders such as Zuckerberg and others as the future of the internet under the new 'Metaverse'.

Now, there still isn't complete consensus about what the Metaverse is or what it will look like, but technology companies are taking this very seriously with entities such as "Meta" (previously Facebook), pledging to invest \$10 billion yearly. This has become a race to develop technology, lap up market share and develop dominance in this new market which is coming and will be a very big deal.

Other technology companies are following suit in a bid to get in early on the act, and interest in virtual real estate companies such as Decentraland, Sandbox and others is now booming, selling virtual 'land' within their popular 'metaverses' for companies to buy and build their virtual presences.

I see that many of these initiatives will merge in the future as the metaverse concept matures and competition streamlines, and will eventually become the sum of all online virtual worlds, augmented reality and the Internet combined into one.

So what can we expect as end user from the future Metaverse? I see our actual existence will be merged using augmented reality devices, IoT sensors and AI in order to bring the Internet into our everyday living, interacting with us in an active and passive manner to make our lives richer and deliver us with greater value.

This will be enabled through augmented reality devices such as smart phones, glasses or smart screens that provide intelligent interaction with ones surroundings. For example, wearing AR glasses, one will be able to find ones way around a new city through directions which appear to the user.

Going around a supermarket will take on a new experience with suggestions based on previous purchases popping up, or your spouse updating your shopping list in real time! Lessons will be made much more interactive with students be able to see augmented information relating to experiments, history and other topics. The applications of this technology are many and I look forward to seeing innovations that will be made in this space.

As well as providing a link between the virtual and the physical, you will be able to interact with the Metaverse purely digitally through a certified digital avatar that will legally represent you in this new world. Virtual replicas of entire cities and their contents such as malls, governmental departments and shops will be available virtually for people to interact with as though they are interacting with them in real life. This will mean that anything you can do physically can also be completed virtually, including completing official government errands, paying bills, buying merchandise and even meeting with friends in digital spaces.

The Metaverse will be a digital twin of our existential reality through which all services will be available including shopping, education, legal, training and others. It will be an extension of our current Internet that will need to have proper governance in place in order to make sure it is a safe environment for all of us to interact in.

We must take lessons from the current internet to make sure we do not make the same mistakes and develop a robust framework in which both technology and humans can survive in a healthy manner in the new Metaverse. We must take our place in this new revolution and develop capacity in its technologies so that we can help build a Metaverse that reflect our norms and values.

The Strategic Alliance between China and Africa

The China-Africa alliance is one of vital global importance for global prosperity that has been going from strength to strength for the past decade. Africa presents huge opportunities for China to expand, serving a population of over 1.3 billion that are becoming increasingly tech savvy and developing innovative solutions to help overcome local challenges.

This is a target market that in my mind has been long underserved by western nations, who still look at them through their colonial lens, seeing them as ‘backward’ nations. Africa represents a future global powerhouse which China acknowledges and has been eager to work with and leverage.

A fundamental pillar in the alliance has been the development of a tailored, flourishing digital economy in the continent, which is bespoke to the specific needs of each country in line with their digital maturity. Africa is as diverse as any continent with each country presenting its own challenges when building a digital infrastructure. National and local projects have been instigated, encouraging a spirit of local innovation to build solutions that meets the needs of the people.

Recognizing this talent, China has focused its efforts on doing what it does best, forging alliances with African telecommunications companies to ensure there is telecoms coverage across Africa as well as building most of the continents wireless and high speed networks. This backbone is an essential part of building a digital continent on top of which Chinese companies have helping governments to develop an array of e-services and local electronic payment solutions.

This has had a snowball effect and led to a vibrant digital economy sprouting, allowing African digital innovators to flourish. This is essential as it empowers local innovators to take control of their digital destiny, allowing them to play on the international stage alongside their conglomerate counterparts. It is imperative for locals to take control of digital initiatives as this is the only manner in which acceptance, adoption and longevity can be achieved; something that has been plaguing national digital implementations to this day.

It is interesting to note how important China considers the African continent with China being its largest trading partner since 2009. Bilateral trade has grown 38.2% year on year, reaching \$185.2 billion US dollars, with Chinese electronic and mechanical products accounting for more than 50% of total available across the continent.

China is looking at Africa as a long-term investment location and has way surpassed its competition with Chinese companies investing \$2.8 billion US dollars in Africa during 2021 alone. It has reduced barriers to entry to Chinese markets by offering zero tariff treatment to 97% of taxable items exported to China by 33 least developed nations in Africa, aimed at providing greater market exposure of African goods in Chinese markets. This demonstrates the confidence that Chinese firms have in the African market and its future potential.

I applaud how the Chinese are working hand in hand with their African counterparts to help deliver prosperity to the continent which is being done through local partnerships in a collaborative manner. The Chinese approach of collaborative work in a friendly and empowering manner is working and is something I urge our western nations to learn from.

Summits held in Johannesburg in 2015 and more recently the Beijing Summit on the Forum on China-Africa Cooperation (FOCAC) in 2018 stimulated great cooperation between the two, which is set to continue as they move into further areas of benefit and cooperation.

I foresee that this alliance will grow stronger in coming years and look forward to the time where we see an African silicon valley develop which will compete internationally to deliver affordable, high quality digital services to the world.

What they call AI is simply intelligent programming

Just mentioning the word artificial intelligence (AI) conjures up images fueled by ideas that science fiction has put into our minds of independent autonomous beings. The reality of AI is a far cry from this imagery, with leading proponents of AI such as IBM's Executive Chairman Ginni Rometty proposing changing the name to something which reflects its true reality which is in fact intelligent programming. Rometty advocates for the term artificial intelligence to be replaced with 'augmented intelligence' in order to remove the stereotypes and stigmas that are associated with the word 'artificial intelligence' which has caused a lot of fearmongering in the past.

This says a lot as IBM is one of the world leaders in the field of AI with its 'Watson' engine which is enabling many industries and sectors with AI capability in order to make sense of large datasets and provide better business analytics.

A look into the workings of AI reveals it to be a technology based on linear algebra, calculus, probability and mathematical optimization to help recognize patterns in information being fed, nothing more. Calculus is used to build a network of nodes attempting to replicate the function of human neurons, albeit on a much simpler level. These are developed and connected in programming code to perform various functions that make up what is known as neural networks. This is then fed with information - or trained - with specific labelled datasets so that it may build up a representation of the data, and in turn, its detection capability. The more data it is fed, the better it develops.

For example, an AI can be fed many pictures of labelled cats and dogs and after training, will identify a cat or a dog when presented with a picture of either. Following that, the AI can be used to perform rapid functions on huge datasets, but it will only be limited to providing the function for which it has been developed. Granted that the example given is a simple one, but it serves to illustrate how AI technology works. It is, as I previously said, intelligent programming.

AI has been receiving a lot of attention recently and the reason is two-fold. One is that large datasets are now available for AI systems to be trained on due to the advent of big data. Without data, such systems fall flat as they cannot be trained. Training them with big datasets provides them with enough information to push through the neural network algorithms, reducing error margin and making them more accurate. Secondly, training and processing the AI with data needs copious amounts of computing power which simply wasn't available in the past. Powerful processing now allows AI algorithms to process big datasets which are ultimately complex mathematical equations.

Whatever level of sophistication they get to, they remain programming systems that humans control which can be used as augmented intelligence to assist human in better decision making.

Another point which is worth raising here is that AI systems are somewhat deceptive in the level of automation they are providing. Perceptions are that having an AI brings about fully automated operations. This is far from the case where AI plays a very limited role, usually for very specific decision making activities, or acting as the interface to backend system that we have had for decades.

Ordering items from the popular Alexa system from Amazon for example, exposes the layman to an AI interface, but masks the backend processes which are pretty much the same as they were before. Systems may seem automated through AI, but pull away the curtain and there is a high environmental cost being paid. In most cases in fact, it is the backend people that are making such system appear autonomous, whereas in fact they hold no value without their human counterpart. In light of climate change challenges, we need to be looking at the overall ecosystems in which AI's sit, to make them greener, transparent and more sustainable in order to democratize AI in the true sense of the word.

An issue which I brought up five years ago which still need work is the issue of bias in datasets being used to train AI systems. We have seen huge blunders in AI systems producing errors due to the bias and prejudice in the data used to train them. Much stronger regulatory laws need to be put in place and greater rigor should be exercised around how such datasets are produced, which means improving guidelines for AI regulation and how these systems are built.

Moving forward, we need to have the experts in our nations who understand this technology and are able to harness them as they start to play a more critical role in our every lives. Having auditable AI systems is imperative in order to remove the ‘smoke and mirrors’ around them, so that we can guarantee some level of assurance regarding their operations.

We also need experts in AI to develop the next generation of systems and must encourage an environment that promotes research and development, as otherwise, this will be another wave that we will fall behind.

The worst is yet come

The world economy has been hit with a multiple whammy over the past few years with the fallout of the pandemic, strangled supply chains, the war in Ukraine, soaring energy prices and rising inflation bringing instability to global markets. This is a period of elevated risk as modern economies take a pounding with the chances of a global recession rising, exacerbated by aggressive hiking of interest rates in a bid to stem inflationary pressure and restore price stability.

The Federal Reserve has pledged to keep tightening the purse strings and continue with steep interest rate hikes as well as proceeding with quantitative tightening programs. The main instrument to control inflation is to increase interest rates in an attempt to stymie expenditure. Interest rates that we are seeing today are reminiscent of the 1980's with the UK and Europe suffering heavily with double-digit inflation rates, the highest in forty years. The rapid increases in borrowing spells trouble for lenders and housing markets which is never a good thing, having knock on effects further down the line.

The President of the European Central Bank Christine Lagarde has warned of supply shocks as Europe contends with huge rises in energy, with the Governor of the Bank of England Andrew Bailey saying it is walking a tightrope between inflation and recession. Soaring energy prices, Russia's war and increases in prices of food and manufactured goods are squeezing consumer purchasing power which is affecting us all. Clearly the longer this lasts the higher the economic costs will be and the effect of an appreciating dollar as the Fed's policies take hold will have reverberations in other economies as the cost of the dollar becomes more expensive in local currencies.

Across the water in China, things are not looking much better. The Chinese are trying to fend off a property market crash characterized by falling apartment sales and numerous debt defaults by mega property developers which could result in the world's biggest ever property crash. What seems to be the worst cost of living crisis in the West will have a knock on effect on China in terms of demand for its finished goods. China also faces difficult relations with the USA as Uncle Sam tries to isolate it from all sides from the processor manufacturing sector. It also suffers from an increasing aging

population, has poor relations with many western states and faces mounting encroachment from the state as President Xi Jinping puts ideology over economy.

It seems that we are all in for a difficult ride in the coming months with the rise in anxiety across global markets as clear as day. This is just the beginning and I fear the worst may be yet to come.

I am often asked what specific actions should be taken by countries to combat such difficulties. My answer is that it is very difficult to paint viable solutions in broad strokes and I would say that each country should look carefully at its own economic situation and assess its own risks that inevitably vary from country to country. Every country's situation is different and I would urge specialist government committees to be formed to make a comprehensive and holistic analysis with solutions that are applicable and pragmatic.

However, and from my experience, I would suggest that such committees should consider the following:

- Creating attractive foreign investment climates.
- Transforming into a digital state making government more efficient and transparent.
- Empower citizens with digital skills to make them more employable.
- Adopt policies to stimulate GDP growth to create more job opportunities. Invest in more sustainable forms of energy as well as promote local production of essential food items.
- Modernize education systems and promote wealth creation and innovation through information technology.

I see that we can only future-proof ourselves if we look at a combination of factors rather than solely relying on economists to help us get out of such a quagmire. We should be promoting active debate among all sectors of society to help our leaders and lawmakers make better and more informed decisions.

Economic Reports Point to a Possible Recession

Recent reports produced by both the IMF and the World Bank indicate that world economies face a bleak outlook in 2023, as several factors threaten to tip them into a prolonged recession, including low growth figures and fragile financial institutions.

According to the IMF's World Economic Outlook April 2023 update, global output growth is expected to fall from 3.4% in 2022 to 2.8% in 2023. The report cites monetary tightening, geopolitical tensions, trade disruptions, and financial vulnerabilities as some of the main risks to the recovery. The World Bank's Global Economic Prospects report, released in January 2023, has projected a slowdown in global growth to 2.9% in 2023, down from 3.1% in 2022. The report highlighted the challenges posed by high debt levels, low productivity growth, and environmental degradation.

One of the main factors behind this slowdown is the effect of monetary tightening on the global financial system. In 2022, several central banks, especially in the US and Europe, raised interest rates to curb inflation and stabilize their currencies. However, this also burst several asset bubbles that had been inflated by years of cheap money and quantitative easing. As a result, many borrowers and financial institutions face an interest rate shock that has increased their debt burdens and reduced their profitability.

This is similar to what happened before the great depression that began in 1929, where the Federal Reserve relaxed credit standards and reduced interest rates that led to excessive debt and speculation. By 1929, signs of trouble emerged and investors started to cash out, which led to one of the longest and deepest depressions of all time that originated in the US, but affected every nation across the globe.

Another factor today is the fragmentation of the global financial system due to geopolitical tensions and deglobalization. The COVID pandemic, the war in Ukraine and the US-Sino rivalry have disrupted global trade, supply chains and cooperation. If the world's largest economies do not cooperate on the financial stabilization of their economies, they could trigger a recession that could lead to more debt and further financial crises that would exacerbate economic stagflation.

I wish to add that as a former member of the “World Trade Organization (WTO) panel on defining the future of trade”, I was expecting these recessions and I called for greater multilateral coordination on fiscal and monetary policies that are urgently needed to revive the global economy and to avoid this situation from deteriorating even further.

AI and Shortening Time ...China Using AI to Improve Educational Outcomes

China is emerging as one of the leading countries in adopting AI for education purposes. Chinese authorities have been using various AI technologies in classrooms that can help teachers and students in different ways, such as headbands that measure brain waves and monitor student engagement and concentration levels. These devices can help teachers determine the students' weaknesses and strengths, as well as tailor their instruction to the individual needs of each student and provide feedback on their learning progress. Other classrooms use cameras and programs that track facial expressions and analyze student behavior. These tools can help teachers assess student emotions and motivation and determine when teachers can intervene to address an issue or provide support to the student when necessary.

Some classrooms also use software that determines students' levels using programs that assign scores based on student concentration levels and performance, which can help teachers evaluate student learning outcomes and provide personalized guidance and support.

This highlights China's determination to invest in AI technologies to enhance student learning and prepare them for the highly competitive college entrance exams, for which parents and teachers are always looking for to gain a competitive edge and improve student performance.

China has proved its ability to address some of the biggest challenges in education today, such as access to good education, inclusion, and looking into issues affecting education in terms of language, in addition to personalized learning experiences through smart teaching systems rather than unified learning/educational processes.

With AI technology, we can quickly highlight how each learner's strengths and weaknesses can be identified in order to develop a tailored approach for each student.

I see that such AI tools are an essential technology that will go a long way to democratize education in ways we could have never imagined.

However, such technology also brings challenges and risks that must be addressed. AI can exacerbate existing inequalities and biases in education through the users! Its tools may also not suit a few groups of learners.

It can also create new digital divides between countries and regions that have different levels of access to technology, infrastructure and skills.

AI also relies on large amounts of data, which raises concerns about the privacy and security of students' personal information as it could be vulnerable to hacking, manipulation or misuse by malicious actors.

There is a definite need to ensure that data collection, storage and analysis are done in a transparent, ethical and secure manner.

The introduction of this technology also requires teachers and learners to acquire new skills and competencies to be able to use it effectively. Teachers need to learn how to integrate AI into their teaching practices, as well as how to evaluate its impact on student learning.

Learners need to learn how to effectively interact with AI systems, as well as how to critically appraise their reliability, validity and limitations.

As someone that has been advocating for the benefits of AI for many years and in my capacity as a member of the UNESCO Advisory Committee for Quality and Excellence in Education, I believe that we need to embrace AI as an opportunity for innovation and improvement in education. However, we must ensure that it is developed and used in a way that respects the rights, dignity and diversity of all learners. We must develop a comprehensive

vision of public policy on AI for sustainable development and work together as a global community to harness the potential of AI for education while ensuring its ethical application.

Finally,

other nations would do well to follow China's lead in applying AI to education. History has shown that those willing to modernize their educational systems with new approaches, technologies and learning systems are the ones that benefit from first-mover advantage, setting up their economies to reap great rewards further down the line as their citizens become more effective knowledge workers in fields that contribute to their community's development and advancement.

The Importance of Special Economic Zones

Throughout many years of international consultations on economics and trade, I have been an ardent supporter of globalization and open trade policies that brought enormous benefits. Globalization has contributed to international prosperity and development, building bridges between nations and acting as a facilitator for greater peace and understanding between historically antagonistic powers. This has allowed economies to open their trade borders to one another which had been encouraging a greater spirit of cooperation, increasing productivity and being a key driver of innovation and growth.

As a result of choppy economic waters during recent times, there have been greater calls towards protectionism by populist politicians on the grounds that local decision making and self-determination are being undermined, and that jobs are being lost to foreign workers. These are easy narratives for politicians to capitalize on as they breed on public fears. In fact, globalization has been a very successful vehicle for economic progress and continues to play a vital part in all economies regardless of their ideological convictions. I would urge those promoting economic nationalistic trends to look deep into their economies and see the myriad of benefits that special economic zones (SEZ) in particular have brought to their nations. We must mature our understanding and not look at globalism or nationalism as binaries, as jurisdictions that SEZ fall under are widespread, acting as conduits for globalization no matter where we may reside and wherever our ideological allegiances may fall.

These special zones act as havens of international business activity, safe from national customs and regulations, with special tax laws and innovation hubs designed to attract investors to an environment where they are given very favorable rules in which to operate, and a great deal of autonomy in their business operations. The 2019 World Investment Report by UNCTAD states that there are some 5,400 such zones across 147 countries globally, offering fiscal incentives, relief from custom duties and tariffs, business friendly regulations, tax breaks, as well as the streamlining of permits, licenses and a raft of infrastructure and state support for international firms to conduct business.

These zones first appeared in the 1950's in western nations to attract foreign investment from multinational organizations. Since then, they have been established in every major country across the globe in some form or another, seen as bastions of globalization that have attracted billions of dollars in investment and allowed international commerce to flourish. The new urban megaproject under construction in Saudi Arabia called Neom, promises to be the next generation of special economic zone, targeted towards foreign investment in what has been touted as the world's most ambitious project. Similar zones have been established in places like Dubai, where a bespoke set of laws has been drawn up with foreigners in mind, with interconnected legal areas, each representing different activities such as healthcare, technology, media and others.

These zones are highly efficient, active hubs of globalization which are getting stronger and more attractive as time progresses. They are being adopted with greater enthusiasm across Africa and China, and are growing in the borders of many other nations as the competition to attract foreign investment and entrepreneurship rises. Countries will continue to fight with each other to offer greater incentives in the form of these zones as it makes economic sense.

With world economies presently struggling, SEZ's are set to play an even greater role in attracting foreign investment which is much needed during these times to boost economic prosperity, through a vital function that will perish if we start adopting protectionist ideas and abandon globalism.

An Arab Accounting Compliance Law

The world today is heading towards a global digital transformation, which has accelerated for reasons imposed by the coronavirus pandemic, during which digital services were been adopted. The world has also witnessed an unprecedented increase in the use of digital channels in banks, creation of digital wallets, and the entry of new customers in the financial system. This requires drafting financial transactions and smart accounting policies, including verifying the customer IDs and tracking the movement of funds and the reasons behind such movements.

We have seen misuse of some financial transactions and accounting movements, such as misusing the digital transformation to carry out money laundry (ML) and terrorist financing (TF) crimes. These two have been, and remain, the main challenges that threaten our world. They do not differentiate between people, cross borders, negatively affect the reputation of countries, and threaten global financial stability.

The question is, do digital technologies really allow ML crimes? Do they contribute to TF crimes? Do they offer financial services that would not have been possible without transcontinental digital channels?

Indeed, smart, digital transactions have facilitated dubious activities because the people carrying them out take advantage of lax controls. We are now confused, as we see unreal institutions, companies, names, and financial movements, whose number is unprecedented.

At the beginning of 2021, America started combating this with the US Senate passing the Anti-Money Laundering Act (AMLA) of 2020. This included a number of anti-money laundering laws, aimed at boosting the financial system and modernizing the anti-money laundering (AML) and combating the financing of terrorism (CFT) infrastructure, which have a strong presence in the certain digital spaces.

Accordingly, Arab financial institutions must invest in the global digital transformation. We at TAG-Global, implement a monitoring program that certifies the financial statements of our clients. It is a special program for

compliance that is based on various international standards and decisions. We have also developed a program that is applied to each client, while taking into account local requirements in the countries we are working in.

So, how should Arabs best invest their time now? They should elect an Arab team to draft new digital accounting standards to curb such crimes. I still remember when I was assigned with convening the first online governance conference in Munich, how the US delegate had refused monitoring the cyberspace.

As anyone can create an account on the internet, even if it is fake, monitoring activity on the internet has become a huge problem, which is a tool the whole world is using.

As for the Arabs, they have to agree on enacting laws that monitor accounting transactions on the Internet and develop an Arab accounting compliance law that is binding on everyone, under the umbrella of the Arab League, which is the most responsive incubator for Arabs.

Finally, the time has come for us to set our own accounting standards by using the expertise of those who preceded us in this field. Each Arab country may then add its own relevant laws that affect its products and privacy. This will enable us to develop our own distinct Arab standard that represents us and serves our interests. No one will be able to impose European or American laws or any other laws on us.

We have everything we need to do that. We, the Arabs, have to impose ourselves on the international arena and I want us to talk in our mother tongue, the Arabic language, because no matter how bad our current circumstances are, we are still “the best peoples ever raised up for mankind.”

US-Sino Relations: No real change

Having reached concerning levels, the saber rattling between the US and China has been a worrying development that I have addressed on many occasions before. The increasing hostility between the two, both economically and politically, has deteriorated to the point where both sides have publically warned of possible confrontation with the other.

In a positive move however, US Secretary of State Antony Blinken has met China's President Xi Jinping in Beijing on Monday 19 June 2023, in a bid to ease tensions and improve communication between the world's two largest economies. The meeting, which was not originally on Blinken's schedule and was only announced an hour before it took place was the first face to face encounter between the two leaders since Blinken took office in January 2023. It came after months of frosty relations between Washington and Beijing, marked by disputes over trade, human rights, Taiwan, Hong Kong, cybersecurity and other issues. A previous meeting was originally scheduled for February this year, but was cancelled after the US shot down a supposed Chinese spy balloon found in US airspace.

After a 35 minute meeting at the Great Hall of the People on Tiananmen Square, Blinken told reporters: "I stressed that... sustained communication at senior levels is the best way to responsibly manage differences and ensure that competition does not veer into conflict. I heard the same from my Chinese counterparts. We both agree on the need to stabilize our relationship." Blinken also said that he was "clear-eyed" about China and there were "many issues on which we profoundly - even vehemently - disagree."

For his part Xi said that the two sides had made progress and reached agreement on some specific issues, but did not elaborate on what they were, saying that China and the US should respect each other's core interests and major concerns, should avoid confrontation and conflict, and should cooperate on global challenges such as climate change, public health and economic recovery.

Both leaders agreed on the need to stabilize their relationship and to prevent competition from turning into conflict. But they also acknowledged that there were major differences on many issues.

The meeting followed a visit by Microsoft's co-founder Bill Gates to Beijing earlier in June where he met President Xi, showing some potential for cooperation between the two countries on issues such as clean energy and innovation.

Blinken's visit to China was part of his Asia tour, which also included stops in Japan, South Korea and India. He said that his trip aimed to demonstrate US commitment to its allies and partners in the region, as well as to uphold a free and open Indo-Pacific.

He also said that he had raised concerns about China's actions in the region, such as its military pressure on Taiwan, its maritime claims in the South China Sea and its crackdown on democracy in Hong Kong.

The meeting between Blinken and Xi is undoubtedly a positive sign of re-engagement and a message to their own people that they are willing to reach out to each other. The two countries will need to balance their interests and values, manage their differences and risks, and seek common ground and solutions.

It is encouraging that hostile rhetoric between the two has moved down a gear. However, the very nature of the relationship between them, each representing a major trading bloc as well as differing political interests, is set to remain fraught with challenges and uncertainties.

In my personal view, no progress, no agreement, no hopes.

Bypassing Congress to Avert the US Debt Ceiling Crisis

The clock is ticking for the US government to raise its debt ceiling, which is the legal limit on how much money it can borrow to pay its bills and obligations. The US Treasury Department has warned that it could run out of cash as soon as June, unless Congress acts to increase or suspend the debt limit.

However, Congress is deeply divided over this issue with Republicans insisting on spending cuts or policy concessions from President Biden in exchange for raising the debt ceiling. Democrats argue that raising or suspending the debt ceiling is a necessary and routine measure that should not be tied to any partisan demands.

As the stalemate continues and with little time left, some have suggested that President Biden may have another option to avoid a default, which is to invoke the 14th US Amendment that states that the “validity of the public debt of the United States ... shall not be questioned.” This amendment was adopted after the Civil War to ensure that the federal government would not deny its debts and to grant citizenship and equal rights to former slaves.

President Biden could use this to authorize more borrowing without Congress’s approval, based on his constitutional duty to protect the integrity of the national debt. However, this option is controversial and untested in court, and he would likely face a legal challenge from Congress or other parties. The Supreme Court has only addressed the public-debt clause of the 14th Amendment once, in a 1935 case involving President Roosevelt’s which was dismissed on procedural grounds.

A default on US debt would have catastrophic consequences for the American and the global economy, triggering a financial crisis and a recession. Invoking the 14th Amendment might prevent that from happening immediately, but it would also create legal uncertainty and insecurity in financial markets. Some prominent Democrats have urged Biden to use the 14th Amendment if Congress fails to act, but some Republicans have warned that invoking the 14th Amendment would be unconstitutional and irresponsible that would undermine the constitutional system of checks and balances and be seen as a power grab.

The debate over the 14th Amendment reflects the broader political polarization over fiscal policy and governance in Washington. As Congress approaches another deadline to raise or suspend the debt ceiling, both sides are digging in their heels and hoping for a breakthrough.

The Hidden Costs of AI Chatbots

The recent surge of AI chatbots like ChatGPT, Bard and others has taken our online world by storm, with the promise of transforming domains through learned knowledge which can generate natural language responses to user queries. However, these models also have enormous hidden costs that could throttle AI development and limit their quality and diversity.

One of the main costs of these systems is the high amount of computing resources they require for training, literally costing millions of dollars to develop, requiring specialized computing resources to run and even more when being retrained. The high computing cost of is due to several factors. These include the large size of the models which can have billions or trillions of parameters that need to be updated during training, as well as the large amount of data that the models need to process and the complex algorithms these systems use.

Another cost of them is the limited availability of the Graphical Processing Units (GPUs) they require. GPUs are in high demand for various applications, such as gaming, cryptocurrency mining, and scientific computing and designed for intensive mathematical calculations, making them ideal for AI systems. This creates a shortage of supply and drives up the prices of them. Moreover, GPUs are not energy-efficient and consume a lot of power, which adds to the environmental impact of AI chatbots..

The high costs of developing and running these AI chatbots pose several challenges for AI development, including restricting the quality and capabilities of the ones that are deployed to the public, as companies may opt for smaller or simpler models that are cheaper to run but less accurate or versatile. The diversity and innovation of the systems that are created may also be reduced, as only a few large companies can afford to train and run them at scale. Also, there is likely to be pressure to monetize such systems as soon as possible which may lead to substandard systems being built, compromise

their ethical and social standards or lead to other unintended consequences. We cannot afford for a few tech companies to have a monopoly on this technology, which deserves to be democratized as much as possible.

To address these challenges, more efficient and scalable methods for training them should be explored, including adapting them to specific tasks or domains, rather than training new models completely from scratch. More energy efficient ways of running and hosting these systems should also be investigated in order to reduce the carbon impact associated with them. Datacenters are already guilty of using huge amount of electricity and producing significant greenhouse gas emissions.

As a long time technologist and being the Chair of the Consortium for Sustainable Urbanization (CSU), I am of the opinion that the total cost of ownership of AI chatbots needs to be radically brought down, as the present course this sector is going down is unsustainable. We require innovative solutions to deal with these and other challenges surrounding their production and operation. If nothing is done, we may well end up throttling and killing this industry before it even gets a chance to take off.

Let Us Agree on One Definition for AI

Dr. Talal Abu-Ghazaleh shares Jumana Abu Ghazaleh's views on Artificial Intelligence.

In 2002, I asked Bill Gates at the Microsoft Executive Summit Meeting in Paris, what the next era would be, to which he replied the era of Artificial Intelligence. With the AI era well and truly upon us, I have been avidly following up on this technology with my daughter and sharing her knowledge as a keen technologist in our time, Jumana Abu-Ghazaleh.

Today, everyone is talking about AI and how it has the potential to change and revolutionize our world in a myriad of different ways. It has become a vibrant topic that sparks diverse and intense discussions with people debating its pros and cons, its reality and fantasy, its biases and ethics, as well as its threats and promises. With the coming of ChatGPT and AI going mainstream, maybe for the first time ever people can see its potential, investigating its applications, dangers and limits, with more zeal than ever before.

Having assessed what is going on in the world of AI and having consulted with Jumana and many others, what seems to be missing is a clear, universally accepted definition of AI. AI seems to mean different things to different people with several organizations refer to it as a kind of system. The US Department of State and the OECD refer to it as a kind of system, the US Congress has called it a computerized system and OpenAI has labelled it as highly autonomous system.

And then there are companies like Microsoft that say that it's a capability with Google saying it's a set of technologies. The EU says it's a family of technologies, with China saying it's a strategic technology. Meta has used various definitions over the years, enough to confuse ChatGPT into providing a definition and then retracting it. It is notable that various links

provided by ChatGPT over the course of Jumana's conversation with the tool regarding Meta's definitions of AI were broken.

With so many definitions and understandings of AI, there clearly seems to be a fundamental problem in defining what exactly it is that we are talking about here. This is highly problematic as it has an impact on current and future discussions about a topic that is so poorly defined. What exactly are we talking about when we refer to AI? If there is ambiguity about the thing we are referring to, how can we have meaningful discussions about how it is developed, governed, used and applied, as well as its merits, dangers and its future?

As an accountant by trade as well as being the founder and chairman of one of the largest audit firms in the world, TAG.Global, having precision and control over what terms mean is something that is built within my very fabric. In 2019, Jumana wrote a piece for 'The Startup' about the state of data-intensive and data-extractive technology that started with this line: "Everyone knows something's wrong - they just can't agree on what it is."

I could have started this article the same way. Why all the obfuscation and complication in defining what AI is? Why is there not a consensus in the world among companies, experts and everyone else about what it is we are talking about here? Who knows?

What I do know is that before we take AI discussion any further, we must settle on a definition of what it is that is both accurate and meaningful. As has been said in management circles "You cannot manage what you cannot measure". I would extend this further and say, "You cannot measure what you have not defined". If we are going to build a healthy, diverse and vibrant AI sector, we need to be clear from the get-go about our terminologies, definitions and hierarchies as these are the basis from which a holistic AI ecosystem can sprout.

We need a well-defined AI taxonomy with a precise nomenclature before we proceed. We must have conversations about what AI is and what makes a system artificially intelligent. To illustrate the quagmire we are in, we are

already in a world that defines AI as multitude of things including a self-driving car, a facial recognition tool, a ChatBot, a business model, a robot, a language interpreter, a tool to help reduce climate change, a chess expert, an early disease detection assistant, and more.

I believe that it's never too late to make things right and that it is time to take meaningful action. I suggest we form a commission— call it the Commission for AI in the Public Interest (CAIPI) — comprised of experts in various related fields, including data science, law, ethics, neuroscience, philosophy, and others. They should be tasked with stress-testing and standardizing the definition so that those working in the field, as well as those using and being used by the field, are clear on the rules of engagement and can expect a modicum of consistency and accountability. It is called governance and it is part of literally every other aspect of our life.

Being the previous Chair of the Advisory Committee on Internet Governance for the United Nations Information and Communication Technologies Task Force and having hosted numerous international forums on governance - as well as having published numerous works on governance - I invite Bill Gates and others to join me in taking action to clearly define AI. I will happily host such a gathering at Talal Abu-Ghazaleh Academy and at Talal Abu-Ghazaleh Digital University, where we are actively investigating, exploring, and teaching various aspects of AI.

AI Regulation: A Matter of Increasing Importance

From the recent developments in the field of AI, it looks clear that the knowledge workers' role will change significantly as this technology integrates further into our everyday lives. The impact of AI is something I have been speaking about for many years, and on numerous occasions, I have raised my voice on regulating this industry and the need for clear definitions about what we are talking about when we speak about AI.

We need to be raising questions now, which I believe will help steer this industry in a positive direction that respects human values and protects our humanity. We need to be able to understand and audit AI systems, as well as address the alarming lack of regulation this industry faces, as this technology's potential to disrupt our lives is immense and that needs to be properly handled.

These concerns have been shared by many leading technologists such as Sundar Pichai (CEO of Google), Elon Musk (CEO of Twitter), Steve Wozniak (Cofounder of Apple) and others, some of whom have even called for the halting of further training of AI's until we have an appropriate regulatory framework. I would say that we also need proper definitions before we proceed as AI means different things to different people, as my daughter Jumana Abu-Ghazaleh, highlighted in her excellent article on defining AI (available here <https://jumanaag.medium.com/ay-yai-yai-a-i-c3516db0e82b>). We cannot afford to let loose technologies that we have not properly defined, let alone fully understand. Even Pichai admitted in a recent interview that there is a "black hole" with chatbots, where "you don't fully understand" how or why they have come up with certain responses.

Regulation is pivotal in building the upcoming AI industry, just as it is important in every other aspect of our lives. It is imperative to set standards and rules for AI systems, in order to prevent misuse and abuse, and to

protect the rights and interests of individuals and groups affected by AI. However, regulation is not easy to design or implement, as AI technology is rapidly evolving and is often opaque. Moreover, regulation is not only a matter of technical or legal issues, but also of ethical and social ones as well. How can we balance the innovation and competitiveness of AI with the protection and empowerment of its users and stakeholders? How can we ensure that AI reflects the diversity and inclusiveness of human society and does not exacerbate existing inequalities? How can we foster trust and transparency in AI systems and their outcomes? How can we be certain the training sets being used to build these AI's are not biased? These are all pertinent questions that we must start to address now.

Having been Chair of the Advisory Committee on Internet Governance, United Nations Information and Communication Technologies Task Force, I believe that one possible way to address these questions is to adopt a human-centric approach to AI regulation, as proposed by the European Union in its 2021 legal framework for AI. This approach aims to ensure that AI is aligned with human dignity, autonomy, and rights, and that it serves the common good. According to this framework, AI systems should be subject to different levels of regulation depending on their risk to fundamental rights and safety. For example, high-risk AI systems, such as those used for biometric identification or critical infrastructure, should comply with strict requirements on data quality, accuracy, robustness, human oversight, and redress mechanisms. On the other hand, low-risk or beneficial AI systems, such as those used for entertainment or education, should be encouraged and supported by incentives and funding. This is one possibility.

The other possibility that I have called for previously, is to involve multiple stakeholders in the governance of AI under a new international commission. This could be called the Commission for AI in the Public Interest (CAIPI) and would consist of AI companies, engineers, social scientists, law makers, ethicists, philosophers, and others who can provide different perspectives

and insights on the implications of AI. Such regulation should not be left to one company or country and must be based on the consensus of a cross section of experts in different fields that AI interjects with. It certainly isn't something that should be left to chance or discussed on the sidelines. This is a highly complex specialization where we need clarity, transparency and disambiguation on all levels in order to fully appreciate and understand what it is that we are dealing with, so that we can fully understand the risks, impacts and opportunities it poses in order to build a robust and comprehensive regulatory framework.

I call upon all those working in this field, including Sundar Pichai, Elon Musk, Steve Wozniak, Bill Gates and others to join hands with me to establish this commission. I will gladly operate and host it at our facilities at the Talal Abu Ghazaleh International Knowledge Forum and spread the outreach globally, as this is an important technology juncture at which we stand, and it rightly deserves utmost care and attention.

Leadership Over Showmanship – The Chinese Way

China's rise has attracted global attention, with many focussing on its economic model as the main factor behind its rise, which is of course important. But China's evolving political change has been somehow ignored.

In fact, without much fanfare, China has established a system of meritocracy, or what can be described as “selection plus election”. Competent leaders are selected on the basis of performance and broad support, through a vigorous process of screening, opinion surveys, internal evaluation and various types of elections. This is much in line with the Confucian tradition of meritocracy. After all, China is the first country that invented civil service examination system or the “KeJu” system. Today, China practices – quite successfully, meritocracy across the whole political stratum; Criteria based on poverty eradication, job creation, local economic growth, social development, environmental protection for selecting and promoting officials.

A good example of this was the profile of China's new elected leaders at the 19th Party Congress where, six of the seven of the top members of the standing committee of the Politburo have previously run provinces or province-level municipalities, many of which in terms of population or GDP are equivalent to many nations combined.

Indeed, the Chinese system of meritocracy today makes it inconceivable, that anyone as weak as George W. Bush or Donald Trump could ever come close to the position of the top leadership.

It's not far-fetched to claim that the China model is more about leadership rather than showmanship as in the West. China's meritocratic governance challenges the stereotypical dichotomy of democracy versus autocracy.

From the Chinese point of view, the nature of the state, including its legitimacy, has to be defined by its substance that is good governance, competent leadership, and success in meeting people's needs.

So, despite its many deficiencies, the Chinese Polity has delivered the world's fastest growing economy, and has vastly improved living standards for most Chinese.

Winston Churchill's famous dictum: "democracy is the worst form of government, except for those other forms that have been tried". Maybe that is true in the Western political and cultural context, and many Chinese even paraphrase Churchill's remark into what Sun Tzu, China's military strategist of the 6th century BC called "Xiaxiace", the least bad option; which means a system that would allow for the exit of bad leaders through regular elections. But in China's Confucian tradition of meritocracy, a state should always strive for what's called "ShangShangCe", or the best of the best options by choosing leaders of the highest caliber.

This is by no means easy, but efforts to this end should be ceaseless and continuous. China's political and institutional arrangements and innovations so far have produced a system, which has in many ways combined the best option of selecting well-tested competent leaders, and the least bad option of ensuring the exit of the leaders who should exit for all kinds of reasons; through for instance, collective leadership or age limits.

China's model of 'selection plus election' is by no means perfect. It still is subject to improvement, but it is well-positioned to compete with the Western model of popular democracy.

The Growing Significance of the Platform Economy

Traditional marketplaces have been the customary setting in which buyers and sellers met to transact and to exchange goods and services. These have been the bedrock of commerce that have facilitated interaction between cultures and people in a vibrant ecosystem, allowing international traders to offer an assortment of exotic products and services to a wide range of buyers.

Moving forward to the present day, these marketplaces have been successfully replicated online through mega online platforms that have led to the birth of huge international firms such as Amazon, Google, Facebook, Uber, AirBnB and many others. These online structures have molded our online interactions by creating virtual ‘watering holes’ for online exchanges, where people congregate to enable a wide sphere of human activities, altering the manner in which we work, socialize and transact.

These spaces are digital platforms that deliver a diverse range of values and they help in organizing online activity into hubs of distinct interaction, pushing the boundaries of globalization to new limits through vast digital ecosystems and marketplaces based in the cloud. These have only been made possible through the application of big data, algorithms and cloud technologies to give the platform developers insights as individuals and businesses, allowing them to tweak their offerings and services based on our likes, interests and previous purchasing habits.

These platforms should not be confused with websites or mobile applications as they facilitate transactions through their ecosystems and aim to leverage this to make money. They have become so powerful today that they have disrupted the manner in which traditional businesses operate, forcing them to transform into leaner entities. The influence of these platforms has become so profound, that the need to properly regulate them has come about to preserve the interests of consumers. Investors have seized this opportunity to build digital platforms that attract users and monetize their activity, leading to the development of entirely new value chains, marketing activities and online careers such as Youtubers, app developers and the like.

Having been the Chair of the Advisory Committee on Internet Governance under the United Nations Information and Communication Technologies Task Force, I think that it is healthy that we question the trajectories of these online platforms and agree that they should be held to account as they hold so much control over us.

The platform economy provides many organizations with the ability to cross borders and it also provides access to new markets which can lead to a significant boost in earnings when compared to competition that do not have a platform offering. The right digital strategy here is key in order to entice users and develop a robust consumer base with a feature-rich platform offerings. Having this in place naturally attracts business and builds the platform as a go-to community where access to and control over data is everything. While online retail is probably the most successful example of the platform economy, as a result of the pandemic, more and more people are looking online for goods, services, social interactions and even work opportunities. No matter the size of the organization, every firm should have a strategy to deal with platforms, either to set one up, or become an active player in an existing one, as the benefits are tremendous.

Firms must view platform strategy development through the lens of business and not technology. They must understand their internal challenges, business maturity, process efficiency, employees as well as what their customer priorities are in order to formulate a comprehensive platform strategy that is multidimensional. Different customers have different needs, with corporate customers prioritizing matters such as efficiency, profitability and productivity, compared to a social media customer base that is looking for newer ways to interact with one another. This is vital to pin down and understand as it is the basis of the success of the platform and the products and services that it offers.

Platforms rely on healthy, long term relationships to be formed, with members expecting them to be fair, transparent, offer a good user experience, keep their data secure and adapt quickly to new market opportunities. If these pillars are in place, marketing the platform is an easy exercise. As well as having leadership from the boardroom and a diverse project team in place, a successful platform implementation relies on a number of things. These include boosting technological capabilities, understanding how data can be processed through tools such as AI and machine learning, having strong data governance in place, as well as generating a pool of talent that can help innovate the platform to new heights.

While many such platforms are geared towards English speaking audiences, I would urge companies in the Arab region to invest time and money to develop more platforms that take this regions needs into account. There is a huge user base in the Middle East and the success of such platforms is already evident.

US Led Challenge to Globalization

During the time when was a Member of the World Trade Organization (WTO) Panel on Defining the Future of Trade - Geneva (2012) and a Member of the International Chamber of Commerce (ICC) Executive Board – Paris (2006 – 2009), the policies that supported multilateral trade were high on the agenda, encouraging a spirit of cooperation and comradery between nations. Multilateralism has brought with it a great deal of benefits, facilitating international trade by having the same regulations for all member nations, bringing the world together on a number of issues including joint security, human rights, climate change and others, through agreed upon regulations. Such policies did bind powerful nations while giving smaller ones a voice and influence they would otherwise not possess.

Presently, the global multilateral trade system is undergoing a major transformation as the United States shifts its trade policies to confront China and to promote its own economic agenda. This poses significant challenges and opportunities for developing countries, which have to navigate the changing landscape and protect their interests.

One of the main concerns of developing countries is that the US will turn its back on the multilateral trade system that has governed global trade for decades, adopting more of a unilateral stance as its position comes under greater threat from the rise of the Chinese giant. The US has already undermined the World Trade Organization and imposed tariffs and sanctions on Chinese firms and expects other countries to follow its lead and limit their trade and investment ties with China. This could force developing countries to choose sides in the US-China rivalry, which could jeopardize their access to markets and technology. The US is clearly trying to strong arm its way out of this battle which has repercussions for other nations.

Another challenge for developing countries is that the US trade policies are driven by its geopolitical and domestic economic goals, which may not align with the interests of developing countries. The US wants to counter

China's technological ascendancy and protect its national security, as well as to promote its domestic industries and workers. These objectives may conflict with the development needs of developing countries, which rely on trade and investment flows for growth and innovation. The growing BRICS alliance is a clear example of this where the agenda of many Global South countries simply do not match with those of the US and its allies, having been sidelined or totally ignored for decades, with Global North interests coming first.

As this situation plays out on the global stage, I see that developing countries have the opportunity to shape their own development trajectories in such a changing trade environment. They should not solely rely on the multilateral trade system for their development prospects, and should pursue their own strategies and policies, including diversifying their trade and investment partners, enhancing their regional integration, fostering domestic capabilities, and leverage their collective voice in global forums.

The global trade system is facing a critical juncture as the US changes its trade policies to challenge China and advance its own interests. Developing countries have to adapt to this new reality and safeguard their development prospects. They must craft their own development paths rather than merely depending on the multilateral trade regime, as the US - once the biggest proponent of multilateralism - has now clearly started to play a different game.

The Need for Better Governance

With all the mayhem that the COVID pandemic has brought with it, it has served as a lens through which to review our previous efforts to implement governance across the world. “The World We Want” global consultations led by the UN in 2014 and the “2030 Development Agenda” with its 17 Sustainable Development Goals (SDGs) in 2015, strongly emphasized the need to adopt good governance for the prosperity of the planet and to build inclusive societies based on human rights.

In March 2020, reports warned that were quite off track to meet the established SDGs and that a new paradigm was required in order to meet these goals. This is particularly in the light of emerging economies, rising tech companies and digitally disruptive technologies that are bringing about new considerations related to governance that can only be addressed through an active public-private dialogue.

This global pandemic has exposed serious deficiencies in the way our world has been operating and that the socio-economic problems that were apparently under control are in seriously bad condition, exacerbating inequalities in areas such as health provision, poverty, the digital divide, sustainable urbanization and the education gap between the haves and the have nots.

This health crisis has shown how inadequate our governance structures really are and have revealed the fragility of our economies; with disruptions in our supply chains, a decline in public trust of governmental institutions and a stark reminder how important it is to have strong governance systems in place to mitigate such risks in the future.

I see that in every suffering there is a blessing; there is a silver lining that one must look for and leverage in order to come out stronger. You lose opportunities in the risks you do not take and this pandemic is an opportunity that we must use to our benefit to become better. As economies begin to recover from the pandemic, we must see this as an opportunity to embed greater sustainability into our recovery and implement better governance frameworks to accelerate our progress to achieve the 2030 SDG's in the goal towards prosperity.

The international community has come together to develop post COVID recovery plans with entities such as the UN, OECD, WEF and others convening to put together blueprints to overcome this crisis. In order to accelerate this progress I saw the need to establish an entity to support these valiant efforts to support governments and other stakeholders in this very important mission.

The Talal Abu-Ghazaleh Governance Institute has been established based on achieving recovery in four key areas:

1. Alignment of national strategies and recovery policies with international and regional frameworks, Agenda 2030 and the Paris Agreement. Particular attention is relegated to alignment of the SDGs with businesses, leveraging both private and public financing.
2. Creating fairer, more equal societies especially for women and marginalized and crisis affected groups and ensuring accountable, inclusive, transparent and resilient institutions are in place.
3. Investment in digitalization and new technologies with a focus on inclusive, affordable and secure access to digital technology to address exclusion, health, climate, environmental and other challenges.
4. Engaging, leveraging and strengthening financial systems drawing on public and private sources, governed by global standards and norms. Improve the integration of climate, environmental sustainability and resilience to future risk into national planning processes and development finance.

I see that these four areas are essential to address public governance, digital governance and corporate governance within our nations in order to promote governance that is underpinned with inclusivity, transparency, accountability and integrity.

I reach out with this institute and my experts to all those wanting to achieve a better state of governance and ask them to join hands with me in this endeavor to create new momentum in an area that needs serious work for our long term success.

Principles for AI in Education

As generative AI starts to take hold across the world, the education sector is probably one that needs urgent modernization to deal with this new development. Unfortunately, the education sector has been lagging far behind, unable to adequately deal with the presence of technologies that empower students to take charge of their learning.

With the ubiquitous nature of the Internet available around the clock through smartphone and other devices, students are more likely to be up to date with facts and figures than their teachers. I have been saying for many decades now that the role of our educators needs to move from traditional teachers to becoming technology mentors, in order to equip our future generations with the skills to use these technologies to their advantage.

The traditional education system was designed for an economic environment that has long gone, and while it possesses many good elements, it must be modernized to take stock of the new technological innovations so that our students are transformed into knowledge workers with the digital skills sought in the workplace. We need to fill the digital skills gap and empower our youngsters with valuable digital know how, and if we don't, we will find them being rather quickly superseded by workers that do.

Acquisition of these skills must begin in our education sector which has to modernize and must be enabled to adequately assess them in ways that do not undermine the education process. If our current assessment methods are inadequate, we should not place the blame on students when they use such technologies to their advantage to complete their school work. Rather, we should be introspective and develop assessment methods that work in modern times.

There is some light at the end of the tunnel and I would like to share how a collection of top universities in the UK called the Russell Group are addressing this matter, which is encouraging and is a move in the right direction. Rather than banning this technology which would prove to be futile, they have developed some guidelines for the use of AI in education so that it becomes part of the learning process in a safe and ethical way.

The guidelines cover five principles which are:

- Support students and staff to become AI literate
- Equip staff to support students in using generative AI tools
- Adapt teaching and assessment to incorporate the ethical use of generative AI and ensure equal access
- Ensure academic rigor and integrity
- Work collaboratively to share best practice as the technology evolves.

This is very timely as Ministries of Education across the world grapple with how to deal with AI in academia. The UK model may not be perfect, but it is certainly a positive step in the right direction.

Having been Chair of the United Nations Global Alliance for ICT and Development (UNGAID), I see this as an opportunity for us to rethink how we assess students and use it to improve their learning as well as impart valuable AI skills to them and help them take charge of their learning. For some time now, there has been a widening gap between the skills being taught and those required in the workplace. With AI, this gap is set to get wider.

Through reskilling teachers as well as providing training and early AI education to students, we can prepare future generations with a well-rounded education to become a dynamic workforce that is empowered to meet future challenges, and to contribute to society and to their workplaces with a modern set of AI skills.

This is a moment in time we must capitalize on and a future we need to embrace. It presents an opportunity to build resilient education systems that will help to develop future economies that are modern and prosperous.

Urbanization Challenges vs. Climate Change

According to the World Bank, over 50% of the global population live in urban areas, a figure that is set to rise to nearly 70% of the global population by 2050. This poses unprecedented challenges for the environment, society and economy, but it also offers unique opportunities for innovation and transformation. To harness these opportunities and address these challenges, we need a new narrative of sustainable urbanization that puts government regulation at the center of climate action, which is an existential threat facing all of us regardless of race or location.

Mark Carney, the UN Special Envoy for Climate Action and Finance and former Governor of the Bank of England, has argued that government regulation of business, carbon taxes on all emissions, stricter building codes and the elimination of combustion engines are essential to tackle the climate crisis and to achieve net-zero emissions by 2050. He has urged businesses and governments to act urgently and collaboratively to limit global warming to 1.5°C. Climate change and sustainable urbanization are inextricably linked as they both affect and depend on one another, being fundamental issues that we need to give greater attention to.

I agree with Mark Carney's sentiments and as the Chair of the Consortium for Sustainable Urbanization (CSU) in New York, I have for decades been advocating for sustainable urbanization. I believe that government regulation can foster sustainable urbanization by creating the enabling conditions for local actors to innovate and collaborate, playing a fundamental role in driving the sustainable agenda. We need to keep the pressure on for real change to happen to achieve net zero and must build on the great work initiated through the Sustainable Development Goals (SDG's) under the UN, spurred on by the Paris Agreement and annual COP meetings to develop sustainable environments for ourselves and future generations.

Implementing sustainable urbanization initiatives will help develop more jobs, push the development of innovative solutions, help to optimize land use efficiency, enhance infrastructure performance, allow the delivery of better municipality services that we all need such as education, health,

water supply, electricity, help to boost economic growth, and as a result help to improve living standards. Achieving this requires finding solutions to a complex series of issues such as poverty, inequality, congestion, social exclusion, and that requires governmental intervention to properly correct through better policies, regulation, standards, taxes, subsidies. This must involve a cross spectrum of different societal actors and stakeholders from both the public and the private sectors to help design and enforce regulation in a balanced manner, address inequities, monitor implementation as well as ensure that funds are being used appropriately and that initiatives are meeting their objectives in order to gain public trust.

We need to eliminate cronyism, bribery, and the undue influence of large energy firms which are systemic problems in many countries, being significant barriers when trying to achieve net zero goals. Proper governmental regulation and oversight can foster sustainable urbanization by creating the enabling conditions for local actors to innovate and collaborate, and by aligning with other goals such as economic development and social inclusion.

Each city has its own specificities and preferences that need to be taken into account when designing regulation which should be complemented by other instruments such as education, awareness raising and active participation. Sustainable urbanization is not only desirable but also feasible if we have the vision and the commitment to make it happen. I see that government regulation is one of the key tools we have at our disposal to shape our urban future.

The Increasing Weaponization of Technology

Technology and warfare have always been intertwined, as militaries seek to gain an edge over their enemies with new and advanced systems of reconnaissance and combat, as the threats and challenges from hostile actors increase and require effective responses. Moreover, developing new technologies and innovations require facilities, money and talent; resources that governments like the US have in abundance. The Internet, for example, a technology that is indispensable in today's world, originated in the military research labs of DARPA in the US. The weaponization of technology is not a new phenomenon, but rather a historical trend that will likely continue.

However, what is new is the shift in the direction and source of technological innovation. In the past, many technologies were initially developed in military settings and then diffused to the civilian sector. Today, however, many technologies are now first being produced by firms that have great technical capacity, and then being applied to military settings to enhance the next generation of defense and attack capabilities.

In fact, the Pentagon and the CIA have adopted various strategies to engage with the tech industry from the get go to fund innovative firms and monopolize their innovations. Military entities have increased their efforts to partner with tech firms in Silicon Valley, to develop and deploy technologies such as artificial intelligence (AI), drones, facial recognition, and autonomous weapon system for military and intelligence purposes.

Another strategy is to offer lucrative deals or grants to some of the biggest tech companies for specific projects or services. For instance, in 2017, Google agreed to participate in Project Maven, a DoD initiative that uses AI to analyze drone footage and identify potential targets. In 2018, Microsoft won a \$480 million contract to provide its augmented reality headset HoloLens to the US Army for training and combat purposes. In 2019, Amazon was awarded a \$10 billion contract to provide cloud computing services to the US Department of Defense under the Joint Enterprise Defense Infrastructure (JEDI) program. The US is not alone in this and governments everywhere are doing the same.

However, not all tech workers are comfortable or supportive of their companies' involvement in warfare and surveillance. Some of them have voiced their ethical concerns and objections through various forms of resistance, such as organizing protests, signing petitions, writing open letters, or even quitting their jobs. For example, in 2018, thousands of Google employees signed a petition demanding that Google cancel its contract with Project Maven and adopt a clear policy that it will not engage in building warfare technology. As a result of this pressure, Google announced that it would not renew its contract with Project Maven after it expired in 2019. Similarly, in 2019, hundreds of Microsoft employees signed an open letter calling on Microsoft to cancel its contract with HoloLens and stop developing weapons' technologies.

The collaboration between Big Tech and Big Defense is a reality that is unlikely to change, but it poses serious risks to global peace, human rights, and democracy. It allows the governments to pursue endless wars abroad and enforce militarized policing at home with little oversight or accountability. It also violates the privacy and civil liberties of millions of people around the world who are exposed to mass surveillance and targeted killings by drones or other weapons powered by AI. Therefore, it is essential that more public awareness and action is mobilized to demand more ethical and responsible use of technology for social good.

We have already done enough damage with technology to our world with rampant abuse of technology and our dominion over this earth. Let technological democratization now act as a vehicle of peace and harmony to help build a better global environment that promotes dialogue, collaboration and a better world for us all.

Our Banks Need to Transform to Meta-Banks

The digital era has brought profound changes to the banking industry, as customers demand more convenience, personalization, and security from their financial services providers. Banks have responded to this challenge by offering more digital functionalities, streamlining their physical channels, launching digital-only banks, and building partnership ecosystems. However, the digital banking transformation is not over yet. A new phenomenon is emerging that will reshape the way people interact, work, play, and consume which is through the Metaverse.

The Metaverse is a massively scaled and interoperable network of real-time rendered 3D virtual worlds that can be experienced live and simultaneously by an unlimited number of users. The Metaverse is not a single platform or application, but a collection of interconnected virtual spaces that span different domains, such as gaming, social media, entertainment, education, commerce, and more, estimated to be worth trillions in the near future.

The Metaverse will have significant implications for the banking sector and the role of banks, as transactions and other financial operations will be a crucial element of Metaverse interactions. Users will need to exchange value across different virtual worlds, using various forms of digital currencies and assets. Banks will need to provide seamless and secure payment solutions that can support multiple currencies and platforms. Moreover, banks will need to offer new products and services that cater to the specific needs and preferences of Metaverse users, such as identity verification, data protection, wealth management, lending, insurance, and more.

Banks should not be passive or resistant towards this change, but embrace it as an opportunity to reach new customers, create new value propositions, and generate new revenue streams. To do so, banks should follow a plan to become meta-banks in order to cater for the real economy as well as the growing digital one.

They should help customers transition from the traditional economy to the virtual economy by facilitating the conversion of fiat money into digital currencies and assets, and vice versa. meta-banks should also provide education and guidance on how to use and manage digital currencies and assets in the Metaverse.

Meta-banks should create their own presence in the Metaverse by developing or partnering with existing platforms that can host their virtual branches. They should offer a seamless and an immersive customer experience that leverages the capabilities of the Metaverse and leverage artificial intelligence and big data analytics to provide personalized and contextualized services to customers in the Metaverse.

Also they should not limit themselves to replicating or adapting their existing products and Metaverse services but should instead explore new possibilities and opportunities that the Metaverse offers. Meta-banks should experiment with new business models and revenue sources that are enabled by the Metaverse, such as creating or investing in digital assets, sponsoring or hosting virtual events, offering gamified or social banking features, and more.

The Metaverse is not a distant or a hypothetical scenario, but a reality that is already taking shape. Banks that want to stay relevant and competitive in the digital era should start preparing for this change now, by becoming meta-banks that can serve their customers as their needs evolve in a growing digital world.

Global Economic Optimism May Be Premature

Recently economists have been upbeat in the hope that the US Central Bank will stop raising interest rates after 26 July 2023, with inflation having fallen to 3%. This could also ease the pressure on other countries, whose inflation has been worsened in the past by a strong dollar. The current outlook shows that stock markets are buoyant, bond yields are low and the dollar is close to its weakest since the Fed began raising interest rates.

Although the US economy grew strongly in the first half of the year, it is expected to slow down but not contract. A moderation of growth that lowers inflation without causing a recession is the ideal scenario for overheated economies like the US, with China's sluggish recovery preventing a surge in global commodity prices. China's growth was only 0.8% in the second quarter of 2023, after abandoning its zero-covid policy just seven months ago.

However, it would be naive to assume that the world economy is now on track for a comeback. Although inflation remains lower, it is still well above US Central Banks' 2% target. The decline in US inflation has been driven by a one off drop in energy prices. However, excluding food and energy, prices are 4.8% higher than a year ago and wages are outpacing productivity growth.

This implies that the US faces a significant disinflation challenge, which will be hard to work through. Even persistent inflation of 3-4% would pose a dilemma for central bankers. They might have to opt for more tightening than anticipated or abandon their 2% goals altogether. Either could be disruptive for financial markets and for the US economy.

So far, in the US labor market, hiring remains robust and layoffs are scarce. However, with fewer job opportunities and a decline in wage growth, it is unclear how long the labor market can adjust without suffering, with a recent stall in job openings, an ominous sign.

While the world is reaping the benefits of cooling down now, the costs may be delayed. The world's big economies are out of sync, so that even as the Fed relaxes, other governments are still anxious. There is still huge uncertainty about where inflation and interest rates will end up, which means the world economy is not clear from fears of recession just yet.

How Technology is Transforming the Battlefield

Technology use for military purposes has shaped modern warfare and is one of the primary reasons that the US is the most advanced military force on the planet. Defense technology dominates national budgets with billions being poured into research and development of the latest deterrents. Traditional warfare of the past has been superseded with sophisticated conventional technologies taking over the many military tasks such as reconnaissance and intelligence gathering, and increasingly being embedded in military hardware. Technology, as anything else, can be used for good or for bad, for peace or for war, which man will apply as he sees fit.

We can see how technology is changing the battlefield in the Ukraine war. One of the most striking features of this war is that the battlefield is becoming transparent, meaning that sensors and algorithms can detect and target enemies with unprecedented precision and range. This is enabled by advances in AI, big data, satellite imagery, drones, cyberwarfare and electronic warfare. These can provide a huge number of data points at any given time which are analyzed on the fly and fed into military systems in real time so that much more informed decisions can take place. Army generals as well as soldiers are being augmented with technology.

These technologies allow both sides to monitor and strike each other's forces, assets and infrastructure from afar, without risking direct confrontation or escalation. They also create new vulnerabilities and challenges for both sides, as they have to deal with information overload, spoofing, jamming and hacking.

The transparency of the battlefield requires new ways of fighting that rely on mobility, dispersal, concealment and deception. It also means that speed, surprise and initiative are more important than ever. The side that can act faster and smarter than the other will have a decisive advantage.

However, reports from the war in Ukraine show that large numbers of soldiers are still required to undertake military operations along with a large number of munitions and hardware apparatus. Technology may eventually change this through robotics and automation, but for now, armies need to be prepared for high attrition rates and high resource consumption. War is brutal and expensive as it consumes lives and resources at an alarming rate. It also exposes the limits of technology, as it cannot prevent human error, corruption, incompetence or fatigue.

The boundary of modern war is wide and indistinct, as it is not confined to a specific geographic area or domain. It is a multidimensional and spans across land, sea, air, space and cyberspace, and is increasingly becoming a war of hearts and minds, with the media playing a significant role in affecting the psyche of the public. This means it affects civilians who suffer from collateral damage or displacement; allies who provide support or intervention; and other actors who have interests or stakes in the outcome.

Technology is being used in all functions and at all stages in military efforts to gain the upper hand. My hope is that it will be used to address the political, economic, social and humanitarian fallout of war that is all so often overlooked, to bring peace and help rebuild nations.

How AI Can Help Promote Sustainable Urbanization

Creating cities that promote sustainable urbanization is a matter of increasing importance, as the population and the economic activity of urban areas continues to rise due to migration that has increased significantly in recent years. According to UNDESA's 'The World's Cities in 2018 Data Booklet' tell us that , by 2030, a projected 28% of people worldwide will be concentrated in cities that house at least 1 million inhabitants. Urbanization can bring many benefits, such as improved access to education, health care, employment, and cultural diversity; however, it also poses many challenges, such as environmental degradation, social inequality, congestion, and crime, which is why sustainability is so crucial.

Having been Chair of the United Nations Global Alliance for ICT and Development (UNGAID) and the Chairman of the Consortium of Sustainable Urbanization (CSU) in New York, I like to explore how technology can help to solve real challenges that we face, particularly with recent developments in AI and how this can be applied to making urbanization more sustainable.

I believe that AI can enhance urban planning and design by optimizing the use of land, resources, and infrastructure to create more livable and resilient urban spaces. For example, AI can analyze large amounts of data collected from satellite images, sensors, surveys, and social media to identify patterns and trends in urban development, and can help to generate simulations and scenarios for future urban growth, which is vital for city planning. AI can also assist in creating smart buildings and smart neighborhoods that can adapt to changing conditions, reducing energy consumption and emissions.

It can help improve the efficiency and safety of urban mobility and transportation as well as reduce their environmental impact. For example, AI can enable smart traffic management and routing that can optimize the flow of vehicles and pedestrians, including reducing congestion and accidents. AI can also support the development and deployment of autonomous vehicles and public transportation systems that can offer more convenient

and accessible mobility options for urban residents, which is important as we move closer towards net zero and green transportation.

AI can also support urban governance and democratize service delivery enabling smart governance through the collection and analysis of data from various sources to monitor urban performance indicators, such as air quality, waste management, public health, and safety. It can facilitate smart service delivery platforms that can provide personalized and timely services to urban residents, such as education, health care, social welfare, and emergency response, thereby, increasing citizen participation and empowerment, enabling more transparent and inclusive communication and collaboration between urban stakeholders.

While it is a useful tool, AI is not a magic bullet that can solve all the problems of urbanization. It can however, help to augment human capabilities and creativity to make urbanization more sustainable by making sense of all collected societal big data, to derive greater insights and develop innovative solutions to the problems we are facing. The key is to use AI in a responsible and ethical manner that respects human dignity and diversity that promotes social justice and environmental stewardship.

AI has great potential but it also poses significant challenges, so we must think carefully and regulate wisely. I invite everyone who cares about creating a strong foundation for AI to join me in a new initiative: the Commission for AI in the Public Interest (CAIPI). This will bring together experts from various relevant fields, such as data science, law, ethics, neuroscience, philosophy, and more. We need to clarify what we mean by AI and establish rigorous regulation that can test and standardize this field, as well as define clear guidelines and a suitable framework for AI to thrive.

How to Prove Your Competence in Pro-Active Programming (PROPRO)-Known as Artificial Intelligence (AI)

For many years I have been saying that our modern knowledge workers need to acquire skills in modern technology areas, particularly Pro-Active Programming (PROPRO) as more businesses look to leverage the power of Pro-Active Programming (PROPRO) to help become more efficient, to solve problems and enhance customer experiences. With the coming of generative Pro-Active Programming (PROPRO), access to Pro-Active Programming (PROPRO) systems has become much easier and is, as a result, helping people become more efficient at their jobs.

I foresee that humans that augment themselves with Pro-Active Programming (PROPRO) will replace those workers who do not have such skills. They will be replaced just as those who did not change during previous technological revolutions. This is similar to when the Word processor came out. Those typists and secretaries that became knowledge workers and mastered these technologies in fact became more valuable to the companies they worked for, while those that did not, soon found themselves out of their jobs. The same will happen with AI.

It is interesting to see the change in the job market, which is already taking place although Pro-Active Programming (PROPRO) is still in its infancy. According to an article written by CNBC in July 2023, the US is the leader in hiring for Pro-Active Programming (PROPRO) jobs, with 169,045 open positions that require Pro-Active Programming (PROPRO) skills in June 2023, and another 3,575 that are specifically focused on generative Pro-Active Programming (PROPRO).

However, with such a new technology, which is rapidly evolving, I wonder how anyone could be able to prove his or her expertise in an area that itself is in its infancy?

I am set to launch a new book next month on Proactive Programming, currently dubbed AI, offering my perspective as a knowledge worker. Prior to its debut, I am pondering about how we can optimally leverage this technology and the impending challenges it poses to global nations. Every knowledge worker should delve into Proactive Programming, acquainting themselves with its capabilities and limitations, and discerning the most effective application methods in their daily tasks. Pro-Active Programming (PROPRO) is not a silver bullet and the technology has many setbacks and limitations that a knowledge worker must understand, which only comes from working with the technology and becoming an authority in it.

This then goes onto my next recommendation that is to try and use it to solve an organizational problem. Using Pro-Active Programming (PROPRO) to achieve a specific goal is proof that technology works and that you can harness it to achieve a tangible business objective and show that it has commercial value. This is evidence of understanding that helps to build a portfolio of Pro-Active Programming (PROPRO) successes and proves competency in this field. Organizations need experts that can use Pro-Active Programming (PROPRO) technology to solve business problems to enable the business further. This is an important and valuable skill to have.

I would finally say that it is essential for any Pro-Active Programming (PROPRO) knowledge worker to keep abreast of the latest tools, models and technologies that are coming out in this field. Being in its infancy, Pro-Active Programming (PROPRO) will undergo numerous iterations as it matures and as companies clamber to get their Pro-Active Programming (PROPRO) products developed and out into the market. As the technology is moving so rapidly, it is essential for an Pro-Active Programming (PROPRO) knowledge worker to know what is happening and to understand the developments in this field, which will provide him with first mover advantage and allow him to stay ahead of the pack.

Presently, there seems to be high paying roles for those with the requisite knowledge, and in a fast moving market, knowledge workers need to keep their pulse on this technology to stay on top of their game.

From “Oppenheimer” to Pro-Active Programming (PROPRO) - known as Artificial Intelligence (AI)

In the same manner that the physicist J. Robert Oppenheimer has faced the complex interaction between science and ethics, the world stands today at a critical juncture in the realm of computer science, where engineering and ethics meet.

Delving into the box-office record-breaking “Oppenheimer” movie, we find ourselves drawn to a story that transcends time and bridges the gap between the past and the present. We will have to decide, once again, whether we will continue to develop a technology, which we have not yet understood its full strengths and potentials.

The parallelism is amazing and timely because we are about to unleash another technological marvel called Pro-Active Programming (PROPRO), whose immense powers and potentials remain a mystery. It is also a double-edged technology, as it has the potential to bring great benefit to humanity in various fields, but also has the potential to cause no less harm than the nuclear bombs, which were dropped on the cities of Hiroshima and Nagasaki. This has recently prompted a group of technology giants to call for caution and further discussion before pursuing further technical developments, and to suggest halting the development of more advanced forms of PROPRO for six months.

As the pace of PROPRO progress continues to accelerate, our ability to harness its massive potentials for the good of humanity lies in understanding how to design, direct, and use this technology in the best interests of the world, to mitigate potential risks, and to steer its development toward a path that prioritizes human values.

In the meantime, PROPRO has already made significant impact in various fields. We can also expect PROPRO, in the near future, to power self-driving vehicles, transform transportation, and reduce road accidents. The fusion of PROPRO and robots can also revolutionize industries, such as agriculture, construction, and others, in addition to increasing human capabilities and enhancing productivity. As for space exploration, the PROPRO driven autonomous systems can enable more complex and cost-effective missions and unravel the mysteries of the universe. The Moreover, PROPRO-powered

virtual assistants and chatbots, are expected to become more intelligent, in reshaping the way we interact with technology, and provide personalized support in different aspects of our lives.

The impact of PROPRO will extend beyond individual fields to include countless areas, as it will be able to address global challenges, save lives, and protect societies.

For example, PROPRO has been used in the area of healthcare and it has demonstrated ingenuity in early detection of diseases, precision medicine, and analysis of medical images, which could revolutionize patient care and save countless lives. In the area of education, AI-powered personalized learning platforms have the potential to empower students, unleash their full potentials, and narrow educational disparities.

Despite the transformational potentials, there are still concerns regarding the impact of PROPRO on the labor market and the social structures because of automating some tasks, in addition to the legitimate fear of job cuts. History, however, has shown that technological advances often create new job opportunities. It is crucial, therefore, to prepare the workforce for the changing labor scene through upskilling and reskilling initiatives.

PROPRO, moreover, may become cooperative and valuable, as it liberates the human capabilities from the routine, repeated tasks, to allow them to focus on problem solving by using creativity and innovation.

While PROPRO offers enormous promises, its future is intertwined inherently with human choices, particularly the development and use of PROPRO in the military. Achieving the optimal balance between technological advancement and ethical considerations is, therefore, of utmost importance, which will never be achieved except through cooperation and moral dialogues.

It is worth mentioning here that the “PROPRO for Good Global Summit”, organized by the International Telecommunication Union recently, is considered a step in this direction. Seven companies working to develop PROPRO have announced their commitment, during a meeting in the White House with President Biden, to a set of general principles aimed at managing the risks of PROPRO. The UN Security Council discussions last week on technological advancement are another step in the right direction, provided they lead to binding controls to ensure the responsible development of PROPRO systems.

Beijing Is Fighting Against Western Sanctions

The technology war between the US and China is something I have spoken about at length in previous articles, along with the growing sanctions that the US has enforced on China in an attempt to stifle its technological progression by banning the export of technology and intellectual property, particularly around semiconductors.

In response, China has been purposefully building alternative supply routes in addition to its own capacity to lessen the effect of these sanctions on its economy. It has also adopted a more aggressive stance towards Western sanctions and is no longer taking them lightly. In recent months, Beijing has enacted a series of laws and measures to counter the US led campaign to contain its technological rise in order to safeguard its national security and sovereignty.

One of the most notable moves is China's tightening of its export control regime, which gives it more power to restrict the export of strategic goods and technologies to foreign countries. This includes rare earths, metals and other components that are essential for many Western industries, such as defense, green energy and semiconductors. China is the world's largest producer and exporter of rare earths, which are used in magnets, lasers, batteries and other high tech products. China has previously threatened to cut off or limit its supply of rare earths to the US and its allies, such as Japan and Europe, in response to their sanctions or criticism.

It has also imposed restrictions on the export of other key materials and components, such as tungsten, graphite, silicon and integrated circuits. These are vital for the production of advanced weapons, solar panels, electric vehicles and smartphone, and a restriction in their availability could prove to be detrimental to Western nations. These export control measures are not only aimed at punishing its adversaries, but also at boosting its own domestic industries and innovation. By limiting the outflow of critical resources and technologies, China hopes to foster self-reliance and to reduce

its dependence on foreign imports. It has also invested heavily in African nations where a lot of these rare minerals are mined, and subsequently refined in China, thereby exerting greater control over their supply.

China's retaliation is more calculated and strategic than before, reflecting its growing confidence and assertiveness in the global arena. However, it also faces challenges and risks from its actions. This could however provoke more backlash and countermeasures from the West, which could escalate the tech war and harm both sides. Another risk is that China may lose its competitive edge and market share if the West finds alternative sources or suppliers for the restricted goods and technologies.

China's tech war strategy is likely to evolve as the situation changes and new developments emerge. How China balances its interests and goals with its costs and consequences will be a key factor in shaping the outcome of the tech war and it shows that it is not willing to take the American onslaught against it sitting down.

Dark prospects: Future relations between Washington and Beijing

In the past years, the world has been closely watching the evolving dynamics between China and the United States; the two biggest world economic powers that represent major trade blocs although with diverging political interests. As we look into the horizon, we see the future of their relations shrouded with dangers and pessimism, as the mounting tensions and deeply rooted ideological differences cast doubts on any potential cooperation.

The initial signs of some less hostile bilateral rhetoric may have offered some hope for improved relations. The diplomatic channels were open and the two sides expressed the desire to engage in dialogue over various controversial issues. This, however, should not be interpreted as an indicator of cordial relations. Rather, it reflects a carefully calculated effort to avoid open confrontation, while each side is still pursuing the promotion of its interests.

The latest escalation was the US President's, Joe Biden, decision to provide Taiwan with USD 345 million in military aid; the first major package drawing on America's own stockpiles, which signaled a historic shift in US approach towards Taiwan. China, of course, will not stand still while Taiwan strengthens its military capabilities.

This situation adds another layer of complexity to the already tense relations. Over the past few years, many contentious issues have fueled the ongoing tensions, most notably the Taiwan issue, fierce technological competition, US sanctions on major Chinese firms in the digital sector, trade, and territorial claims in the South China Sea. These sensitive and complicated matters remain a major obstacle to efforts seeking common ground for managing Chinese-US relations.

One might say that the visits of U.S. Secretary of State, Antony Blinken, Secretary of Treasury, Janet Yellen, and Climate Envoy, John Kerry, to China were met with positive response from Beijing. It is true that the responses were positive, but they were not warm enough. Alternatively, the Chinese leadership's warm welcome to the latest visit of the former National Security Advisor and Secretary of State, Henry Kissinger, to

Beijing, reflects a Chinese desire to see an American policy that focuses more on participation, similar to the times of President Richard Nixon and his Secretary of State Kissinger.

Despite the previous rounds of negotiations and high-level meetings, there was little substantive progress or consensus on the key issues. The trade imbalances, intellectual property infringements, human rights concerns, and territorial disputes in the South China Sea remained major sticking points.

Of course, both China and the United States invest deeply in protecting their national interests and ensuring the prosperity of their trade blocs. Thus, they often find themselves at odds over issues related to international markets' access, technology transfer, and the protection of their domestic industries. To be precise, the US regards the fast rise of China as an economic power a challenge to its long-standing solid position as the dominant economic power in the world. Since the two countries are major trading blocs, their economic interests are and will inevitably clash with each other, especially with China's Belt and Road Initiative and the United States' efforts to advance its strategy in the Indo-Pacific region. Both initiatives seek to expand the each country's influence and to secure a strategic foothold in regions that are important for global trade and security. This often means that regional partners are caught in the crossfire, as they navigate complex relations with both Washington and Beijing.

Technological advances have also opened new horizons for competition and conflict and have raised national security concerns, due to possible misuse of technology for espionage and electronic warfare purposes. There is also a fierce race for leadership in the areas of AI, 5G networks, and quantum computing, which can decrypt and decipher codes that have been previously thought to be indecipherable. This gives an additional reason for pessimism regarding bilateral relations future.

It is expected, in the near future, that relations between Beijing and Washington remain under the shadows of tensions and doubts. Navigating through this complicated scene will require both countries to achieve a balance between protecting their interests and finding ways to engage positively in global issues of common interest. Only through continued dialogue and a willingness to search for common ground can the two most powerful nations in the world hope to pave the way toward more stable relations.

Returning to the Gold Standard

Everyone is concerned about the state of today's economy and the eroding value of their money. If we look to our history over the last fifty years, we can see repeated waves of recession, inflation, and instability which are signs that there is something wrong with the current system. Some have urged a return to the gold standard, which may not be such a bad idea.

The gold standard is a monetary system where fiat money is linked to gold at a fixed price, guaranteeing that the money supply is steady and that its value is not dependent on the decisions or whims of central banks. The US monetary system was based on the gold standard after the Second World War, but it abandoned it in 1971 under President Nixon. This gave the US free reign over how many dollars it could print as under the Bretton Woods agreement, it needed to back every \$35 dollars with an ounce of gold.

The US abandoning the gold standard has been a major cause of the numerous economic and financial challenges we repeatedly face, such as inflation, recessions, debt crises, asset bubbles, and bailouts, with inflation recently reaching its highest level since the 1980s. This has affected us all because of our reliance on a paper dollar with no real backing. Whether we like it or not, we are all linked to the US dollar which is the main reserve currency held by countries around the world, being the most widely used currency in international trade and financial transactions.

I believe that implementing the gold standard would promote better stability, growth, and prosperity by preventing inflation, financial crises, interest rate distortion, and unrestricted printing of cheap money. It would limit the power of central banks and governments in interfering with the markets or in manipulating interest rates. This would also restore confidence and trust in the monetary system as it would be backed by solid reserve of valuable assets rather than by promises or expectations.

The US dollar's reserve currency status is closely tied to US hegemony and influence in the global system. Having been the chair of numerous international accounting associations as well as a member of the Bretton Woods Committee, I can understand why the US would be reluctant to go back to the gold standard as that would limit its flexibility on the global stage and would require backing all the dollars in circulation with gold reserves.

The gold standard may not be a perfect system, but it preserves the value of money and shields economies from inflation and manipulation.

The Growing BRICS Alliance Threatens US Dominance

A clash of titanic proportions is underway as traditional western power structures are being questioned. On the one hand you have the traditional G7, primarily representing the interest of the Global North and its 'advanced' economies, while on the other hand, you have the BRICS alliance which is a rival bloc providing an alternative model for Global South nations.

Some would argue that the G7 is an outdated organization of seven of the world's most industrialized economies established in 1975, consisting of the US, UK, France, Germany, Canada, Italy and Japan. The G7 holds annual summits where growth, trade, security climate change and other international matters are discussed which allow it to exert significant influence over world trade and the international financial system, with the U.S. as the most powerful member.

BRICS consists of Brazil, Russia, India, China and South Africa, a rival to the G7 which represent the interests of emerging economies that have been marginalized by the West. It has become a geopolitical force to be reckoned with, engaging in annual multilateral talks to discuss a similar range of issues that the G7 does, putting the interests of its members first, with China at its helm as the strongest player within it. It has set up competing institutions to those of the G7, like the New Development Bank, the BRICS payment system and the BRICS basket reserve currency. This is a new reserve currency to better serve members based on the Brazilian Real, the Russian Ruble, the Indian Rupee, the Chinese Yuan and the South African Rand, allowing it to settle an annual intra BRICS trade volume of \$162 billion without having to revert to the US dollar.

If this is not worrying enough for the US, memberships to BRICS is open and many nations have expressed an interest to join the alliance which include Saudi Arabia, Egypt, Iran, the UAE, Bangladesh, Indonesia and Turkey among others.

Having been a member of the World Trade Organization (WTO) panel on defining the future of trade, I can see this creating vast opportunities for cooperation and development which will circumvent the US and the need for the dollar, consequentially creating a competing framework in which business can be pursued. China is providing the major funding for the BRICS banks and its initiatives which is increasing its economic and diplomatic influence internationally, particularly among those that have either been ignored by the West, or face sanctions under their watch.

Just this month of March, Brazil and China finalized a deal to ditch the greenback and use their own currencies in trade settlements, with Russia shifting towards the Chinese Yuan as an alternative to the US dollar for its oil reserves. All ASEAN finance ministers and central banks governors also met in March this year and spoke about dropping the dollar as a high priority.

It seems as though momentum is building, with many nations not happy with the US exerting so much financial control over them. With the US over \$30 trillion in debt, having its currency dumped by other countries marks the start of a much larger problem. In my mind, this is just the start of a critical situation that might lead to an all-out war between the two superpowers, China and the US. This will be a battle for global domination, which will end in nothing less than the establishment of a new world order.

I am praying for God to save the world. Wisdom should prevail over stubbornness. World leaders need to meet on this one issue to maintain harmony in the global money market for the benefit of humanity.

Highlights of the G20 Summit in India

World leading economies gathered in India for the 18th G20 summit on 9 and 10 September 2023, under the theme “Global Cooperation for Sustainable Development”, which aimed to address the most pressing challenges facing humanity. The Summit was attended by leaders of 19 countries and the European Union, as well as representatives of international organizations such as the United Nations, the World Bank, the International Monetary Fund, and the World Health Organization. The participants discussed a range of issues such as climate change, digital transformation, global health, debt relief, trade, and terrorism.

The summit resulted in a renewed commitment to fight climate change and achieve the objectives of the Paris Agreement. The G20 leaders confirmed their promise to limit global warming to 1.5c above pre-industrial levels and achieve net-zero greenhouse gas emissions by or around mid-century. They also agreed to triple the global renewable energy capacity by 2030, with a special focus on supporting developing countries, especially in Africa.

I have been campaigning for this for many decades now, as well as in my official capacity as the Chair of the Consortium for Sustainable Urbanization (CSU) in New York. We have reached a point where the science is clear and the effects can clearly be seen in the World around us. This is a matter that must be taken with utmost seriousness, particularly as UN Secretary General Antonio Guterres only very recently warned that we have moved from the era of global warming to global boiling.

I call for all stakeholders to revisit the topic of environmental accounting, where companies and governments can effectively report and fully understand environmental costs and liabilities associated with climate change. In 1999, I led the production of a detailed report with international experts called ‘Accounting and Financial Reporting for Environmental Costs and Liabilities’.

This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and International Standards of Accounting and Reporting (ISAR),

which I also chaired. It is only when we understand the cost climate change is having on our countries, we can appreciate the full impact it is having, and develop a comprehensive plan of action.

Another key area of focus during the summit was digital transformation and its impact on society and economy. The G20 leaders endorsed a roadmap for digital cooperation that aims to promote inclusive and human-centric digital development, foster innovation, protect data and address digital divides. The Summit also recognized the importance of digital infrastructure, skills, and literacy for achieving the 2030 Agenda for Sustainable Development.

Having worked tirelessly for the UN as the Chair of the UN Global Alliance for ICT and Development (UNGAID) and as the Chair of the UN Information and Communications Technologies Task Force (UNICTTF), I am glad to see that this important matter is featuring so prominently in G20 discussions and receiving the due attention it deserves. I would also like to draw attention to my new book on Artificial Intelligence (which I believe should be renamed to proactive programing) that highlights my views and expressions on the subject. This would prove to be useful reading for those interested to see how it has become a force of innovation and change and how it will revolutionize our World.

The summit then went on to address the ongoing global health crisis caused by COVID-19 and other diseases, promising to strengthen the global health system as addressing the issue of debt relief for low-income countries that have been affected by the pandemic and other shocks.

The Summit also confirmed the importance of free and fair trade for global growth and recovery in light of all that has been happening in recent years and the shocks that global supply chains have faced. The G20 leaders promised to support the multilateral trading system and the reform of the World Trade Organization.

While multilateralism is important and has brought us great benefits, I would add that developing countries should not solely rely on the multilateral trade system for their development prospects. They should pursue their own strategies and policies, including diversifying their trade and investment partners, enhancing their regional integration, fostering domestic capabilities, and leverage their collective voice in global forums.

Africa and the Upcoming Economic Promise

After three decades, Africa is expected to be a major global player. Africa is home to one quarter of the world's population, and yet it has always been judged through shortsighted stereotypes and outdated, slanderous narratives.

Many regarded Africa as trapped in the trinity of poverty, backwardness, and eternal conflicts. Beneath the surface of these challenges, however, lies an unbridled, dynamic energy, which is now surfacing, of a continent that refuses to be defined solely by its past hardships.

One of the major transformations that is taking shape in Africa is the demographic weight. According to UN forecasts, the continent's population will be 2.5 billion by 2050, of which the youth will be a majority. These are not just deaf numbers. They are demographic dividends that offer Africa unique opportunity and challenge. The youth are not only a vibrant workforce, they also strive to move forward and innovate. I, therefore, say that the ability to harness these great potentials may reshape the entire international scene and economy, not only in Africa.

In conjunction with this great demographic opportunity, the continent's economic transformation is gaining new momentum. Africa rests on a treasure of natural resources, including oil, minerals, and very vast areas of pastures and arable land. Unfortunately, Africa's natural resources have been used historically against it and the continent has been plagued with colonialism and tyranny, instead of using its enormous natural wealth for its own development.

It is no secret that for many decades, Western countries have looted Africa's massive reserves of minerals, oil, and agricultural products at the expense of the continent's peoples. The West made huge gains and left the local communities struggling with poverty, corruption, and eternal conflicts. One might even argue that the West worked to sustain this multiple, profound legacy of stark inequality, environmental degradation, and political instability. These factors had created a fertile ground for anger and violence, which eventually led to eight military coups over three years.

Africa is witnessing major transformations, which are sparking conflicts for influence between the world's major powers. Population growth, massive resources, and increasing economic potentials made Africa a hotspot for geopolitical competition. The conflict between the superpowers is taking various shapes all over Africa. In some countries, there is a clear competition between the US and China. In some other countries, Russia is trying to stress its influence and the EU, especially France, is seeking to maintain its lucrative traditional ties.

It is true that one of the main factors behind this competition is the economic potential Africa has, but there are other factors, such as the military and the strategic calculations. There is also a diplomatic scramble for influence to gain the support of African countries, which have an increasing voice in international forums, and whose alliance with major powers could influence global decisions.

Amid these transformations and struggles, the African countries are facing the challenge of maintaining their sovereignty while ensuring that any foreign ties are translated into tangible benefits for African citizens, through fair, balanced partnerships that give due priority to the interests of the continent's countries and peoples, as well as sustainable development, instead of merely serving the ambitions and interests of foreign powers.

The conflict between the major powers will probably continue for a while. But the transformations Africa is currently witnessing is clearly enhancing its power. Africa is not a passive player on the global scene anymore; rather a dynamic continent that has a golden chance to reimagine its future, where it is less dependent, more prosperous, less vulnerable, and more sustainable, and resilient. This all depends on harnessing its resources to the interests of its peoples and avoiding the negative repercussions it has had in the past. This, however, requires good governance, wise policies, and international cooperation.

My Accounting for Environmental Costs and Liabilities Report to the UN

The global climate change agenda needs more attention as we are clearly lagging in our net-zero targets. Freak weather events are now becoming commonplace with numerous natural disasters and instability in the weather systems across the World caused by global warming.

UN Secretary General Antonio Guterres has starkly warned, in a press conference on July 23 2023 in New York, that “The era of global warming has ended; the era of global boiling has arrived”. As the Chairman of the Consortium for Sustainable Urbanization in New York (CSU), I have been calling for all stakeholders to take real action for many years, and for more assistance to be given to poorer countries to provide sustainable energy alternatives, being the most vulnerable link in the climate change equation. These countries have mounting levels of debt which has a domino effect on their other policies and is impacting the lives of their citizens in a negative manner. The main goal becomes to earn revenues to pay creditors, which means that any green agenda is left by the wayside, stripping away any sovereignty the country might have to transition away from fossil fuels. Such loans have become a tool to impose control over these nations; a practice that needs to stop.

I would even go as far as saying that such loans should be cancelled to allow these countries to focus on sustainable energy alternatives as they are way behind the curve, as the cost of maintaining the status quo is much greater in the long run. We must understand that climate change is a joint responsibility and only works if we all pull together and work towards making this happen. Our climates and weather systems are shared environments, meaning that what everyone does has an effect on it. We cannot afford for some nations to go green and for others to remain fossil fuel dependent due to the greed of certain nations and banks.

Having sat on many international accounting boards since the 1980's as well as having my own international financial auditing firm, TAG-Audit, it is clear to me that countries need to be implementing environmental accountability to fully appreciate the extent of climate change on their nations and the full impact of such debt. This comes from having proper accounting practices in place where companies and governments can effectively report and fully understand environmental costs and liabilities, as after all, you cannot manage what you do not measure.

I spoke about this as early as 1999 where I led the production of a detailed report with international experts called 'Accounting and Financial Reporting for Environmental Costs and Liabilities'. This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and International Standards of Accounting and Reporting (ISAR), which I also chaired. It is only when we understand the cost fossil fuel debt is having on these countries we can appreciate the full impact it is having, and we can develop a comprehensive plan of what needs to be done to help them.

Climate catastrophe: Challenge that must be confronted before it is too late

In a world that is full of ongoing challenges and crises, the danger that is threatening humanity in the near future has become clear. It is not an imagination, a dream, nor a black look. It actually relates to the expectations that are based on information and scientific studies. We are at a time when crises are creeping in from all sides, some of them are related to climate, some to geography, and some to politics and economics.

If we look into the future, the coming crisis will not only be restricted to diseases or epidemics, it will be related to the global warming that is threatening the entire planet in a manner that cannot be ignored anymore. I have seen excerpts from classified, scientific research papers that have been leaked, which indicate that humanity is facing an increasing danger of extinction by 2050, if the climate change crisis is not addressed seriously and effectively. The biggest economies of the world, however, seem reluctant to address it, as I have been working on the issue of environment and climate and their protection since 1996. I submitted my report to the UN in 1999 on the parties responsible for climate pollution, in my capacity as the Chairman of the Committee of Experts assigned by the Secretary-General of the United Nations to formulate international accounting standards for environmental accountability.

The dangers surrounding humanity are extraordinary, with record temperatures of the earth and floods taking place in different countries of the world. If we do not find solutions, develop plans, and commit to their implementation, humanity might find itself on the brink of extinction. Global warming is escalating and temperatures have been steadily rising in an unprecedented manner, causing, without limitation, wildfires, melting ice at the poles, and raised sea levels, seriously threatening the biological diversity and wildlife.

Depending heavily on the sources of fossil fuel has had a significant impact on the environment and it increased the greenhouse gas emissions. This requires a global stance to turn to renewable energy sources and more

sustainable technologies. This includes developing green technologies and promoting sustainability in various sectors, such as agriculture and transportation.

It has become clear that we need to take serious action to confront these challenges. We have to strive to achieve a balance between developing the economy and preserving the environment and ensuring the provision of healthcare and disease prevention. We cannot ignore the constant warnings and clear signs of imminent dangers. We need to have international cooperation and common motivation to work towards achieving a better and a more sustainable future for all.

Hence, the role of global leadership and cooperation between governments, international institutions, and civil society comes into play. We must adopt strategies and policies that aim to provide sustainable solutions to these multiple challenges, by supporting research, adopting innovative technologies, and promoting awareness and education.

Finally, facing these challenges requires immediate, collaborative action because the world is interconnected and shares the same space. We need to learn from our experiences and work together to build a more sustainable and safer future for all, including the coming generations.

The Supremacy of the US Dollar Continues

I have written previously about a growing sentiment to destabilize the dollar, even ending its position as the reserve currency of the World; the position that has translated into massive US political power. The BRICS group of countries have discussed various alternatives to try to end their reliance on the dollar and to lessen the effect of US sanctions against their countries, particularly with the Chinese currency slowly becoming more global and free in recent years.

Conversations about the future of the international monetary system need to consider the great incentives to hold to the US dollar, including its pervasiveness in the global financial system; something that is not easily superseded, partly because there is no alternative that is so widely recognized and accepted the world over. But the dollar faces some threats and challenges that could shake its supremacy in the future.

China is the world's second-biggest economy and the biggest trading partner for many countries, and it has been pushing for using the RMB in cross-border trade, investment, and finance. The RMB's share in global payments and reserves has grown steadily, although it still trails behind the dollar by a fair margin.

Global political tensions affect the US's foreign policy and its relations with other countries, due to its many conflicts and disputes around the world, as well as its internal polarization and splits, which have affected the trust and confidence in US leadership and commitment to working with others.

Despite these factors, the dollar has many benefits over many of its rivals, including the size and stability of the US economy and financial markets, which offer liquidity, depth, diversity, and safety for investors. According to the International Monetary Fund (IMF), the dollar accounted for 59% of global foreign exchange reserves at the end of 2022, far ahead of the euro (21%), the Japanese yen (6%), and the Chinese renminbi (2%).

Another benefit of the dollar is its important role in international trade and commodities. The dollar is widely accepted and wanted by exporters and importers around the world as a way of payment. The dollar is used as a billing currency for most international contracts and invoices, and is linked to the prices of commodities such as oil and gold, which are still priced in dollars in global markets.

These factors create a positive cycle that boosts the demand for dollars. The US dollar's position as the world's reserve currency is likely to stay safe for the foreseeable future unless there are big changes in the global economic and political situation.

Abu-Ghazaleh: Call for adopting proactive Arab strategy to participate in shaping future

I am firmly convinced that the best way to predict the future is to actively influence it through proactive participation. Accurate foresight allows us to allocate resources wisely, mitigate risks, and create a more resilient and sustainable future. I do not necessarily mean predicting all the details; rather anticipating the challenges, the opportunities, and the potential trends for building a strategic framework that embraces uncertainty and prepares us to navigate tomorrow's complexities with confidence and purpose.

Waiting until things unfold leaves us as individuals and nations exposed to uncontrollable circumstances. We must instead focus on participating actively in the current scene, especially when it comes to the information revolution and cognitive programming, and making major contributions. Doing so will enable us to steer the future of our nation to the track that would lead to the desired results and ambitions.

I have been repeatedly calling to regard crises as opportunities to show resilience and adaptability. Instead of surrendering to fear and doubt through difficult times, we should regard such times as chances for personal and social growth. It is only by realizing that challenges represent potential for innovation, learning, and change that we can transform adversities into forward momentum. I would like to stress here the fact that crises often reveal untapped tracks and potentials that have been unnoticed during the times of prosperity. Seizing such opportunities could achieve a great deal of progress and breakthroughs.

I will never be tired of saying that the enthusiastic, active participation in making the present gives us the ability to shape the future by taking advantage of everyone with ability, creativity, and vision. We have to admit that the future is not pre-defined, and can be affected by the choices and the actions we make today. I, therefore, encourage participating actively in the current events, to enable both the individuals and nations to utilize our understanding, concepts, and serious work to steer the events towards the desired future results.

On the personal and professional level, I have always regarded crises as chances that reflect the essence of resilience and adaptability. This means that instead of surrendering to fear and uncertainty during the hard times, we should utilize such times as opportunities for growth and transformation. I always regard challenges as a chance to innovate, learn, change, and harness the power of adversities to move forward.

Let us examine, for example, the information revolution and the advent of Pro-Active Programming (currently AI). With the technological advancement that took place, visionary individuals immediately recognized the potential for significant positive change and participated actively in creating and applying such discoveries, rather than relying passively on technology to achieve gradual progress in a natural manner. They assumed decisive roles in pushing the information revolution forward, by imagining a future where information becomes accessible around the world, laying the foundation for the current digital world we live in today.

Similarly, experts played an active role in developing Pro-Active Programming and integrating it in the various sectors. Instead of waiting negatively for it to develop by itself, they took the initiative to build algorithms, make experiments, and explore potential applications of the technology. Such practical participation enabled them to make use actively of the capabilities of the cognitive intelligence to transform areas such as healthcare, financing, autonomous driving. By influencing the current path of development of cognitive programming, they have also shaped the future in line with the vision of a more streamlined, interconnected, and automated world.

I would say that this concept is not restricted only to technology. Throughout history, the social and political movements have proved that active participation in the current moment may affect the direction of community development, drive progress, pave the way for a future that prioritizes the security of humanity, in its holistic sense, and make a long-term impact on the world that lies ahead of us.

In a nutshell, I reiterate my call for adopting a proactive Arab strategy to take part in shaping the future and not waiting negatively until our destiny unfolds. We also have to engage actively in transforming the challenges into progress and the crises into pivotal moments of positive transformation.

The Heart of Arabism is still Beating ...

Despite all the Wounds

Syria has not yet been spared the targeting that began over a decade ago under the banner of the 'Arab Spring,' which served as a declared slogan but had a concealed meaning related to 'destruction,' affecting most parts of the greater Arab homeland, with its negative impact still felt today. The Syrian role differs nationally from others, due to its strategic location as the closest country geographically to 'Palestine,' making it the primary supporter of both the Lebanese and Palestinian resistance movements. This is something that 'Israel' categorically and definitively rejects, which increases its hostility and arrogance towards Syria, which has refused to sign peace agreements and opposed normalization in all its forms unless Palestine attains its full rights.

This honorable stance has led Syria to endure blow after blow from the aggressive and occupying Zionist entity, aimed at twisting its arm, breaking its will, undermining its positions, splitting its ranks, and tearing apart its national unity. All of this is an inevitable result of its steadfast and honorable role in adopting the cause that everyone else has abandoned, including a significant portion of the Palestinian people, unfortunately!

For this reason, Syria has suffered and will continue to suffer more and more from betrayal, treachery, targeting, and lurking threats to its security, safety, tranquility, stability, and economy. The greatest catastrophe lies within the economy; however, Syria has always known how to skillfully and confidently find a solution to the equation of self-sufficiency. This is because Syria understands well and knows with certainty the heavy costs that come with its honorable stances, yet its unspoken sentiment is: Every hardship is trivialized for you, Palestine.

Undoubtedly, the path of suffering is long, arduous, and exhausting for the cross-bearer. This is the case for Syria, which has carried the Palestinian cause like a heavy cross. The criminal does not tire of attempting to subdue Syria, continually reprimanding it to dissuade it from its positions. However, it is futile for the proud to submit to humiliation! Indeed, every painful blow paves the way for Syria toward a stronger will.

Certainly, what happened at the military academy is an assault that brings shame, and I am certain it is a cowardly, treacherous, and brutal act. We must ask a thousand questions about who is behind this despicable and blatant aggression... Who benefits...? Other than Zionism and its accomplices, and those who follow their lead.

Undoubtedly, the treacherous arrow poisoned by misleading policies, which was aimed recently at the side of beloved Syria, slaughtering its new graduates and some of their families who came to celebrate and share in the joy at the military academy in the city of Homs... has left us wounded, in tears, and in pain, placing us on a platform of endless questions... between: Why? How? and Why?!

Syria has paid and continues to pay high prices for holding onto the ember of certainty that dictates the liberation of Palestine, even if it takes time. This is the dream of every true Arab citizen and the enduring dream of Syria. For this reason, it has not compromised or conceded, despite all the available temptations. I know that whether my words are few or many, they will not lessen the enormity of the tragedy that has struck the heart of Syria through the city of Homs. But I know more that Syria, in facing this difficult test, which has lasted for more than a decade, needs to find a clean ally, a true friend, and a genuine companion, and to hear kind and sincere words. My simple words will not wipe away the sorrow that may be in the heart of a grieving mother, and certainly, they will not heal deep wounds.

Therefore, I can only say: May God have mercy on the martyrs of Syria, the 'martyrs' of the greater Arab homeland, which I always hope will become one nation, not isolated by thorny borders, contradictory policies, or malicious international relations. And this is not dear to our Lord.

Finally, I pray to God Almighty that this terrible disaster, which has shaken my Arab identity and bewildered my weary human body to the point of pain and astonishment... this orchestrated catastrophe, inflicted by wicked hands, that has befallen beloved Syria... may it be the end of its sorrows and the sorrow of its kind and noble people, and a beginning for its imminent stability. O Allah, amen.

Except My Homeland- Except Palestine...

Seventy-five years have elapsed since the Nakba that forced me from my cherished homeland, 'Palestine.' I vividly recall every detail as a ten-year-old, being led by a gentle, trembling, and sorrowful hand, alongside my family, who left for just a few days without any supplies, believing that our return was closer than the white of the eye to its black. They did not foresee that those promised days would transform into years of hardship. We eventually came to understand the meanings of displacement, refuge, and deprivation

Just yesterday, history ceased its countdown, allowing Palestinian history to be inscribed with Palestinian voices. Time no longer squandered the Palestinian moment, aligning the 'clocks' of the entire world with the timing of the Palestinian return to the platform of honor, embodying heroism in all its forms of dignity, pride, and glory.

The Palestinian has demonstrated an abundance of military acumen, proving to the world that he possesses a sharp intellect. He has outperformed all systems equipped with artificial intelligence algorithms and modern technologies. He has shown that his will remains unbroken by intimidation, death, or the constant presence of prisons.

Prove to the entire world that men are purely Palestinian creation that knows neither hybridization nor domestication, nor deviations. Its genes will not be dissipated by all the sudden campaigns against 'colored' societies, despite all attempts to distract the Palestinian mind from its free and noble being, from its love for its land, and from its pure air on the face of the earth; The land that was the cradle of Jesus and his mother, peace be upon them, and the night journey of the honored prophet, blessings be upon him. Those who left for future generations the treasures of their divine messages in the blessed Al-Aqsa Mosque and the supreme Church of the Holy Sepulchre.

What can I say when the tears of wandering through the streets and alleys of Palestine contend with the chronic grief I inherited from my father, who passed away, leaving me with the key of our 'big house' in our occupied home in Palestine? I have placed this key with great care inside a frame that symbolizes waiting on my desk until today. I testify that this key was not freed until 10/7/2023.

I feel that the distance is the closing between this 'saved' key and its steadfast gate in 'Jaffa,' my city, my childhood, and my first happy memories.

Today, Palestine occupies the attention of the entire world. Today, Palestine has stirred the fleets of American power fully supported by the bias of the European Union, without condition or reservation.

Today, Palestine has boldly summoned the latest American arsenal with the courage and valor of its knights. Today, Palestine has unified all followers, observers, analysts, politicians, military personnel, and journalists around a single phrase: ‘An unprecedented Palestinian military mobilization.’

Palestine today, with its small factions, has unsettled the world and its slumber, challenging death under a sinful barrage of shells and missiles—unconcerned and unfazed by death—because it believes in truth, justice, martyrdom, life, dignity, honor, and liberation.

I hesitated for a long time to write, as I have only a wealth of emotions here. It is far too early for me to succumb to the feelings of joy that have overwhelmed the youth of the entire Arab world. I am a man of reason, thought, scrutiny, reflection, calm, and patience; however, this is an opportunity worthy of expression for a momentous occasion that I have waited for a long time, with much patience that has worn thin.

Today, Palestine is a country that needs to prove to the whole world that it is free to receive support from every corner. The compass of Palestinian factions cannot differ any longer; the Palestinians must unite around the fundamental issue of Palestine, and let the positions, spoils, and privileges go to hell. Vietnam was liberated from the most brutal occupation in the world thanks to its understanding, solidarity, and constants, and this is what Palestine needs today: much understanding, coordination, and sincerity. Only then can it achieve freedom and independence.

Do not hold any grievances against those who have not turned to you or moved for your sake; it is your Palestine—your homeland, your honor, your decision, your destiny, and every line you write with your will, determination, and resolve will shape your future and the future of your children and their children, and so on.

The words I wish to say are many, very many. However, I know that you do not have time to read lengthy texts, so I will settle for saying: May God guide your steps, my beloved children, and support you with forces you cannot see, and grant you imminent victory. Indeed, He is capable of all things. ‘Indeed, God has certain people when they will, he wills.

Climate Crisis Unleashes Havoc

It is hard for me to find the words to describe my deep sadness for the tragic events that Libya and its people have been through. This disaster, however, serves as a painful reminder of the urgent need for resilience, preparedness, and above all, commitment to confront the profound repercussions of the most complex issue facing humanity: climate change, which is a global challenge that recognizes no borders.

The devastation in Libya is a clear warning that goes beyond reports and statistics. It exposes the fragility of human life, within the boundaries of a tragedy that is rapidly unfolding. It calls on us to confront the harsh reality that our world is intertwined inseparably with the powers of nature and the complex fabric of human existence.

The repercussions of the sharp climate change are taking place before our eyes. The extreme weather events are doubling and their horrific frequency often exceeds imagination. The temperatures of the earth are rising stubbornly, surpassing what was once the standard. Rising sea surface temperatures, a direct result of the planet's warming, gave the Storm Daniel a terrifying arsenal of energy and moisture, causing the equivalent of an entire year's worth of torrential rains to fall within a few hours. The consequences were swift and devastating as it approached the Libyan coast.

The repercussions of our fragile existence on this earth will not be less catastrophic. This stresses the urgent need to mobilize our global efforts to mitigate and correct this perilous path, which is exposing the future of our planet to danger. We must remain, therefore, firmly committed to preventing global warming from exceeding the critical threshold of 1.5°C, as unequivocally expressed by the scientific community. Breaking this threshold would lead to havoc on an unprecedented scale, unleashing a series of catastrophic consequences that our world would struggle to endure.

The truth is that millions of people around the world are already suffering from the horrific and catastrophic repercussions of extreme weather events that are exacerbated by the relentless climate change. In sub-Saharan Africa, prolonged droughts have pushed local communities to despair, depleting their livelihoods and causing untold suffering. Europe could not escape

also, as it grappled with deadly heat waves that claimed the lives of many and pushed its ability to withstand to the edge. On the other hand, countries such as South Korea, Algeria, and Croatia witnessed merciless wildfires, which destroyed vast areas of land and disrupted the ecosystems. Pakistan is struggling to cope with the severe floods, leaving communities in disarray and struggling to rebuild. In addition to this series of woes, Madagascar is suffering from a long-term, unrelenting drought, pushing more than a million people to the brink of despair with severely limited access to the most basic human necessities; mainly food.

I have been working on the issue of environment and its protection since 1996. I submitted my report to the UN in 1999 on the responsibility for climate pollution in my capacity as then Chairman of the Committee of Experts mandated by the Secretary-General of the United Nations to formulate international accounting standards for environmental accountability. Thus, I would like to say that the path to achieve this critical objective requires uniform, orchestrated efforts that goes transcend borders and ideologies. We are looking forward to achieving the bold objective of eliminating fossil fuels as a global energy source by 2050. But this project requires unwavering dedication and innovation to formulate tangible and sustainable alternatives that can lead us to a new era of clean, renewable energy. It is essential that we extend a helping hand to the countries burdened by the harsh climate risks, especially in poor regions. We must admit that the burden of climate change falls disproportionately on these countries, much more than on their Western counterparts. It is our moral duty to show support and solidarity and to ensure that no one is left to face climate devastation alone. The fate of our planet is at stake in this shared mission and it is time to take action.

This is the reality of our world today. It is a painful reminder that the climate crisis is not a distant future anymore, but rather a real, relentless, and unforgiving threat that requires us to take urgent, orchestrated action with speed, wisdom, and unity, aligning our policies with the boundaries of our planet that determine our common destiny.

Serious Consequences of the Knowledge Gap in the Arab World

It is a well-known fact that some Arab states are lagging behind in the information revolution and cognitive programming breakthroughs. They find themselves now isolated from the world's leading technology and knowledge hubs because of the widening digital gap, unlike the countries that have harnessed the power of innovation and inventions to boost their present and future. The consequences of lagging behind are long term and will not be only limited to economic growth, but will also include the quality of life in the Arab world. Regardless of the causes of such stark contrast, there is no reason for waiting anymore to adopt digital transformation and cognitive development in the Arab world because knowledge and innovation reflect power on the current global scene. The lack of investment in education, particularly in the fields of research and development has caused a void in the intellectual capital and hindered our nation's ability to create and compete effectively globally.

It is also no secret that Arab world consumption surpasses its production capacities, which causes economic dependence on other countries. Such imbalance undermines economic stability. Arab countries must develop strategies to achieve self-sufficiency, while focusing on producing their basic goods and services by achieving technological advancement and industrialization.

I believe that one of the basic challenges our nation is facing is its dependence on importing technology and its products. To reverse this, the Arab world must give the priority to research and development, investing in creating technologies, and sponsoring innovation centers and research institutions to enhance the culture of invention and discovery; which will not only meet our direct needs, but will also contribute to the global human progress.

I would also like to add that the Arab states must not only keep pace, but also leap to the future. Embracing technological advancement and digital transformation is not a luxury, but a necessity. This does not only mean the

adoption of current technologies, but it also requires the promotion of an environment that encourages innovation so that the Arab states become a bright spot for creativity and entrepreneurship, where ideas flourish and technological solutions are generated. To achieve this noble cause, the priority should be given to education and the development of a human capital to build a clever workforce that is able to deal with the complex requirements of the digital era. We must also recognize the value of critical thinking, problem solving, and creativity in any education reform programs.

We did already embark on a journey to implement the digital transformation project in the Arab world in the areas where that is most needed, including Lebanon, Syria, and Libya. Unfortunately, there seems to be lack of understanding of the gravity of the current phase we are living. Digital transformation is not a luxury or an option; rather a comprehensive revolution is set to reshape every aspect of the human existence in an unprecedented manner.

Realizing the fact that unity is strength, the Arab states must work to enhance regional cooperation, encourage knowledge exchange, pool resources, and work collectively on technological projects with the aim of accelerating their march towards digital transformation and bridging the knowledge gap. The information revolution will not stop or wait for anyone. We have to realize the urgency of embracing digital transformation, not only as an economic necessity, but also as means of securing our future identity on the global scene, facing the challenges of the 21st century, and ensuring that we consume less than we produce. Once again, all this requires focusing on the knowledge era, setting our intellectual sails, and drawing on our rich heritage, so that we forge a path towards a future in which wisdom and innovation illuminate our journey to re-assume global leadership.

Palestine, which Palestine! It is Al Aqsa Uprising

The eruption of anger from Al-Aqsa and the fury of the nation is a response to an enemy that has desecrated Al-Aqsa and whose audacity has crossed the sanctuary of our Prophet. This enemy has perpetrated massacres against civilians, including children, youth, and steadfast women. The monumental explosion of Al-Aqsa is a vindication of truth and the commencement of the enemy's demise, and his unrestrained barbarism by any accountability.

Al-Aqsa exploded and revolted, declaring the beginning of the attack on October 7th, 2023, to repay evil with its kind and injustice with its like. It declared the beginning of the decisive blow, destroying the enemy's high fortresses, and making the Israeli enemy taste the bitterness of kidnapping and threats in kind. Al-Aqsa exploded, raining thousands of rockets on its oppressive enemy, to make it drink from the same cup that the free people of Palestine drank from and to taste its poison as their children did. History will record for the free children, youth, elderly, and women of Palestine that God will bring about the truth and nullify falsehood with "their iron swords," and that right will prevail, whether people like it or not.

The defeated and broken Israeli enemy's declaration of being in a "state of war," rather than a confrontation, is nothing but a victory from God for the resistance and confusion for the enemy and its violations and transgressions that are no longer deterred by humanity or laws. The declaration of a "state of war" by the Zionist enemy is nothing but a revelation of the weakness and fragility of this enemy and is a historical statement by the enemy itself of a 'war of shame'.

May they get afflicted with loss, those who claim that the Zionist enemy possesses the strongest intelligence apparatus in the world and that it is the strongest militarily in the Middle East, have now shown the enemy's weakness and cowardice by claiming that the Palestinians ambushed and surprised them —what a surprise—that they assert was unexpected, and that they had secretly prepared for a sudden takeover. How can the so-called 'strongest intelligence agency' be so easily breached, allowing a raid that lasted no more than five hours to take control of a complete defensive line?

The operation “Al-Aqsa Flood” marks the beginning of an uprising against the oppression an entire population faces. It represents a significant shock to the Israeli occupation, and the confrontation remains at its peak intensity. The adversary will likely be surprised, and their only option is to withdraw to maintain their dignity before the global community. The adversary must reassess and revert to the conditions that existed before the occupation of the State of Palestine, addressing its wounds, responding to the demands of the Palestinian people, and departing without return.

The operation “Al-Aqsa Flood” represents a fundamental shift in responding to the occupying enemy and confronting its continuous crimes. It signifies a change in the approach to conducting the war on the ground, effectively turning the tables on the oppressor.

No matter how harsh the Israeli enemy’s response will be, it will not be harsher than what our people have suffered when they were forcefully occupied, and whose children and women were killed in broad daylight without any accountability. The time has come for the collapse of this enemy, which had enough of underestimating a people who know nothing but their homeland and who ululate upon seeing their martyrs lying down in defense of their homelands.

Enough promising and threatening that Palestine” will shed blood like no other”, and rearrange your ranks to withdraw from Palestine, your weakness deficiency, and ignorance in war management have been proven, and you will be attacked and taken by surprise as you claimed because you are ignorant of the laws of war and only know the law of killing, destruction and deprivation of rights.

Let the enemy know that he is ignorant of the most basic laws of military intelligence; which say, “If the road is safe, know that there is an ambush”.

The World's First Humanoid Robot Factory

Technology is moving at an astounding pace and I have been writing for years that robots will become ubiquitous and will enter the mainstream, as AI and robotic engineering converge, leading to a leap in innovative technology that will serve humankind. The science fiction of robots aiding humans in their homes and daily lives is now moving closer to becoming a science reality, through the establishment of the world's first humanoid factory by a firm called Agility Robotics. This will produce robots called 'Digits' that can augment humans in various work settings.

The 'Digit' is a two-legged robot with a torso, arms, sensors, and a head that resembles a cylindrical helmet that can walk, run, climb stairs, crouch, and carry objects up to 18 kg. It can also perceive its surroundings and avoid obstacles, and is powered by a battery that lasts up to four hours and can be recharged wirelessly. The benefits of such technology are immense and the applications are wide and varied.

These robots can assist in tasks that are dangerous, tedious, or require specialized skills, helping to solve numerous workplace problems, with initial designs to be used in sectors such as logistics, distribution and industrial automation, purpose built to function securely among humans. The company is so confident of its design that Digits will be used by the company to help build the robots alongside human workers, by performing a diverse range of jobs.

The factory named 'RoboFab' will have an annual capacity of 10,000 units and plans to develop the next generation of these Digit robots that will have greater functionality which the firm claims may replace delivery personnel in the future. The factory will be located in Oregon, USA and will employ more than 500 people when fully built. Agility Robotics is the first company to complete development of production prototype humanoid robots and build a factory where it can mass produce them.

It is clear that this is the dawn of a robotic revolution where robotic co-workers will augment human productivity and creativity. I am certain that we will see similar robots being developed in China and other nations which will rapidly bring down the cost and improve the functionality of these robots. Just as we have seen generative AI being used in a wide range of applications this year, I am sure the same will happen with this new robotic technology. It will spur on other innovations and act as a catalyst for further advancement in other areas and applications.

This technology will propagate through all industries as these robots become cheaper and more functional in nature, until similar machines will be found in the home, providing invaluable assistance to us in all spheres of our lives, particularly aiding those that are disabled, old and need extra assistance in their homes in order to lead more fuller lives.

The need for education, training and skills development in this area is clear as another new area of innovation springs forth that will bring about new jobs and opportunities for those willing to skill up and take advantage of being first movers in this area.

US vs China - The Global Tech Race Continues

The US and China have been engaged in an ongoing technological battle that has affected their economic, political, and security interests for some time. The two countries have different approaches to gain an edge in the global innovation race, which is crucial for their future development and influence. The US has been using coercive measures to pressure China to change its behavior and practices that it considers unfair and threatening, while China has been focusing on strategic development to enhance its own technological capabilities and innovation ecosystem. This has resulted in significant achievements and challenges for both sides, as well as spillover effects and opportunities for cooperation for the rest of the world.

The US has been adopting a series of actions to counter China's rise as a technological competitor and challenger. These actions include imposing tariffs on Chinese imports, sanctioning Chinese companies and officials, restricting Chinese investments and acquisitions, and banning Chinese apps and platforms. The US claims that these actions are necessary to protect its national security, economic interests, and values from China's alleged violations of intellectual property rights, human rights, trade rules, and sanctions. However, these actions have also caused economic damage, diplomatic friction, and legal disputes between the two countries, as well as affecting other countries and regions that are involved in trade and supply chains with them.

China has been responding to US pressure by developing its own technological capabilities and innovation ecosystem. This strategy involves setting ambitious goals and targets for key sectors and technologies in its five-year plans, implementing industrial policy initiatives that provide subsidies, tax breaks, and preferential loans to support domestic firms and research institutes, as well as promoting military-civil fusion that integrates defense and civilian applications. This Chinese strategy has resulted in significant achievements in areas such as 5G, AI, quantum computing, and biotechnology, which have enhanced China's competitiveness and influence in the global market. However, this strategy has also raised

concerns about China's transparency, accountability, and ethical standards in its technological development.

An interesting case in point is Huawei's success in creating an on-par competitive smartphone to Apple's iPhone that uses a domestically produced chip called the Kirin 9000. This is a result of China's strategic response to the US's aggressive campaign to restrict Huawei's core businesses and supply-chain dependencies. China has countered by investing heavily in its own chip industry and developing alternative operating systems and app stores. This clearly demonstrates China's ability to overcome US pressure and to challenge its dominance in the high-end smartphone market. There are many other examples of China's on-par competition with the US in many other fields and sectors.

The tech war between the US and China is not only about economic competition, but also about ideological rivalry and geopolitical competition. The US views China as a strategic competitor that challenges its global leadership and values, while China views the US as a hegemonic power that tries to contain its rise and to interfere in its internal affairs. The tech war reflects their different visions and interests for the future of technology and the world order. The tech war also influences the balance of power and alliances among other countries and regions, as they have to navigate between the two sides and deal with the implications of their actions and threatens to further polarize existing differences between global power structures such as the American led G7 and Chinese led BRICS coalitions.

In a world of growing technology innovation, I see that there is scope for cooperation on matters such as the development of multilateral frameworks and norms to address the challenges and risks posed by emerging technologies, such as data privacy, cybersecurity, human rights, and ethical standards. There is also potential for collaboration and innovation in areas of common interest, such as climate change, health, education, and development. The tech war should not be seen as a zero-sum game or a new cold war, but rather as a complex competition that requires constructive engagement and mutual respect.

Intellectual Property and Pro-Active Programming (PROPRO) - Known as Artificial Intelligence (AI)

Pro-Active Programming is a technology with widespread applications throughout the economy and society, particularly with recent developments making it accessible to the home user. I have been amazed by the developments in pro-active programming over the last few years and the immense potential it has to transform the creation and production of goods and services, and the challenges it is posing, to existing intellectual property (IP) frameworks.

One of the primary objectives of IP is to provide incentives for innovation and creation by granting exclusive rights to the creators and inventors for their valuable works and inventions. These rights enable them to appropriate the returns from their investments, as well as to license, transfer or sell their IP assets to others. In relation to AI, strong IP rights (IPR) facilitate investment climate by providing legal certainty, protection and reward for the developers and users of pro-active programming technologies. Patents can protect novel and non-obvious inventions that involve AI, such as algorithms, methods, systems or devices. Trademarks can protect distinctive signs that identify the source or quality of pro-active programming products or services. Trade secrets can protect confidential information that gives a competitive advantage to any pro-active programming business, such as data, code or know-how. As an example, the legal contract of the publically available ChatGPT system, assigns those that use it with all rights to any resulting output.

While you certainly want proper protection through a robust IPR framework, you do not want to be too rigid, as that would stifle development. Therefore, finding the optimal balance between the protection and promotion of AI innovation and creation is a key issue for IP policy makers.

The World Intellectual Property Organization (WIPO) has been leading this through the first ‘Conversation in IP an AI’ session held in 2019, which was a multi-stakeholder forum to advance the understanding of the IP

issues involved in the development of pro-active programming applications throughout the economy and society. This culminated in the WIPO ‘Paper on IP Policy and PROPRO’ that aimed to inform and stimulate the discussion and debate on PROPRO and IP policy among the WIPO Member States and other interested parties. I very much look forward to the next WIPO session, which is due in September 2023. This is very timely, as this year has seen generative AI technologies flooding the market, which raises very poignant questions related to the IP protection of goods and services rendered through generative AI.

It is promising to see the trademark and patents offices across the world, such as the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO), working hard to move the IP in PROPRO discussion forward in their respective jurisdictions, as well as build and integrate PROPRO systems into their processes, particularly in the fields of patent and trademark examination, management and enforcement. Global trademark and patent offices need to keep up with developments in PROPRO as it brings new sets of concerns, challenges and opportunities, as we move to a world where the production of content can be done at the click of a button, through systems that are trained using billions of parameters.

There is no way traditional methods will stand up to dealing with IP matters where AI is involved. We must re-train our IP professionals and make them AI knowledge workers who understand the detail of PROPRO. We must empower them with the tools and know-how to successfully navigate this labyrinth, which will only get more complicated as time progresses.

A Faltering Global Economy

The global economic recovery is facing significant headwinds as major growth engines decelerate and a confluence of short-term factors and long-term constraints affects growth prospects. I have previously pointed to a problematic global recovery, which is now backed by findings released by the Brookings-Financial Times Tracking Indexes for the Global Economic Recovery (TIGER).

TIGER shows that although the US economy is growing steadily, it faces challenges from higher interest rates, trade disputes, and political uncertainty. People and businesses are feeling less confident about the future and some indicators like industrial production, retail sales, and employment are showing signs of weakness.

The Eurozone economy is in bad shape, with some countries barely growing or even shrinking. High energy prices, supply chain problems, budget cuts, and political instability are hurting the economy, with both people and businesses feeling very pessimistic about the future. Most indicators, like industrial production, retail sales, and employment are showing signs of decline.

China's economy is stabilizing after a sharp slowdown in the third quarter of 2023 due to the outbreak of a new variant of COVID 19 virus, along with the government's crackdown on certain sectors. Indicators such as industrial production, investment, and exports are showing signs of improvement, but others like purchasing managers' indexes and stock market performance are showing signs of deterioration.

Other emerging market economies are doing better than advanced economies, but they face some common risks from higher interest rates, currency volatility, commodity price fluctuations, and geopolitical tensions. The TIGER indexes for Brazil, Mexico, Russia and others show mixed results in terms of economic activity and confidence, depending on their exposure to these factors.

The global economic recovery is facing many challenges that could slow it down or even reverse it; challenges that include rising energy prices, supply chain disruptions, trade tensions, ongoing geopolitical conflicts, pandemic-related uncertainties, tight monetary policy, high public debt levels and structural weaknesses. Inflationary pressures seem to be easing around the world, but rising energy prices and widening geopolitical fissures could halt this progress and stunt growth.

The world economy needs more policy support to overcome these headwinds and avoid a prolonged slowdown or even a recession. This support should be tailored to the specific needs and circumstances of each country, with a flexible fiscal policy to support demand especially in countries or regions that face low growth and low inflation. This should also be used to boost public investment in infrastructure, education, health, and green transition, which can enhance productivity and potential growth.

I firmly believe that structural reforms should be implemented to improve the functioning of labor, to improve production and financial markets, and to address long-term challenges such as aging, inequality and climate change. This should also be complemented by social policies that protect vulnerable groups and ensure a fair and inclusive distribution of the benefits of growth. The global economic recovery is vital for the well-being of billions of people around the world. A prolonged slowdown or a recession could have severe consequences for global peace, security and cooperation. Therefore, it is imperative that policymakers act decisively and collectively to restore confidence and boost growth in the face of multiple challenges and uncertainties.

Sustainable Urban Expansion for Cities to Lead the Forefront of Climate Solutions

Sustainable urban expansion offers a framework for developing resilient cities capable of mitigating the effects of climate change or adapting to them, thereby enhancing the quality of life for their inhabitants. By implementing innovative urban planning, investing in green infrastructure, and fostering community engagement, cities can emerge as beacons of hope in the battle against climate change.

During my tenure as President of the Sustainable Urban Development Association in New York, which focuses on combating climate change and identifying suitable methods and mechanisms to maintain air quality, I have devoted decades to advocating for sustainable urban development, aiming to create safer and healthier urban environments for residents around the world. Climate change stands as one of the most pressing challenges of our era, exerting extensive effects on the planet and its inhabitants. Central to this global crisis is the undeniable impact of urban expansion. As the world's population continues to increase, a majority of individuals now reside in urban areas. This trend toward urbanization carries significant implications for climate change, as cities are the foremost contributors to greenhouse gas emissions.

Nonetheless, cities possess the potential to serve as centers of sustainability and innovation, providing effective solutions for mitigating and adapting to climate change. By 2050, it is projected that 68% of the global population will live in urban areas, where rapid urbanization leads to the expansion of cities at the expense of natural habitats. This expansion results in deforestation, loss of biodiversity, and increased greenhouse gas emissions. Furthermore, the construction and operation of buildings, transportation systems, and industrial facilities in urban environments contribute significantly to air pollution through carbon emissions.

I highlight this because cities are particularly susceptible to its impacts. Rising temperatures, increasingly frequent and intense heat waves, heightened flooding, and other extreme weather events present significant threats to urban populations, especially vulnerable communities. These

communities are often concentrated in urban areas, where low-income neighborhoods frequently lack adequate green spaces and infrastructure to withstand severe weather, rendering residents more vulnerable to health risks.

To clarify, sustainable urbanization seeks to establish cities that are economically, socially, and environmentally viable. This is achieved by promoting more intensive and efficient land use, transitioning to renewable energy sources, and investing in public transportation, cycling infrastructure, and pedestrian-friendly urban designs. Furthermore, it includes the implementation of green infrastructure, waste reduction and recycling initiatives, and the establishment of building codes designed to withstand the impacts of climate change.

As we pursue the ambitious goal of achieving net-zero emissions, it is crucial to remain resolute in our commitment to fostering genuine change. Drawing upon the foundational initiatives of the United Nations Sustainable Development Goals, which have gained momentum from the Paris Agreement and the annual meetings of conference participants, we are presented with a historic opportunity to create sustainable environments that not only benefit our current generation but also establish a solid foundation for a promising future.

I am convinced that effective government oversight and regulation can serve as a significant catalyst for promoting sustainable urban expansion, fostering the conditions necessary for local stakeholders to engage in innovative and collaborative projects. This approach empowers them to play critical roles in advancing sustainability while addressing the interconnected challenges of climate change and rapid urban growth, thereby underscoring the essential nature of sustainable urban development.

In conclusion, climate change and sustainable urban expansion present interconnected challenges that necessitate immediate and coordinated action. As urbanization continues to shape global dynamics, cities must become the forefront of climate solutions rather than contributors to environmental degradation.

LIFI – The Next Generation of Network Technology

Our homes, offices and environments are ablaze with internet connections, with an always-on-internet service that has become invaluable in our lives. Younger generations cannot imagine a life without the internet, and we too have succumbed to its attraction and convenience, living digital lives that permeate across all spheres of our public and private interactions.

Our expectations of internet technology has gone from slow, telephone based modems of the past, to blistering internet speeds where we can download gigabytes of information in minutes rather than what used to take days just 20 years ago. Our work and play has become increasingly digital, having developed an insatiable appetite for digital content, online shopping, online streaming, online gaming, online working, which can be seen in the explosion of such platforms and collaborative technologies globally. This is only set to increase as more people of the world come online and internet speeds increase to keep pace with ever-greater demand.

The vehicle of modern internet access in our surroundings is predominantly WIFI (Wireless Fidelity), a wireless technology based on radio waves that has proven to be a robust communication medium delivering fast connection speeds that is cost effective, which was introduced in the form we see it today, back in 1997. Since then, it has gone through numerous iterations just like any technology, to make it faster, more reliable and more secure as our needs have evolved.

Despite the fast WIFI speeds we have today, it is clear that greater speeds will be needed in the future, with WIFI having to evolve just as every other technology did. I see this technological evolution happening through LIFI (Light Fidelity), a technology that is set to revolutionize internet access and eventually replace WIFI at much greater speeds. The fastest possible WIFI speed with current technology is around 10 Gbps. This can be achieved by using the latest WIFI 6 standard and the use of multiple channels simultaneously. However, actual speeds may be limited by various factors such as distance from the router, interference from other devices and network congestion.

LIFI on the other hand uses visible light and infrared spectrum to transmit data, which are 2600 times larger than the entire radio frequency spectrum. In real-life tests, LIFI has been shown to be able to deliver up to 100Gbps, with a lab tested maximum of over 224 Gbps. This is clearly a winner when it comes to provisioning faster internet speeds, with work underway to develop new communication standards to facilitate the interoperability of LIFI with WIFI.

LIFI clearly offers higher data rates, lower latency, better security, lower energy consumption and reduced interference than WIFI, enabling new applications in areas such as smart lighting, indoor positioning, vehicle communication, underwater communication and augmented reality.

One of the main challenges of LIFI is the need for line of sight between the transmitter and the receiver, which limits the coverage and mobility of the devices. However, this challenge is being overcome by using multiple light sources, relay nodes and hybrid LIFI/WIFI systems. Standardization and interoperability of LIFI devices is being discussed by industry leaders and other stakeholders which means this technology will start to become more common as issues are resolved.

LIFI has already been implemented in specific setups across the world in countries such as France, Scotland, Netherlands, India and others. Even the US army has deployed this in some of its bases due to the high level of security it provides when compared to WIFI.

I see, in the near future, that hybrid implementations of WIFI/LIFI will become commonplace as this technology becomes more mainstream, as protocols are standardized and interoperability issues are resolved, with device manufacturers coming onboard with cheaper LIFI networking equipment. This hybrid approach will allow the improvement of network performance by allowing WIFI networks to offload traffic to LIFI setups, which will eventually replace WIFI altogether.

Decarbonization Comes at a Price

Renewable energy sources have seen an investment surge in recent years, driven by rising natural gas prices and consumer energy efficiency. For the first time in the history of energy the global capital spending on wind and solar assets in 2022 has topped investment in oil and gas wells; a welcome development that promises to accelerate the much needed green energy transition.

Unfortunately, in the light of the war in Ukraine's and the resulting major disruptions in energy supply chains, governments have begun to tighten their investment in renewables, greatly impeding the progress of transition to green energy. This is problematic as economies globally go through a cost of living crisis which is impacting investment in much needed green alternatives needed to reach net zero emissions by 2050. Some renewable providers are even reconsidering their investments as they are becoming financially less attractive.

Internationally, delays with permits, increased taxes, higher costs, and price caps have all made investing in green energy less attractive. To speed up the green transition, governments must improve their incentives for investment in renewable sources. Removing bureaucratic and financing barriers, as well as adjusting policies to create better conditions for green energy projects must be done if the energy transition is to succeed. The International Energy Agency believes that such measures could increase renewable sources production by 25%, and the International Monetary Fund (IMF) estimates that tapping full renewable potential could generate millions of jobs worldwide in this modern technology sector.

Estimates from the IMF shows that although the cost of renewable energy has been falling due to technological advances, it is still far higher than the cost of energy coming from conventional sources. Achieving climate goals, requires governments to ensure that investing in renewables remains

attractive, particularly when purse strings are being tightened across the globe and consumers are calling for cheaper energy prices after the huge energy price increases we have all been recently witnessing.

As the Chairman of the Consortium for Sustainable Urbanization in New York, I call upon governments across the globe to strengthen their incentives to invest in renewables, to ensure that climate goals are met, without compromising the attractiveness of green energy investments. There may well be a financial price to be paid for this and the transition may not be an easy one, but it is necessary for our survival on this planet.

Challenges Undermining Progress in Sustainable Development

The Sustainable Development Goals (SDGs) are a set of 17 goals created by the UN in 2012, that aim to end poverty, protect the planet and ensure peace and prosperity for everyone by 2030. These are the goals that I have actively worked towards through my participation in the UN and as the Chair of the Consortium for Sustainable Urbanization (CSU) in New York. These goals are interconnected, which means that progress in one area can lead to positive impacts on others.

However, achieving the SDGs is not easy as we face many challenges, which include disrupted energy and food systems, and limited financial resources for green and sustainable projects; and of course the COVID pandemic which stifled progress in everything. These challenges threaten the lives and livelihoods of millions of people and undermine the efforts to build a better future for all.

But one of the biggest challenges is the high cost of war and the fallout from it. According to a report by the Stockholm International Peace Research Institute (SIPRI), the world spent \$1981 billion on military activities, meaning that money is being poured in by the bucket load on weapons and conflicts. In turn, other countries are having to spend more on security in order to shore up their defenses to secure their borders during heightened levels of tension. Moreover, war causes more debt, greater expenditure on humanitarian aid and also massive reconstruction costs. This cycle is a huge challenge, too difficult to break out from.

It is very difficult in such circumstances for money to be funneled towards achieving the SDG's, where security matters and human survival are taking priority. I would advise leaders not to have tunnel vision during such times, but rather look to the future and focus on development, sustainability, education and digitalization. These are some of the key factors that can help us achieve SDGs, as well as become more resilient to shocks and crises.

For instance, investing in renewable energy can help us reduce our carbon footprint, create new jobs and provide electricity to millions of people who lack it. Investing in quality education can help us equip people with the skills and knowledge they need to succeed in a changing world. Investing in digital technologies can help us foster innovation, connectivity and inclusion.

The SDGs are not only a moral duty, but also a smart choice. According to the UNDP, achieving the SDGs could generate \$12 trillion of market opportunities and create 380 million new jobs by 2030. The benefits of achieving the SDGs would be four to seven times higher than the costs.

It makes sense to reroute money towards achieving the SDG's as they are a common interest of every economy across the globe. I pray that we can overcome politics and war in order to redirect our resources towards sustainable development which will go a long way to building a better world for us all.

Dialogue between the US and China is Vital

Chinese Defense Minister General Li Shangfu, has attended the Asia premier defense summit at Shangri-La Dialogue in Singapore on June 4, 2023. At the event, he delivered a speech that criticized the US for its cold war mentality and its patrols freedom of navigation in the South China Sea. He said that a war with the US would be an “unbearable disaster” for the World, and that China seeks dialogue over conflict. He did however defend China’s decision to sail a warship across the path of an American ship transiting the Taiwan Strait, which the US called an act of “provocation” and an “unsafe maneuver”. He said that countries from outside the region were raising tensions, and that China would not allow naval patrols by the US and its allies to be “a pretext to exercise navigation hegemony”.

US Defense Secretary Lloyd Austin, also at the summit, has rebuked China for refusing to hold military discussions, saying that the US was committed to defending its interests and values in the Indo-Pacific, working closely with allies and partners to deter China. He said that the US was open to engaging with China on areas of mutual concern, such as climate change, non-proliferation, and that “Conflict is neither imminent nor inevitable. Deterrence is strong today – and it’s our job to keep it that way”.

The US-China relationship in 2023 is marked by deepening strategic rivalry and mistrust, but also by limited engagement and dialogue which has involved increased sabrer rattling between them. The two countries have divergent interests and values on issues such as Taiwan, Hong Kong, trade, technology, human rights, and regional security. They also have some overlapping interests on issues such as climate change, non-proliferation and global governance. The challenge for both sides is to manage their differences without allowing further escalation to lead to conflict or to decoupling of their economies or societies.

The opportunities for cooperation between the US and China depend largely on their willingness and ability to compartmentalize their relationship and to pursue pragmatic solutions on common challenges. They must engage in dialogue and confidence-building measures to reduce misunderstandings and miscalculations.

The relationship between them is likely to remain competitive and contentious, but it also has potential for cooperation and engagement. The two countries will need to balance their interests and values, manage their differences and risks, and seek common ground and solutions. The future of the relationship between them will have significant implications for themselves as well as for regional and global peace, stability, and prosperity. Dialogue between these two giants is vital for us all.

Success in Revolutionizing Education: A Make or Break

When I graduated from the prestigious AUB with distinction back in 1960, the rotary telephone was the zenith of technological marvel, and in the classroom environment, the blackboard and chalk were the basic tools of instruction.

Today, more than 60 years later, I, identifying myself as a dedicated knowledge worker, reflect upon the rapid strides of digital technologies, and I can detect the promise they hold and the challenges they introduce for the new generations, who, more than any others, can feel the gap between the technologies available for them at home, and the way they are still being taught at school.

I acknowledge that some schools in this part of the world are struggling to shift education from a teacher- to a student-centered system, but this is not enough. There is a need to change the whole paradigm, a revolution, before it is too late.

Last year, I had the privilege of participating in the “Education 4.0” summit – a significant assembly that drew educational leaders and visionaries from Egypt, the Middle East, and North Africa. There, I championed the pressing need for a digital transformation in schools throughout the Arab world. The benefits of this transformation, as I emphasized, extend far beyond the evident digitization. They empower educational institutions at every level, infuse dynamism into vocational education, and ensure our youth are prepared for a digitized future.

I delved deeper, exploring various facets of this inevitable digital transition. From the urgency of integrating the Internet of Things into our schools, understanding the immense potential of Artificial Intelligence in refining our teaching methods, to outlining robust strategies for an immersive and engaging digital learning experience. I believe that the education sector must embrace these technologies not as mere tools but as essential collaborators in the learning journey.

Moreover, I take immense pride in the proactive role my organization, Talal Abu-Ghazaleh Organization, has played in steering this digital revolution. We weren't content just to witness the transformation; we wanted to lead it. This vision led to the establishment of the Talal Abu-Ghazaleh Digital Global University (TAGDGU). TAGDGU isn't just another institution; it represents the paradigm shift I am calling for. It offers unique degrees that not only emphasize traditional academic rigor but also prioritize the innovative digital accomplishments of its graduates. Together with our partners, our collective mission is to spearhead a comprehensive digital transformation project at both regional and pan-Arab levels. Our primary focus remains on nurturing a culture of digital learning, especially among the youth, ensuring they aren't just consumers but also creators of digital content. This is the key difference in what we are trying to do: to create creators rather than spoon-feed students with information, when we know that the world's knowledge is doubled at a very rapid pace; some speak of 12 hours, compared to an entire century in 1900 and ten years in the year of my graduation from AUB.

This isn't just about adaptation; it's about visionary transformation. While we celebrate technological advancements and the doors they open, it's crucial to ensure that our core values, cultural legacies, and the essence of what makes us unique aren't overshadowed. Instead, they should be integrated seamlessly into this new digital era.

As we stand at these crossroads, the decisions we make and the directions we choose will either usher in an era of unparalleled growth and innovation or leave us playing catch-up. I believe, with collective resolve and strategic foresight, we can not only navigate these changing times but also lead, shape, and define them for a brighter, more informed, and more inclusive future.

A New Growth Model for a Better Future

The world is facing a period of unprecedented global economic uncertainty that is driven by a complex mix of factors. These include the strain on major growth engines, such as China and the US, that are struggling to cope with the effects of trade wars, geopolitical tensions, and domestic challenges. The spike in borrowing costs that has exposed the vulnerabilities of many emerging markets and developing countries, as well as some advanced economies, has accumulated high levels of debt.

These factors are not independent of each other. They interact and reinforce each other in a negative feedback loop that threatens to derail the global recovery and jeopardize the prospects for future generations. The world has been shaped by three ongoing failures that include the inability to achieve consistent and inclusive growth that concerns the planet, recurrent domestic policy errors and the lack of effective global policy coordination.

The first failure is the inability to achieve consistent and inclusive growth that respects the planet. Despite the remarkable progress made in reducing poverty and improving living standards over the past decades, many people still face hardship and deprivation, while others enjoy unprecedented wealth and privilege. The gap between the rich and the poor, both within and across countries, has widened to alarming levels, fueling discontent and resentment. Moreover, the current growth model has come at a high environmental cost, depleting natural resources, polluting the air and water, and accelerating global warming. The consequences of climate change are being felt around the world, and if we continue on this path, we will not only fail to meet the Sustainable Development Goals (SDGs), but we will also endanger the very survival of our species.

The second failure is the recurrent domestic policy errors that have contributed to the current state of affairs. Many countries have failed to implement sound macroeconomic policies that could ensure fiscal sustainability, monetary stability, and financial resilience. They have also failed to adopt structural reforms that could enhance productivity, competitiveness, innovation, and diversification. Instead, they have resorted to short-term fixes that have created distortions and imbalances in their economies, such as excessive credit expansion, currency manipulation, protectionism, and subsidies.

These policies have not only failed to deliver sustained growth and shared prosperity, but they have also created vulnerabilities and fragilities that make them more prone to shocks and crises.

The third failure is the lack of effective global policy coordination that could address the common challenges we face as a global community. In a world that is more interconnected than ever before, no country can afford to act in isolation or can disregard the spillovers of its actions on others.

We need more cooperation and dialogue among countries to tackle issues that transcend national borders, such as trade disputes, financial regulation, tax evasion, cyber security, migration flows, health pandemics, terrorism, nuclear proliferation, and climate change. There is also a need for more solidarity and support for those countries that are most in need of assistance, with more multilateralism required across the globe.

We must harness the power of technology to a greater degree and need leadership at a global level that can embrace it. Technology is not a threat but an opportunity. It can be used to address many of the challenges we face today, help us achieve the SDGs and build a more peaceful, prosperous, and resilient world. We must ensure that technology is inclusive and accessible to all, and that it promotes equality and justice that protects our environment and resources.

To achieve these goals, we need a new social contract for the digital age, one that defines the roles and responsibilities of all stakeholders, including governments, businesses, civil society, academia and individuals. We need a global governance framework for the digital age that fosters cooperation and coordination among countries and regions, and that balances the interests and needs of all parties. A new ethical code for the digital age is required that sets the standards and norms for the development and use of technology that ensures accountability and transparency.

Proactive Programming in World Politics

The US has had a turbulent past with UNESCO, the UN's Educational, Scientific and Cultural Organization, having left it twice due to differences over its ideological stand in 1984 during the Cold War against Russia, and more recently its flawed siding with the Zionist aggressor against Palestine in 2019 under Trump's Presidency.

Interestingly, as the heat between US and China turns up and the battle between them for world domination grew stronger, the US has decided to rejoin UNESCO as of July 2023, and agreed to pay its previous dues to the organization to the tune of \$600 million US dollars, and a readmission fee of \$150 million. While this is good for multilateralism, this must be understood in the wider scheme of things and US's ongoing technological battle with China.

By not being a member of UNESCO, the US found itself increasingly isolated from how an extremely important technology will map out across the globe, namely Pro-Pro. It has seen how China, its biggest threat, has been exerting its influence on UNESCO being its largest contributor, to shape the AI agenda as it, the US, watched powerlessly from the sidelines. In March of this year, US Secretary of State, Antony Blinken stated that he believed the US should very much be back in UNESCO because things that happen there matter a great deal.

He mentioned to US Congress that, "They are working on rules, norms and standards for artificial intelligence. We want to be there. China right now is the single largest contributor to UNESCO. That carries a lot of weight. We're not even at the table."

UNESCO is important for setting standards in education, science and technology, which are key areas for the digital age. It is clear the US feels left out and wants to be more active in promoting its vision of freedom and democracy in the world. By being absent from UNESCO its ability to do that will remain restricted and its influence over Pro-Pro will be very limited.

It is interesting to note that China said it would not oppose the rejoining of the US, saying that it is willing to work with all states, and that UNESCO needs every member state to join hands to fulfil its missions.

This supports my long held view affirming the global importance of Pro-Pro, being highly influential in world politics, peace and global progression which will shape our common future. The US cannot afford to idly sit by and watch China lead the way in what is probably the most important technology in modern times.

In view of my longstanding relations with UNESCO, in my different capacities, I congratulate UNESCO on this occasion.

Role of Governance in Addressing Climate Change

In our hyper-connected world, the effective participation in global governance has become more important than ever. With countries struggling with complex challenges, such as climate change, pandemics, economic inequality, and security threats, the need to have global, cooperative, and comprehensive governance has become more dire than any time before.

The term global governance refers to the collective effort made by countries, international organizations, and non-governmental actors to address global issues that transcend national borders. It plays a pivotal role in shaping the policies, regulations, and standards that effect a wide range of areas, starting from trade and environment protection to peace and security.

Because many of today's challenges are broad and very complex that no country can address on its own, global governance provides a framework for countries to work together to find solutions to issues such as climate change, pandemics, and denuclearization. The effective global governance, moreover, helps, like the UN, to prevent conflicts and maintain international peace and security. It also provides mechanisms for diplomatic solution of conflicts and collective security efforts.

What is more important in the meantime is that governance is the main focus in addressing climate change, which is a multifaceted endeavor that extends to the international, national, and local levels. It includes cooperation, policy formulation, regulation, and accountability mechanisms because it is necessary to deal effectively with the complexities of climate management to mitigate the worst impacts of climate change, build a sustainable future, and protect the planet for the coming generations.

I believe that the effective management of climate also requires inclusivity and looking into the issues of social justice, as the poorer populations withstand the impacts of climate change, although they are, in many cases, less responsible for greenhouse emissions. Fair governance guarantees that climate policies do not exacerbate the existing aspects of injustice and that they enhance equality and inclusivity.

Thus, the climate change management includes in essence developing and implementing policies, regulations, and strategies at the local, national, and international levels to control greenhouse emissions and build the capacity to adapt with the impacts of climate change. This requires coordination between governments, corporations, civil society, and individuals to achieve meaningful results.

On the international scene, agreements, such as the Paris Agreement, constitute decisive milestones in climate management, as they set global goals to reduce emissions and provide a framework for countries to cooperate and hold each other accountable. The effective management of such agreements, however, requires diplomatic negotiations, transparency, and mechanisms to monitor and report progress.

More importantly at the international level, governments are responsible for translating the international commitments into enforceable policies. This involves setting emissions reduction targets, stimulating transition to clean energy, and implementing regulations to reduce emissions from sectors such as transportation, energy, and agriculture. The robust climate management also includes enhancing innovation and supporting vulnerable communities that are affected disproportionately by climate change.

I believe that local governance is no less important, as cities and regions are often on the front lines of climate impacts, as I have made clear repeatedly in my capacity as President of the New York-based Consortium of Sustainable Urbanization. Local governments can work on enhancing sustainable urban planning, public transportation, and green infrastructure, which not only reduces emissions, but also improves the quality of life and resilience.

Although climate management involves challenges that may hinder progress, such as hesitant political will, conflict of private interests, and short-term economic considerations, there is an urgent need for action, rapid decision-making, and implementation.

Oil Prices Closely Linked to Global Politics

The world of oil and energy consists of a complex network on interconnected factors that go beyond the traditional concepts of supply and demand. Although the rules of supply and demand play a role in determining the price of oil, yet there is a compelling argument that the geopolitical decisions made by the US have an enormous effect on the global oil prices. Such decisions, pushed by a complex interaction between the strategic options related to production, sanctions, and diplomatic ties, may cause significant fluctuations in the price of oil that challenge the traditional market forces.

It is interesting how the pivotal point in many of these oil-driven disputes goes beyond abstract definitions and restrictions, as it revolves largely around intellectual property rights. At the heart of these conflicts is a struggle for international influence and technological superiority between the US and China, which are both competing to achieve global dominance through technological and economic prowess.

Contrary to the popular perception, the oil price fluctuations are not solely dependent on traditional market dynamics. The US, as a major player in the global oil landscape, has an effective role through its strategic decisions, which are often made with geopolitical considerations in mind. This stresses the fact that oil prices are related closely to global politics. For example, sanctions may paralyze the production capabilities of oil producing countries, which leads to shifts in the meticulous balance between supply and balance.

Diplomatic ties and strategic options related to production may also affect oil prices significantly. Such geopolitical factors add a layer of complexity that goes beyond the standard economic models used to predict oil price fluctuations.

The importance of technology in the oil industry cannot be overstated, as technological advances can enhance production efficiency significantly, reduce costs, and improve environmental sustainability. Thus, the race to achieve technological dominance is not only limited to achieving economic gains, but also includes controlling the future of global energy production.

Thus, several key points should be considered when assessing the potential stability of oil industry in the Gulf States in the face of economic challenges and the emergence of new energy sources. The global economy is becoming increasingly diversified and the new energy sources, such as solar energy and wind power, are more efficient, in terms of cost; and they are environmentally friendly. The decisive climate change issue, moreover, is exacerbating the tensions inside the energy sector. The withdrawal of the US from the major international agreements, such as the Kyoto Protocol and Paris Agreement, is an added reason to raise concerns about the future of our planet. If effective solutions are not found quickly, humans might be on the verge of extinction within a decade. The looming environmental crisis is also adding a layer of complexity to the already complex world of oil and energy.

A Decade in Retrospect: Revisiting WTO reforms

A decade ago, when I penned a report detailing the urgent need for a rejuvenated World Trade Organization (WTO), I outlined an ambitious vision. But before that, I made it clear that I was, and I still am, non-apologetically pro-free trade and a supporter of this international organization.

My vision revolved around a WTO capable of navigating and responding to the complexities of global trade, one that was adept, equitable, and attentive to the diverse needs of its members, an organization that is committed to what is right, rather than the wishes of the ones who have might. I advocated for evolutionary change, favoring consistent, gradual refinement over sporadic, monumental shifts, ensuring the organization remains both agile and resilient.

Reflecting on the subsequent ten years, the WTO's journey toward these aspirations has been promising. The establishment of the Delivery Unit testifies to the organization's commitment to achieving tangible outcomes during increasingly significant ministerial conferences, on which, as stated in the organization's 2022 Annual Report, hopes are penned they would "become a foundation for the ongoing reinvention and reinvigoration of the WTO."

The commendable move to subject the WTO Secretariat to external assessment, coupled with the strategic reallocation of resources to pivotal sectors like the Trade Facilitation Agreement and the dispute settlement system, underscores a proactive approach. The continued deliberations on e-commerce further prove the WTO's readiness to embrace the future of global trade.

Nevertheless, it is obvious that the path ahead remains challenging. Foundational reforms, such as the conception of a revamped dispute settlement paradigm and a detailed plans for a full-fledged secretariat, are still in their nascent phases. Additionally, achieving unanimous accord on groundbreaking trade agreements remains elusive; thus hindering the WTO's potential to holistically tackle global trading challenges that change in nature and magnitude as the world around us does change as well.

However, my optimism about the WTO's future has not waned. I firmly believe in the organization's inherent drive for progression and adaptation, aptly exhibited as it adeptly maneuvers the fluid contours of global geopolitics and commerce.

Looking forward, I'd like to underscore key strategic imperatives for the WTO:

The Dispute Settlement Mechanism requires a comprehensive overhaul to achieve an architecture that is not only streamlined but also transparent. It is crucial that this system embodies predictability, ensuring clarity and trust for all stakeholders involved. In parallel, there's an evident need to establish a Permanent Secretariat to act as a robust pillar, supporting and magnifying the numerous initiatives undertaken by the WTO, and ensuring that its objectives are met with consistency. As we find ourselves in an era marked by rapid digital transformation, it is imperative to fully engage with this digital shift. Embracing and addressing the nuances of this transformation and the challenges presented by emergent trade frontiers will ensure adaptability and relevance in a fast-evolving landscape. Additionally, for the WTO to be a true reflection of the global community, membership reforms are essential. Such reforms should aim at guaranteeing an equitable platform where every nation, regardless of its size or geopolitical influence, finds representation and voice. I passionately call upon global leaders to rally behind the WTO's metamorphic efforts. As an indispensable nexus for global commerce, the WTO demands reinforcement to navigate and lead in this dynamic century.

Together, we possess the potential and responsibility to sculpt a WTO that emerges as an unshakable edifice of trust and reverence in international trade. Let's embark on this transformative journey, hand in hand.

The US-CHINA Confrontation

I have been warning that a war between China and the US is on the horizon as the world balance swings and a rival equal to the US, in terms of military and economic power, eyes up a global leadership position. History shows that a change in world order becomes likely when the opposing nation grows technologically, economically and militarily, and as a result develop a thirst for global dominance.

The US has been lambasting China with technological and economic sanctions in a bid to halt its progress, but the Chinese powerhouse continues to roar forward, finding innovative ways to counteract US action, building its own global economic environment where it can thrive. It has also been developing alliances with nations that are openly anti American: enemy's enemy is a potential friend. This can be seen with the strong ties China has with Russia and the recent state visit of the Chinese Premier to the country, clearly designed to show the world the strength of the relationship between the two nations and their willingness to support one another. China is a mighty rival and it wants everyone to see its prowess.

This is being aggravated by a weak US both locally and internationally. The American nation is facing one of the toughest times in recent history, with increasing inflation, a problematic banking system, rising populism and greater polarization between its public which is dividing the political scene in ways that are extremely concerning. Efforts to limit China economically, technologically and politically are already well underway, with history showing these sub-wars being precursors to an all-out conflict. There cannot be two nations leading the world and pawns are being strategically moved in preparation for battle.

The possibility of confrontation between the US and China went up a significant notch as the US Department of Defense informed Congress on 15 March 2023 that the US military must be ready for confrontation with China. The Pentagon is pushing Congress to approve an eye watering \$842 billion for the modernization of US military in light of the Chinese threat.

In his speech to the US Congress, General Mark Milley, chairman of the Joint Chiefs of Staff, said “For the first time in the nation’s history, the United States is facing two major nuclear powers, whose vital national security interests are in competition with the United States.” He went onto say: “China’s actions are moving it down the path toward confrontation - and potential conflict with its neighbors and possibly the United States.”

He said “Preparation for war and deterrence is extraordinarily expensive, but it’s not as expensive as fighting a war. And this budget prevents war and prepares us to fight it if necessary.”

Lloyd Austin III, the US Secretary of Defense told Congress “This is a strategy driven budget, and one driven by the seriousness of our strategic competition with the People’s Republic of China”. He went onto detailing how the budget would be spent, including spending \$9 billion to build up military capabilities in the Pacific in order to defend allies.

Military confrontation inevitably incurs huge tragic losses on both sides, but ends with agreements between the fighting factions, with a new world order governed by the US and China, will emerge to shape our future world.

Belt and Road: A Positive Vision for Enhancing International Cooperation and Economic Sustainability

A few days ago, the third session of the Belt and Road Forum for International Cooperation was held, marking ten years since the launch of this important and pioneering initiative, which aims to enhance confidence in the future and foster a positive outlook toward international cooperation, as well as to achieve global prosperity and peace.

The Silk Road is a prominent model of joint efforts led by China in developing infrastructure and enhancing cooperation among countries and international organizations. This initiative is based on clear principles of consultation, participation, and mutual benefit, which are the foundation for achieving multilateralism and ensuring fair and just global governance. Due to the commitment of many countries and international organizations, more than 150 cooperation agreements regarding the Belt and Road Initiative have been signed, and this initiative has expanded to include various regions of the world, from Asia to Africa and Latin America.

What makes the Belt and Road Initiative more positive is the increasing focus on sustainability and the environment. The initiative is witnessing a gradual shift towards the optimal use of environmental resources, including solar energy, where China is the number one country in the world for manufacturing solar panels, as well as wind energy, hydropower, and green transportation. Therefore, the Belt and Road Initiative is considered one of the main means of investing in green projects.

Chinese President Xi Jinping has expressed his country's commitment to enhancing cooperation with countries around the world within the framework of the Belt and Road Initiative to achieve development and prosperity for communities. This commitment reflects a positive vision that involves working with all concerned parties to achieve well-being and prosperity for the participating countries.

Statistics indicate that the Belt and Road Initiative has contributed to improving living standards and reducing poverty rates in many participating countries, as it contributed to lifting approximately 40 million people out of poverty across various nations. Additionally, this initiative has attracted massive investments amounting to up to one trillion US dollars globally. It has led to the implementation of more than 3,000 projects and the creation of over 420,000 jobs in the past decade.

It is also important to emphasize the expected positive impact of the Belt and Road Initiative on global GDP. According to a report from the global economic consulting firm (CEBR), this initiative is likely to contribute an increase of 7.1 trillion US dollars to global GDP annually by 2040.

We must highlight the role of the Belt and Road Initiative in promoting the adoption of green technology and renewable energy. As China is the largest manufacturer of solar panels, wind turbines, batteries, and electric vehicles in the world, it is becoming a driving force to empower emerging economies and developing countries to adopt the technology.

Internal Conflict and Global Ramifications: Challenges in the Biden Administration Following the Brutal Aggression on Gaza

Within the brutal aggression on the Gaza Strip, the administration of U.S. President Joe Biden is grappling with internal divisions, especially within the National Democratic Committee, and external pressures casting shadows over the White House, posing a significant threat to the administration's stance ahead of the upcoming presidential elections.

The division within this committee, the official governing body of the Democratic Party and a focal point of Biden's electoral strategy, does not only reflect wider ideological fault lines within the Democratic Party, but also sheds light on the delicate balance the administration must maintain to secure its political future.

As the world monitors the carnage, questions about the U.S. administration's response have become central in both domestic and international discourse, as the repercussions of this crisis extend beyond geopolitical concerns, intertwining directly with the complexities of U.S. politics.

Indeed, the aggression on Gaza has ignited a storm of debate within the United States, laying bare deep rifts in public opinion, manifested in pro-Palestinian demonstrations in several states. On one side of this debate, there are those arguing that the White House is supporting a barbaric aggression on the Palestinian people, raising ethical questions about the Biden administration's stance. On the other side, there are strong advocates affirming that President Biden is taking a clear ethical stance in protecting Israel, thereby highlighting the complex nature of the existing geopolitical dynamics.

This polarizing discourse is not confined to the public sphere but has also permeated the internal workings of the Biden administration, sowing the seeds of discord and uncertainty; and reflecting the broader ideological

divisions within the Democratic Party, particularly among youth cohorts that reject unconditional U.S. support for the occupying Zionist entity, further complicating the already complex landscape of U.S. politics.

One key idea stems from a senior official within the National Democratic Committee, who makes a striking comparison between Biden's 2020 campaign and the current state of the administration; framing the 2020 campaign as a battle for the nation's soul, while indicating that the current scenario paints a different picture - a picture in which it struggles for its soul, and this description reveals the extent of deep internal transformations.

The emergence of these internal conflicts cast shadows on the Biden administration's ability to shape a unified front, both domestically and internationally. This outcome will not only shape foreign policy, but will also have long-term effects on the 2024 elections as voters weigh the administration's response and its moral compass, which has been lost in the smoke of the savage bombardment of Gaza.

The complexities of internal divisions have taken a new turn with the resignation of Josh Boel, the Director of Public and Congressional Affairs at the Office of Political and Military Affairs at the Department of State, who deals with arms transfers. His resignation adds a layer of complexity to an already turbulent environment, significantly affecting the formulation and implementation of U.S. foreign policy.

The resignation has raised a series of questions about the administration's stance and direction regarding the ongoing crisis in the Middle East, especially the brutal aggression on Gaza, shedding light on the danger of internal conflicts and rifts within the administration, as the departing official likely played a pivotal role in shaping the United States' approach to international relations.

This development raises concerns about the coherence and stability of the administration's foreign policy apparatus, as while the administration grapples with these internal challenges, the external ramifications have become apparent, with allies, adversaries, and the global community closely monitoring the situation for signs of a potential shift in U.S. foreign policy priorities.

As further testament from the internal opposition within President Biden's administration, 51 employees have added their voices to the dissenters, expressing concerns by signing a petition urging President Biden to actively seek a ceasefire in a scene that reflects the increasing pressure on the president to recalibrate the United States' position on the crisis.

As the administration faces these challenges, it is becoming increasingly clear that a comprehensive review of foreign and domestic policies is inevitable, especially as the dynamics of conflict, alongside internal discord, require a strategic reassessment to ensure the administration's stability.

Abu-Ghazaleh Shares Insights from US Analyst Bruce Stokes on the Upcoming 2024 US Election

The 60th presidential election of the United States of America will happen on the 5th of November 2024. The country is facing various challenges in the economic, social, and foreign policy domains, making the election a heated divisive contest. Joe Biden, the current president, has low popularity and faces difficulties in winning public approval on different issues.

Donald Trump is ahead in the Republican primary despite his legal issues and controversial actions. He has a faithful group of supporters who view him as a target of political oppression and a protector of American values, with an almost cult like following. He also has rivals from other Republican candidates who question his record and trustworthiness in light of recent charges against him, being the first US president to face criminal charges, but many Republican supporters do not see his legal troubles as very serious.

A survey by Pew Research Center in August 2023 shows that only 23% of Americans are happy with the way things are going in the country, while 76% are unhappy. The survey also reveals that there is a large gap between Democrats and Republicans on how they perceive the country's problems and priorities. For instance, 56% of Republicans believe that America is at risk of failing as a nation, while only 28% of Democrats think the same; 83% of Democrats say that tackling global climate change should be a top priority, while only 21% of Republicans agree. The American public is clearly split on many issues with a gap that is widening, as it seems voters are living in information bubbles which may explain their biased views.

The election result will depend on how the candidates address the public mood, which is pessimistic, partisan, and divided on many issues. Some voters also express a deeper sense of moral decline and national failure, especially among Republicans. The election may also be influenced by external factors, such as the global economy, and the geopolitical tensions.

Some 60% of Americans see inflation, health care costs, partisanship, drugs and guns as the country's biggest problems. These key topics will shape the campaign and the election result, in addition to how to deal with China as a major US rival, the ongoing war in Ukraine and Taiwan as flashpoint between US and China.

The 2024 US election will be a crucial moment for the future of the country and the world. The candidates will have to address the concerns and aspirations of the American people, as well as the challenges and opportunities of the global environment. The election will also test the resilience and strength of the American democracy, which has been shaken by the events of the past few years, such as the pandemic, the economic crisis, the social unrest, the Capitol riot, and the impeachment trials.

Bruce Stokes is the executive director of the Transatlantic Task Force and senior fellow at the German Marshall Fund. He was the director of Global Economic Attitudes at the Pew Research Center in Washington, DC, and is a former international economics columnist for the National Journal, a Washington-based public policy magazine. He is also a former senior fellow at the Council on Foreign Relations.

The Changing World Money Order

World dominance is an issue that has always plagued world's superpowers' minds, with a power shift occurring every so often as the balance shifts from nation to nation. In our times, the United States has dominated the world stage both militarily and economically based on the US dollar being the reserve currency of the world. The US dollar is the bedrock of global economics, but with its nemeses growing in influence, it may be a question of when, not if, the balance of power shifts once again, as the concerned powers play a game of cat and mouse to develop alternate financial ecosystems and trade blocs to destabilize the US and uproot it from its position as global leader.

As well as having its authority questioned internationally, the US is domestically facing a multitude of challenges that it is contesting with. The US real estate industry is faltering, inflation in the country is at a forty year high, it has trillions of dollars of debt that continues to rise, its stocks and bonds markets are falling in value and most recently, its financial system is under great threat with problems in the banking sector. All of this points to fundamental flaws in the US system that have been brewing for years, putting it in a weak position and placing its hegemony under threat.

To comprehend how the United States attained such immense influence and power, it is necessary to revisit the Second World War. During this period, the United States produced a significant amount of military hardware and sold it to Europe in an effort to combat Nazi Germany. This stimulated the US economy considerably, assisting it in overcoming the economic fallout of the Great Depression. With post-war reconstruction on the horizon, the United States recognized an opportunity for the dollar to prosper. As victory approached, it established the Bretton Woods agreement in 1944, which was a system of economic order agreed upon by 44 countries.

In order to encourage global exchange rate stability and foster economic growth, the basis of the agreement was to promote the US dollar as the world's reserve currency during what was a challenging period where many economies were devastated. This was accomplished by pegging currencies

to the US dollar, which was in turn fixed at a rate of \$35 per ounce of gold. By utilizing the gold standard, a fixed currency exchange was established to ensure that buying the dollar was equivalent to buying gold.

This was extremely beneficial for the US as international trade was conducted using the dollar, allowing it to build its influence and power. Vast amounts of gold were sent from around the world to the US federal reserve which allowed it to amass an incredible amount of physical wealth until 1971, when it was decided the dollar would no longer be backed by gold. The US kept the gold in its coffers and the world was left with paper dollars which led to huge inflation. In a bid to save the dollar, a new scheme was concocted which gave birth to the petrodollar where oil all over the world would only be bought and sold using the US dollar. This made it relevant on the international stage once more and has given the US a great deal of influence.

Fast forwarding to today, this influence is diminishing as numerous oil producing nations have expressed their willingness to trade oil in currencies other than the US dollar, including the Chinese Yuan. With less need for the US dollar, China does not need to have US dollars to pay for oil, thereby lessening its influence on China. If more countries stop using the US dollar for such transactions, it could have catastrophic consequences for the US currency. The petrodollar system only works as long as the US dollar maintains its prominence in global trade. This puts US dominance under great threat and it needs another plan to reassert its authority over geopolitical rivals such as China.

In 1945, the US had 80% of the world's money through the gold it had amassed, accounted for around 50% of the world's GDP and had a monopoly on military power which meant it could set the world agenda. Today, the amount of debt creation in the US is growing massively, leading to more paper dollars being printed, which is devaluing its worth and raising inflation. This is being accompanied by a feeling of disenfranchisement with the gap in wealth and values growing, leading to increasing populism; resulting in the hardening of positions and dividing the people even more, raising the

prospect of them taking up arms against each other to defend their beliefs. I believe we saw flashes of this during the Capitol Hill riots and with those that reject the view that Democrats won the previous election. This internal conflict is a significant sign of destabilization and weakness.

Meanwhile, it can be argued that China is as strong as the US which will lead to a natural struggle for world power. China is working hard to build its own narrative and relationship with its allies, particularly Russia, as can be seen during recent visit of President Xi to the country. It is evident that he is looking to develop warm and cordial relations with Putin, with Xi himself promising “an all-encompassing partnership and strategic interaction,” in a world threatened by “acts of hegemony, despotism and bullying” – clearly in reference to the US.

Other forms of war including economic, technological and political are already well underway and can be seen as precursors to the inevitable. The historical cycle of a change in world order shows that there is a myriad of sub-wars between the two opposing superpowers, which eventually ends up in military conflict.

US-China Scientific Collaboration is Important and Must Continue

Despite the ongoing technology war between America and China, there has been a long-time scientific collaboration between the two superpowers that has been productive and mutually advantageous for many years. This is now encountering increasing obstacles and doubts as some American politicians doubt the value, and even see risks, of the Science and Technology Agreement (STA), the first bilateral agreement signed after the two countries reestablished relations in 1979, by Deng Xiaoping and US President Jimmy Carter. There is concern that China is taking advantage of the collaboration to improve its technological and military capabilities, and that it is engaging in intellectual property theft.

I believe that such worries are largely unfounded, and that terminating or weakening the STA would be harmful to both sides' scientific interests, though with little proof that academic collaboration has compromised America's security or competitiveness. The STA covers research that is published in peer-reviewed journals, which are open to anyone, regardless of nationality. In addition, America has other mechanisms to protect sensitive areas of research, such as an executive order by President Joe Biden that limits the sharing of American expertise in certain fields.

China has achieved remarkable progress in some fields, such as batteries, telecommunications and nanoscience, which can complement America's strengths. China also has a large and diverse population, which can offer valuable data for research in areas such as health, education and social sciences. By collaborating with Chinese scientists, American researchers can gain insights and opportunities that they would otherwise miss.

Some US politicians have raised concerns over China's methods in conducting ethical research. If this is a major point of contention, America can further influence China's approach in such matters. Under the influence of the US, China has already adopted Institutional Review Boards, which oversee research that involves human subjects. As innovation in artificial

intelligence and other frontier areas poses new ethical challenges, America can use its collaboration with China to guide its approach towards more responsible practices if it feels this is necessary.

The history of scientific collaboration among rival great powers during the cold war demonstrates that such an approach can bring mutual benefits and advance humanity's progress. For instance, joint research by American and Soviet scientists led to the detection of gravitational waves, the eradication of smallpox and high energy density physics that resulted in over 400 joint scientific publications and presentations. Research between US and Chinese scientists has even been more fruitful in areas such as cancer trials, mapping the Milky Way, quantum technology, biology, medicine and physics. The US-China partnership brings strength in numbers to global science projects which is essential if we are going to face joint challenges such as climate change.

Rather than adopting a new model of scientific isolationism, America should remember that collaboration in the lab tends to benefit everyone, including itself. It is clear that cooperation between these two powers is necessary as it helps to foster mutual trust and understanding between them, which are crucial for maintaining world peace.

Therefore, America needs to continue its scientific collaboration with China and it should renew the STA without major changes. Quitting or watering down the STA would not only harm America's scientific interests, but also damage its relations with China and its reputation as a leader of global science.

The US-China Conflict: Security vs Growth

The relationship between the US and China has undergone seismic shifts in recent years, moving from working with one another as trade partners to now each side considering the other as a major adversary. In her speech on 20 April 2023 at the John Hopkins School of Advanced International Studies, US Treasury Secretary Janet Yellen stated that the terms of engagement between the two nations has changed, alluding to the fact that the US now considers China a serious threat to its national security. It seems that forty years of bilateralism that took a lot of blood, sweat and tears to establish, is pretty much over, with growing animosity between the two spilling over into every sphere of interaction between them.

The US has tried its best to discredit China and justify its tough stance against it with accusations of unfair trade practices, intellectual property theft, corporate espionage and human rights violations. It has also imposed tariffs on hundreds of billions of dollars of Chinese goods and restricted US investment in certain Chinese sectors such as artificial intelligence and quantum computing, citing security risks. China has retaliated with its own tariffs on US exports and lowered tariffs on imports from other countries, as well as pursuing its own national security interests through its military-civilian fusion, Belt and Road Initiative, and digital sovereignty policies.

Studies by the International Monetary Fund (IMF) and the European Central Bank (ECB) have shown that the trade war has reduced global output, increased inflation and disrupted supply chains. The IMF has estimated that the formation of a US bloc and a China bloc could reduce global output by as much as 2% over the longer term. The ECB found that the trade war could boost inflation by as much as 5% in the short run and around 1% over the longer term. These effects could also have implications for monetary policy and financial stability in both advanced and emerging economies.

Interestingly, the trade war has created trade opportunities for other nations that have increased their exports to the US, China and other nations. A study led by Professor Pablo Fajgelbaum, an Economics Professor at UCLA, found that the trade war has raised global trade by 3%, as bystander countries

substituted for the products previously supplied by the US or China. The US benefits from the dollar's role as the world's dominant reserve currency, which allows it to borrow cheaply from abroad, despite increasing talks of global de-dollarization threat.

Both the US and China care about their geopolitical security and are concerned about each other's influence, power and action. They have policies that aim to protect their interests and stop their rival's influence that is leading to a dual bloc fragmentation, where countries are aligning themselves with either the US or China based on their economic and political interests. I have written previously that this is already underway under the guise of the G7 led by the US, and the BRICS led by China.

Having been a member of the World Trade Organization (WTO) panel on defining the future of trade, this precarious situation poses a serious challenge for both countries as well as the rest of the world. The US has to weigh the costs and benefits of compromising its economic interests for its security concerns. China has to balance its development goals with its security ambitions. Other countries have to navigate the changing dynamics of global trade and geopolitics. My fear is that this, alongside increased sabre rattling on both sides, will culminate in military conflict between the two nations, which will result in huge losses and devastation, thus must be avoided at all costs.

The Sino-American Technology Conflict

The technological war between China and the United States is in fact a new cold war on a new battlefield, with the prize being no less than world domination in a sector that underpins every aspect of our modern day life. I have spoken previously about this war and how America is taking drastic steps to force Chinese submission, by trying to severely disrupt Chinese access to semiconductor design, intellectual property, manufacturing technology, as well as by excluding the Chinese from important semiconductor supply networks such as the Chip 4 alliance.

The US justification of such a harsh line is that Chinese technology is controlled by the state, with technology falling under the control, not just of the state, but of the military establishment specifically. For the US this means that Chinese tech functions are in fact a Trojan horse, allowing Chinese authorities to engage in undercover espionage of other nations by providing compromised technology products that are installed globally. This was the justification for the heavy-handed tactics towards Huawei which threatened the US telecommunications industry with its advanced 5G products. The resulting spate of accusations, arrests and espionage charges which seem to be tenuous at best, are based on circumstantial evidence to limit Huawei's further encroachment on US soil.

This is a clear case of double standards as the US has adopted exactly the same approach it accuses China of, for years having a strong link between military and civilian use of technology, with many innovations spawning from the military. Notably, this includes the Internet, imaging technology, GPS tracking, radar, satellites, robots, artificial intelligence and a plethora of other technological innovations which have found their way into the public domain, all of which can be attributed to the military. It seems to be that what is fine for the US to engage is unacceptable for others. Who are we to say that tech from the US isn't laced with its own backdoors?

It is questionable how long the USA can adopt such a strategy by trying to control international networks, supply chains, other consortiums and play the blame game with China. The US is suffering from technology brain drain

with fragile leadership in technological development. Federally funded research and development has fallen to 0.7% of GDP in 2020, compared to 1.9% in 1964. According to the World Bank, China on the other hand was spending 0.89% of GDP on research and development in 2000, which shot up to 2.4% in 2020. China is also producing more STEM PhD's than the US which is fueling greater technology innovations.

The US needs more investment in technology research and development if it wants to survive the technology war. It needs more homegrown talent, greater onshore production of technology innovations, and it really needs to ramp up its game as it has fallen behind.

China however, holds vast amounts of data which gives it the upper hand in the development of AI systems which are rapidly becoming the go-to technology for all sectors, particularly with the recent public release of the ChatGPT AI application, showing the public for the first time what AI is capable of. Because China understands the weakness it has in the semiconductor sector it has already started to plug the gaps by investing heavily in domestic alternatives.

China is playing the technology long game and there is no guarantee the US will succeed if it continues with its short term assaults on the Chinese technology sector in the manner it has been doing over the previous years.

Washington and Beijing: Proactive programming based weapons arms race

The US and China's pursuit to possess proactive programming (currently AI) based weapons reflects the escalating geopolitical competition between the two superpowers. Proactive programming is one of the most transformational technologies in the modern age that provides huge potential in various areas, from healthcare to investment and transportation. It is undeniable that the role of proactive programming in military applications has also become pivotal for major world powers and in the arms race between the US and China. America's first objective is to build proactive programming based weapons, driven by the belief that China's superiority in this area could lead to a disastrous end for the US.

With the advent of proactive programming powered weapons, countries have found themselves in a race to maintain their technological advantage and protect their national security. Hence, the concept of proactive programming arms race stems from the growing recognition that the country that gains a decisive technological advantage in proactive programming driven weapons is likely to reshape the global power balance.

Thus, the US and China in particular regard proactive programming as a game changer in modern warfare that will revolutionize military capabilities, including nuclear weapons, decision making, and strategies. Each of the two countries is pushed, therefore, to achieve technological dominance to secure its interests and deter potential opponents.

While China is investing heavily in proactive programming and emerging technologies, the US regards the possibility of being outperformed in military power as a major national security concern. Fearing a future in which Beijing dominates the technology behind proactive programming based weapons; Washington feels that it is obliged to maintain its technological superiority.

Owning advanced proactive programming systems, nevertheless, may discourage opponents from initiating hostile actions and; thus, promote global security and stability. They may also enable exerting greater influence in regional and global affairs and becoming a dominant player in international politics and security.

This fierce competition between Washington and Beijing has led, of course, to increased innovation, as scientists, engineers, and defense experts find ways to integrate proactive programming in weapons systems. The quest for military supremacy is driving advances in machine learning algorithms, natural language processing, and autonomous systems, but the two countries must address the ethical implications of deploying proactive programming in warfare and develop robust work frames to ensure accountability and compliance with international humanitarian law. The pursuit to own proactive programming-based weapons promises enhanced capabilities on the battlefield, but it also raises major moral and ethical dilemmas. The automation of lethal decision-making process, the potential for unintended consequences, and the vague lines between fighters and civilians are all concerns that require careful study.

I think that the lack of clear regulations and internationally agreed standards for the military applications of proactive programming would amplify the risk of an uncontrolled arms race. In order to prevent escalating tensions and promote global stability, diplomatic efforts are necessary to create multilateral dialogues about weapons powered by proactive programming and to develop consensus-driven rules of engagement for systems that support proactive programming.

Despite the fierce competition, there is a potential for cooperation between the US and China in the field of proactive programming. Through enhancing open communication and cooperation lines, the two countries may face the common challenges such as cybersecurity, proactive programming

ethics, and climate change, collectively. The establishment of cooperative platforms may also help to build mutual confidence and reduce the potential for unintended arms race.

I stress here that it is necessary for the two global superpowers to give priority to responsible development of proactive programming, to ensure the safety and security of the weapons powered by proactive programming. Implementing robust testing, validation, and fail-safe mechanisms is essential to prevent unintended consequences and reduce the risk of interactive programming crashes or hacking by irresponsible parties.

Rapid integration of proactive programming in the defense sector may have major impacts on the workforce and employment. With more tasks being automated, jobs might be replaced and transformations will take place in the labor market. The governments of the two countries may have to face the social and economic repercussions of spreading proactive programming, unless they make early, seamless transition for the affected employees and invest in retraining programs to adapt with the changing employment scene. Only by concerted efforts can the world navigate through the arms race driven by proactive programming, while ensuring global stability and harnessing the transformative potential of proactive programming for the common good.

Lithium is Vital for a Sustainable Energy Future

Lithium plays a vital role in the batteries of the future that are essential for transitioning to a low carbon economy. With the increasing demand for energy, the need for lithium is also growing rapidly. Experts predict that by 2040 this demand could surge by more than 40 times compared to 2020 levels, with there being a global shortage in the supply of refined lithium to meet this demand.

One of the challenges lies in China's dominant position in the lithium refining industry. China has made investments in this sector over several years currently accounting for around 60% of global lithium chemical supply and producing about three quarters of all lithium ion batteries worldwide as reported by the International Energy Agency (IEA). Moreover, China controls a significant portion of global lithium reserves through direct ownership or through strategic partnerships with other nations. This concentration poses risks to other nations since it creates dependence on a single country for such a critical resource.

China's dominance in the market gives them a competitive edge with this sector expected to experience rapid growth in the future. However, there are concerns about the concentration of refining capacity in China from western nations as it raises questions about supply security and resilience. Considering these factors there is a need for increased global investment in lithium refining. Regions, like South America, Australia and Africa that possess lithium resources should focus on developing their own refining capabilities and infrastructure. Attracting investment and technology transfer would also be beneficial to diversify the supply chain and create a more balanced and competitive lithium market.

The importance of the lithium battle cannot be underestimated; China has already taken a lead. The rest of the world must make efforts to catch up by investing resources into this crucial technology that plays a vital role in our green future. As history has taught us relying on one country for a resource can jeopardize availability and sustainability. Influential voices such as those of Elon Musk call for more capacity to be built outside of China to mitigate lithium supply chain risks.

On another note, we must acknowledge that the lithium war extends beyond economics; it also has implications and considerations of environmental justice. The extraction and processing of lithium have environmental and social impacts, especially in regions where most of the world's lithium resources are located. These impacts have consequences, including the depletion and pollution of water sources the degradation of land the loss of biodiversity violations of human rights and conflicts within society.

For instance in the lithium triangle consisting of Argentina, Bolivia and Chile – which holds than half of the world's lithium reserves – mining activities consume substantial amounts of water in arid and salt rich regions. This has an impact on local communities and indigenous peoples who rely on these water sources for their livelihoods. The extraction process often involves mixing chemicals with the water used for lithium extraction, which is then disposed into evaporation ponds. There is a risk of leakage and pollution associated with these ponds.

Additionally foreign companies often dominate the lithium industry without sharing its benefits with local populations generating feelings of resentment and fueling resistance. Therefore, addressing issues related to lithium production and consumption goes beyond securing a resource; it also involves ensuring sustainability and equity.

To address these challenges effectively at a level it is necessary to invest in increased refinement techniques for lithium processing while adopting more stringent environmental and social standards for the industry. Furthermore promoting efficient usage patterns such as recycling and reusing batteries can contribute to a more sustainable approach towards lithium consumption. It is important to remember that while the focus is often on the lithium war, we should not neglect the importance of research and innovation in other battery technologies. Exploring options like sodium ion, zinc air or solid state batteries can help lessen our reliance on lithium and provide a range of affordable solutions for this expanding market.

International hypocrisy: embracing Ukraine while criminalizing Palestinian resistance

For decades, the Palestinian people have been through a long, painful struggle to free their land and exercise their right to self-determination. Despite their plight and the failure of the international community, they remain steadfast and insist on achieving their national objectives and maintaining their rights and security.

The international hypocrisy, especially by the West, which is reflected in embracing Ukraine while criminalizing the Palestinian resistance, raises critical questions about the consistency and fairness of international narrative and why one party is regarded as hero while the other is regarded as terrorist. The right to self-determination is a basic principle of the International Law and a basic human right of every people, as stipulated in numerous United Nations resolutions and international agreements. It is based on the principles of justice, equality, and respect for the dignity and rights of all individuals and communities.

The deep, long suffering of Palestinians has unfortunately been met with long silence from the international community in many cases. This silence helped the occupying entity to evade punishment. Meanwhile, Palestinians have been subject to displacement, occupation, economic hardships, movement restrictions, and violence, but amid all that they remain determined to protect their rights of self-determination, independence, and normal life. It is unfortunate that the international community is reluctant to hold Israel accountable for its actions and has allowed it to continue to evade punishment. Despite all that, Palestinians have developed their ability to remain steadfast and self-reliant. Historically, they used to rely on the Arab military support to defend their cause, but they managed overtime to depend on themselves in their struggle for self-determination.

Palestinians' struggle for justice, dignity, and independence has fostered a deep sense of adaptation and resilience in them in the face of the many challenges they have been facing throughout their history. The process of

gaining immunity in this context reflects the ability of this resistant people to navigate the complex geopolitical terrain in which they find themselves, to become more efficient in defending their land, rights, and interests in the manner that suits them and by depending on themselves.

There is no doubt that those who monitor the current developments realize the gravity of the current situation. It is impossible for this situation to continue endlessly. The international community has a moral responsibility towards all of this.

The plight of Palestinians is a long lasting tragedy that requires urgent attention and decisive action. A just and lasting peace that is free of occupation must be achieved, based on implementation of the International Law. It is necessary that the international community act with conviction and determination to give life to this vision. This requires enforcing the International Law, dismantling the illegal settlements, and putting an end to the actions and practices that perpetuate human suffering.

Only through these concerted efforts can the international community fulfill its commitment to preserving Palestinian identity and the principles of justice, equality, and self-determination, ensuring that the promise of a just, lasting peace becomes a reality for the Palestinian people, Palestine, and the entire region.

Economic Inequality

The increasing concern about economic inequality emerges as a central issue affecting the sustainability of development and the stability of societies. Reducing these gaps requires the adoption of effective economic and social policies aimed at improving access and empowerment for all, to achieve a more equitable distribution of opportunities and resources within the community.

I am aware that there is no superpower capable of making the poor in the world rich overnight while simultaneously increasing the wealth of the already rich. However, I also recognize that ‘economic inequality’ is directly responsible for reducing life expectancy, a weakened education system, and resting political instability. It also likely plays a role in rising suicide rates linked to mental health issues and increasing crime rates.

Economic inequality” refers to the disparities in the economic distribution of income and wealth among individuals and groups within a society. These disparities include differences in income, wealth, economic opportunities, and even access to essential services and resources like education and healthcare. Its effects are evident in various economic factors such as employment, wages, investments, taxes, and economic policies.

I can almost assert that most cases of unemployment in the world are caused by ‘economic inequality,’ primarily due to limited access to economic opportunities. In societies with high inequality, accessing economic opportunities and good jobs can be challenging for individuals from the lower economic classes, leading to increased unemployment rates among these groups. In such societies, there can be significant disparities in wage levels among individuals. This can put pressure on low-income wages and undermine working conditions. The effects are also seen in trends of job relocation to low-cost areas, which further increases negative psychological

and social impacts, resulting in heightened feelings of frustration, psychological stress, and an increase in crime and instability.

Here, I would like to highlight the impact of ‘economic inequality’ on the economy and economic sustainability. This is manifested in reduced economic growth rates, decreased investment, increased social unrest, and fewer opportunities for learning and development, along with a decline in ambition and initiative. Inequality can diminish the motivation to work hard and innovate, as individuals may feel less capable of achieving economic success compared to those from higher social classes.

Combating economic inequality is a primary objective for many governments and international organizations worldwide. This can be tackled through various policies and measures, such as creating strong investments in education that empower individuals and provide equal opportunities for all, alongside promoting and effectively implementing fair tax policies to reduce wealth distribution disparities. Investment should also be directed towards key sectors that play an important role in achieving sustainable development, such as agricultural and industrial industries. Enhancing transparency and combating corruption contribute to a more equitable distribution of wealth. Additionally, it is crucial to take into account the need to attract foreign direct investments that stimulate economic growth and create new job opportunities, along with developing infrastructure.

The Clouds of Economic Weakness are Approaching

In light of the current successive crises that the world is experiencing, which are intensifying and tightening their grip on the world, I can only recall what the legendary investor Warren Buffett said: “Only when the tide goes out you do discover who’s been swimming naked.” In simpler terms, the downturn can reveal the risks we have taken.

We are in a suffocating economic period that casts its shadows over the entire world, summarized by rising prices, a shortage of purchasing power, and consecutive losses in corporate revenues due to inflation, which has negatively influenced the halting or freezing of hiring, followed by rising unemployment. It is no surprise that investors are reluctant to inject their funds into the market during such times, opting instead to freeze their capital in banks in anticipation of any upcoming surprises amidst the troubling economic conditions, to the extent that investors now refer to it as the “Anxiety Economy.”

The “Anxiety Economy” no longer applies solely to investors but it has transcended to include governments and nations, impoverished countries that struggle as much as possible to live in the moment, in the absence of plans because they are uncertain of the future and its ongoing and increasing fluctuations.

Anxiety” has clouded our economic behavior at present, and doubts have become the only dominant thought in any investable project, leading to a situation where incoming money does not return. I often wonder about the fate of commercial businesses such as “restaurants,” malls, fashion, and many consumable services, which typically receive the hardest hit during a fragile economy. Therefore, as the clouds of economic anxiety approach, it is necessary to focus on “high-demand businesses,” or “recession-proof businesses,” as they are the only secret to survival in the face of current harsh conditions and are the most resilient against economic crises.

What the world has recently witnessed regarding rising interest rates will not stop there; fears escalate every day due to inflation and the deterioration of economic conditions. This is also what Jamie Dimon, the CEO of JPMorgan, warned about, stating that “if the Federal Reserve is forced to continue raising interest rates to curb inflation, it will be painful.” He also warned that further hikes in interest rates would be “more painful” and “this will be the trend that will come to pass.”

In conclusion, we should not enter into “a guessing game”; because the clouds still obscure the vision, and the grim data leads to difficulties in prediction, along with rapid surprises and an environment of uncertainty that have driven many towards accepting the realities of recession.

In a previous article titled “Facing the Greatest Global Depression in History,” I mentioned a set of proposals that could help mitigate the severity of economic recession. I reiterate it is necessary to offer alternative proposals away from imposing new taxes that hinder the required recovery. This includes eliminating taxes on new investment projects in agriculture and pharmaceuticals, as well as on all viable industries, and ensuring necessary protections to achieve self-sufficiency in the state. Additionally, there is a need to prioritize the transition to a digital state, including in-service trade, education (especially digital education), and digital government, along with the comprehensive and effective updating and development of education and digital interaction laws. Alongside this, it is essential to adopt growth stimulus policies in national output and support profitability in companies to create more job opportunities and expand the tax base, thereby achieving greater tax revenue for the state (without resorting to direct tax increases). Not to mention the importance of adopting transparency and involving the economic sector and citizens in decision-making. The golden rule for confronting economic recession remains the focus on essential needs with valuable and reasonably priced services.

Smart Agriculture: Sustainability and Resilience in the Face of Climate Change

The need for innovative and more efficient agricultural techniques has become more urgent than ever before, and the importance of this endeavour cannot be overstated. It is not only about feeding the world's population, but also about protecting our environment and enhancing global food security for future generations.

With the projected population figure reaching nearly 10 billion people by 2050, there is a persistent and immense demand for more food. However, this growing population does not only require more food, but also needs more diverse and nutrient-rich food systems. To meet these demands, we need to rethink our agricultural systems and embrace innovation and sustainable practices.

Farmers, who form the backbone of our food production system, must adapt to these evolving conditions by harnessing the power of knowledge and digital technology to ensure food security in the face of an uncertain future. The current levels of food production are facing an unprecedented challenge to keep up with the continuous growth of the world's population. The task at hand is not only about increasing food quantity but also about enhancing quality and ensuring that the produced food is nutritious, safe, and environmentally sustainable. Achieving this goal will require concerted efforts to enhance crop productivity, reduce post-harvest losses, improve food distribution and access, and minimize the environmental footprint of agriculture.

I completely agree that the global challenge and urgency of food production make it clear that the only viable solution lies in adopting data-driven smart agriculture. Combining traditional agricultural wisdom with modern technology, supported by data analytics and interactive programming known as "Artificial Intelligence," has the potential to revolutionize agricultural practices worldwide. However, to achieve this transformation on a global scale, it is necessary to simplify the cost, accessibility, and availability of these processes for everyone.

One of the key advantages of smart agriculture technologies is the ability to monitor equipment efficacy, ensuring that machines operate at maximum capacity. This not only conserves resources and reduces operating costs but also minimizes the environmental footprint of agricultural practices.

Additionally, smart farming systems provide real-time information on crop growth and development, enabling farmers to make timely decisions regarding irrigation, fertilization, and pest control. These technologies offer valuable insights into soil moisture levels, which are crucial for effectively managing water resources, especially in drought-prone areas.

I believe that imbuing a democratic character into smart agricultural technology is not just a goal; it is a necessity. This technology should not remain limited to advanced countries or large agricultural corporations but should permeate every layer of the global agricultural fabric. Smallholder farmers in developing nations, who constitute a significant proportion of the global agricultural workforce, should have access to the necessary tools and knowledge to enhance their productivity and adapt to changing environmental conditions. Inclusive adoption of smart agriculture is vital to ensure food security and sustainability for the continuously growing population worldwide.

Making these technologies affordable and accessible to farmers at all levels, from subsistence farmers in remote villages to large-scale operations, will require cooperative efforts from governments, international organizations, and the private sector. I don't just mean providing tools; it also involves capacity building, education, and technical support. As we look to the future, we must realize that feeding additional billions of people in a sustainable and equitable manner can only be achieved through the collective global adoption of smart agriculture. This effort will contribute to sustainability and resilience in the face of climate change.

Fossil Fuel Debt - A New Form of Colonialism

The global climate change agenda needs more attention as we are clearly lagging in our net-zero targets. Freak weather events are now becoming commonplace with numerous natural disasters and instability in the weather systems across the World caused by global warming.

UN Secretary General Antonio Guterres has starkly warned, in a press conference on July 23 2023 in New York, that “The era of global warming has ended; the era of global boiling has arrived”. As the Chairman of the Consortium for Sustainable Urbanization in New York (CSU), I have been calling for all stakeholders to take real action for many years, and for more assistance to be given to poorer countries to provide sustainable energy alternatives, being the most vulnerable link in the climate change equation.

A recent report from the entity ‘Debt Justice’ in the UK, shows that democratic advanced nations in the West have been deliberately trapping poorer countries into fossil fuel debt, forcing them to continually invest in fossil fuel projects to make repayments on loans from richer nations. High levels of fossil fuel debt are a clear barrier to these countries adopting green energy solutions as they simply cannot break out of the cycle of debt repayment. These are the typically global south nations whose debt has increased 150% since 2011, spending five times more on debt repayment than on the climate crisis.

This is a new form of colonialism that must end if we are ever going to adequately address the climate crisis with the seriousness it deserves. There are examples where loans have been taken by countries from western banks based on projections of earnings from gas field discoveries. In some instances, country bailouts have been in the form of loans to be repaid through future fossil fuel revenues. This is ludicrous and a clear attempt at profiteering by advanced nations that claim to be purveyors of sustainable energy and net-zero.

Clearly, such mounting debt has a domino effect on the other policies of these countries and ends up impacting the lives of citizens in a negative manner. The main goal becomes to earn revenues to pay creditors, which means that any green agenda is left by the wayside, stripping away any sovereignty the country might have to transition away from fossil fuels. Such loans have become a tool to impose control over these nations; a practice that needs to stop.

I would even go as far as saying that such loans should be cancelled to allow these countries to focus on sustainable energy alternatives as they are way behind the curve, as the cost of maintaining the status quo is much greater in the long run. We must understand that climate change is a joint responsibility and only works if we all pull together and work towards making this happen.

Our climates and weather systems are shared environments, meaning that what everyone does has an effect on it. We cannot afford for some nations to go green and for others to remain fossil fuel dependent due to the greed of certain nations and banks.

Western nations have a long, bloody history of extracting economic resources from foreign lands for their own benefit. It is about time they turn serious by helping these nations by cancelling any debt and by helping their journey to build sustainable energy infrastructures, which may heal the huge damage done to our environment and build a cleaner World for us and our children.

The parallel Economy

In Modern societies, the demand is increasing to develop strategic studies that are considered as integrated reference to submit proposals, projects, methods, Solutions, and behaviors that contribute to finding practical foundations, on which the private sector can rely on and pursue its means with full confidence, led clearly and firmly according to a chart that paves through accredited studies and research institutions, to innovate the means and methods for success paths.

There is no doubt that these reliable institutions did not come out of nowhere, but from many years of experiences that have certainly provided the rules of sound experience, and they have plans to support facilities of various fields, whether in the field of agriculture, industry, trade, housing or even art. Therefore, each of its vital fields needs, after determination, to develop the basic theory under which the pillars of the initial project are established, and here the competent institutions serve as a guaranteed partner for success, as they have an outstanding ability to commit to keeping up with work, whatever it is. The specialized consulting institution here provides advice and guidance to ensure proficiency in managing this or that project, since it has the ability to secure capital immunity as a top priority, and then innovates the methodologies that guarantee the capital multiplication. The next stage is the attention required to expand the work place, and then activate the vital orbit by opening branches and departments by introducing elements close to the employers, especially the assets to complete on those who revolve in its family Orbit, in which the disagreement and harm decreases, and the scope of trust, loyalty and solidarity increases to preserve the interest of work and secure climates conducive to development, spread, fame, dedication and success.

I would like to emphasis here that all of the above cannot be done away from the knowledge and moral “financing” institutions, through the experience of these institutions, and the scientific and practical foundations they have to find the possibility of finding profits first, then finding the multiplication of profit, then attracting the labor force for employment, then searching for pillars of sustainability by avoiding all financial slippage that can lead to collapse in one way or another. Here also comes the role of advisory support institutions, which must be the axis around which work revolves at an accelerated pace that keeps pace with the market movement, relying

on the principles of the tide and root, especially with the public sector which is considered the difficult competitor. What distinguishes it is that the private sector is doubly afraid because it depends on self-financing in capital. As for the public sector, its funding comes from the state treasury, which usually lacks research and interest in obtaining the best results for success and profit, because these results are not associated with specific individuals such as family or even a team, but rather the trait of negligence, mismanagement and waste prevails, which in all these cases necessitate falling into the trap of corruption. Therefore, we see that most of the public sector complains of the lack of profits, and failure to achieve optimum levels of success. This is because this sector simply does not follow the intellectual, scientific and theoretical methods necessary to complete tasks and excel. It avoids consulting the above-mentioned institutions. The public sector is full of loopholes and chaos. This is not in the interest of anyone in the absence of effective oversight, accountability and scientific evaluation. In conclusion, it can be said that the private sector represents almost half of the society in stimulating the economic wheel. It is often able to provide the basics, luxuries and most of the other details for the society, as it performs its role faithfully to itself, its family scope and its extensive relationships. In contrast, the public sector employee who often finds himself either indifferent or uninterested, because in all cases this employee will receive a limited salary whether he works hard or not, there is no incentive or motivation, only the routine and more routine that kills ambition and discourages success.

Returning to the private sector, it is important to emphasize that it would not have known the path to success and profit without the development programs that put the investors on the path to success. This is the principle that we have adopted in Abu Ghazaleh Global Group for more than four decades of success, continuity and fame. Most importantly, our good reputations among all and everyone, because we are distinguished by our confidence and we always strive to provide the best in various fields, whether consulting, electronic or accounting audit, which I have not abandoned despite the multiplicity of areas in which Abu Ghazaleh Global Group is known. Talal Abu Ghazaleh Global Group has earned the honor in the eyes of all those who have had pioneering consulting or investing relations in the Middle East, and I say it proudly, I hope that all private sector companies receive the same level of attention and support that Abu Ghazaleh Global Group has received. This is all due to the relentless ambition, untiring commitment, unwavering focus and the restless education.

Determinants of the effectiveness of public spending policy on economic growth

Public spending is a key economic policy employed by governments to promote economic stability and achieve sustainable development. Its impact is primarily felt in the components of gross domestic product, leading to significant changes in productive capacity and aggregate demand. This makes public spending an essential tool for attaining economic development objectives.

The effectiveness of public spending is closely tied to enhancing the productive capacity of society. Investment spending aids in the creation of fixed capital, thereby improving society's ability to produce goods and services more efficiently. Furthermore, consumer spending plays a crucial role in stimulating production and energizing various sectors.

The significance of aggregate demand in achieving sustainable economic growth is clear, as public spending plays a crucial role in boosting aggregate demand. This increase, in turn, drives higher levels of production and employment, illustrating the impact of government expenditure on stimulating the economy and enhancing long-term economic performance. I would like to highlight the Barro model (1990) and the optimal size of government intervention in the economy. The Barro model (1990) is one of the theoretical frameworks that help explain the impact of public spending on economic growth, emphasizing the critical need to determine the level of government intervention in a way that promotes balance and maximizes benefits. This model is based on the idea that public spending becomes effective when its marginal productivity is equal to the change in economic output. The concept of marginal productivity refers to the increase in output resulting from an increase in public spending. The model suggests that the marginal productivity of public expenditure is the criterion used to assess its effectiveness in impacting the economy.

The model suggests the necessity of achieving a balance between public spending and changes in production. When the marginal productivity of public spending equals the change in production, government intervention is effective. However, if this balance is not achieved, public spending may lead to distortions in economic equilibrium. The model emphasizes the importance of determining the level of public expenditure in a measured manner; therefore, the government must exercise caution in directing spending to ensure it positively impacts growth without causing economic disruptions. This requires a careful study of the expected economic effects and adjusting the level of spending accordingly.

Therefore, it is essential to utilize public spending in a strategic and balanced manner; this enables governments to maximize the economic benefits of their expenditures, thereby promoting sustainable growth and improving welfare levels. The interaction between public spending, productive capacity, and aggregate demand underscores the importance of carefully directing government policies to ensure a balance between economic stability and sustainable borrowing. Consequently, governments should strive to organize public spending in a way that reflects the needs of society and fosters long-term economic development.

The Role of Banks in Supporting National Development Public and Private Banks, Competition or Integration

The discourse surrounding the role and prospects of private banks continues to evoke significant debate. It is important to stress that the public and private sectors should not be seen in isolation; they are not competitors vying against one another but can function in a complementary manner. Private banks, like their public counterparts, are national institutions that should operate on principles deemed equal and similar, under the supervision and regulation of a responsible governmental framework grounded in national decisions and legislation designed to serve the national economy while generating profits for their stakeholders.

This matter should receive substantial attention from all stakeholders and officials, as banks play a critical role in financing projects and facilitating development. Consequently, it is vital to support, encourage, and enhance this essential instrument in the financing process. This is especially pertinent in light of the ongoing development and modernization initiatives in Arab countries, which necessitate sustained support to achieve the desired outcomes.

In our future vision for banking, encompassing both public and private sectors (which can be complementary), we identify extensive opportunities and significant areas for providing new and innovative services. To enhance current banking performance, we must concentrate on available opportunities while improving efficiency and enhancing our roles.

Achieving this necessitates actions such as expediting the issuance of bonds and permits to enable banks to offer long-term financing for investment projects through commercial bonds and government permits. Additionally, it is essential to develop a banking system that incorporates the concept of “Private Banking” for managing and investing clients’ financial portfolios in national companies.

There is also a pressing need to establish several companies dedicated to mortgage operations to alleviate financial burdens and ensure borrowers receive a defined interest rate. Furthermore, gradually liberalizing the exchange rate will be crucial in attracting existing savings from abroad and directing them into national investments. The establishment of a venture capital fund would also provide banks with a designated opportunity to supply venture capital for financing new projects.

Undoubtedly, banks—whether public or private—serve as a vital element in national economies, playing a fundamental role in achieving economic balance and enhancing development processes. The support provided by banks to the national economy is vital for ensuring continuous development and promoting financial stability. Their role is essential in maintaining the stability of financial systems and stimulating economic growth. Therefore, banks must adopt innovative approaches and modern technologies to ensure the effective delivery of their services, thus contributing to the establishment of a sustainable and growth-oriented national economy.

In conclusion, we affirm that all countries possess the potential to achieve sustainable development, supported by their robust economies and ample financial reserves. Ongoing support for this vital sector is crucial to ensure the attainment of development goals and stability within nations.

Blockchain Technology: Redefining Relationships between Individuals and Organizations

Recently, we have frequently heard the term “impressive technology” as a description of blockchain technology. Since its emergence, blockchain has promised to bring about a major transformation in how individuals and institutions interact in the digital world. This technology has now become a catalyst for achieving extraordinary changes in the way individuals and organizations operate, providing remarkable opportunities for improvement and advancement in various fields.

Blockchain is a decentralized system that relies on encryption technologies to store and secure information, which leads to a radical change in economic and social interactions. The promises of this technology for significant changes and transformations are evident in its contribution to increased transparency and trust, providing a permanent and decentralized record of transactions. This enhances levels of transparency and trust between parties, helping individuals and organizations easily verify information and data, thereby reducing risks and promoting integrity. Alongside its clear impact on simplifying processes and accelerating digital transformation in financial, logistical, and even governmental transactions, this speed contributes to improving efficiency and delivering better services

Moreover, there has been a change in financing patterns and the impact of this technology on banks. New and decentralized financing models have emerged, allowing individuals to participate in borrowing and investing directly without the need for intermediaries. These models have also contributed to providing solutions to privacy issues by offering effective encryption methods and self-governance for individuals over their data, enabling them to determine who can access their information and how it can be used.

Blockchain technology is considered a catalyst for achieving extraordinary changes in the way individuals and institutions interact by enabling transactions between individuals and institutions without the need for a traditional intermediary. This transformation reduces the cost and time

involved in financial transfers and commercial transactions, thereby contributing to more efficient and effective economic exchanges.

Additionally, blockchain enhances transparency and builds trust among stakeholders. All transactions are recorded on the blockchain in a permanent and tamper-proof manner, providing greater credibility for all parties and contributing to increased trust in business and institutional relationships.

Blockchain technology plays a vital role in bringing about a radical change in the way individuals and institutions interact with each other, thereby enhancing collaboration and trust in the era of technological innovation. In this regard, we urge all institutions to seriously consider adopting a blockchain system for its future role in the business world.

This decentralized technology is not just a new technique; it is the key to achieving a fundamental transformation in how businesses are organized and how information is exchanged, and an innovative means to enhance digital transformation and improve corporate performance. We encourage all institutions to engage in this groundbreaking development and take advantage of its benefits to build a more efficient and inclusive future.

The resistance: Dignity and Freedom Struggle in The Face of Occupation Oppression The Right to Confront Occupation

In Gaza, the concept of resistance has manifested itself as a powerful and multifaceted phenomenon, distinct from fields of terrorism or violence that are often misunderstood in our region. It is a beacon of legitimate assertion—a fundamental right of humanity, exercised by nations across multiple regions and eras. In its essence, it represents a collective response to occupation and aggression. Resistance is a fundamental force that transcends borders and eras. This precise and rooted principle has been woven into many social conflicts and emerged as a distinctive feature of the human experience.

In The complex occupation narrative, the entity has often sought to present itself as a legitimate state, but the stark reality, as clear as midday sun has exposed them for who they are: mere occupying authorities that exercise control through tyranny, torture, and deprivation. Behind the façade of governance supported by western collusion, a stark truth has been revealed. A system of apartheid based on oppression, and the suffocating of collective dreams.

The term “War”, that was casually mentioned in speeches, concealed the deep nature of the conflict. In essence, it was a war of liberation. Far from the superficial connotations, it was an emotional struggle aimed at restoring dignity and securing freedom.

It is essential to separate resistance from the connotations of terrorism and violence, because it represents a supreme cause— an ethical and principled stance against oppression and the violation of fundamental human rights. Throughout history, societies have used the right of resistance as a mean to preserve their dignity, maintain their independence, and restore their homeland from occupation. This historical series reveals resistance not as an erratic act of defiance, but as resounding echo for the collective will to confront injustice, and secure fundamental freedoms that define the essence of human existence.

The invincible will to resist occupation not only defines the past but continues to shape the course of humanity's pursuit for freedom and self-determination. Throughout history, societies under the yoke of heavy occupation have consistently sought empowerment through resistance. This resilient response, born out of the innate human desire for freedom and self-determination, has become a common thread woven through the history of many countries grappling with the arrogance of apartheid regimes.

The important pending question is: what is the path of the political settlement, and what is the outcome of these many decades of negotiations.?? A question that does not reflect the diplomatic deliberations tangible results, but the essence of resistance imbedded in the collective consciousness pushes any negotiations or settlements forward to ensure a just and equitable solution.

The history is an indelible testimony to the unwavering spirit of resistance that emerges whenever a land falls under occupation. A peek through the chronicles of time reveals a constant pattern, in which all residents of occupied territories rose up in defiance, deployed all resources and made enormous sacrifices in pursuit of liberation. The history bears witness to notable examples of resistance from the French expedition of Egypt, and the occupation of Algeria to the War of the Million Martyrs, and even further, the French resistance against the German occupier resonates as evidence of the global impulse to resist oppression.

AI Will Create Abundant Work Opportunities

Although Artificial Intelligence (ProPro) is certainly one of the most powerful and disruptive technologies of our time, it still raises some serious questions about the future of work forces all around. One of the most common fears about AI is that it will replace human workers and create mass unemployment. This fear is based on the assumption that there is a fixed amount of work to be done in the economy, and that if machines can do some of it faster and cheaper than humans, then there will be less work left for humans. This is known as the “lump of labour” fallacy, and it has been debunked by economists for centuries.

The reality is that economies are dynamic and constantly evolving. Although technological change does actually cancel some jobs, it creates new ones. For example, when the Industrial Revolution replaced manual labor with machines, it also created new jobs in factories, railways, mines, and other sectors. Similarly, when computers replaced many clerical workers in the 20th century, they also created new jobs in software, IT, finance, media, and other sectors.

The same logic applies to AI. While AI may automate some tasks that are currently done by humans, it will also create new tasks that require human input, such as designing, programming, supervising, maintaining, and improving AI systems. It will also create new sectors and industries that rely on AI, such as data analytics, biotechnology, robotics, cybersecurity, and more. According to a report by Goldman Sachs, AI could replace the equivalent of 300 million full-time jobs by 2030, but it could also create 400 million new jobs in the same period.

Moreover, technological change does not only affect the supply of labor, but also the demand for it. As machines become more productive and efficient, they lower the cost of goods and services, which increases the purchasing power of consumers. This in turn stimulates demand for more goods and services, which creates more jobs for workers. For example, when cars replaced horses as the main mode of transportation in the early 20th century, they not only created new jobs in car manufacturing and related industries, but also increased demand for travel, tourism, hospitality, entertainment, and other industries.

Therefore, we should not fear that AI will cause mass unemployment in the foreseeable future. Instead, we should expect that AI will create new jobs and increase demand for workers. However, this does not mean that everyone will benefit equally from AI or that there will be no challenges or disruptions along the way.

AI will change the nature of work and the skills required for it. One thing for sure is that workers with AI skills will replace those that do not have such skills. The person that has the skills to harness such technology will out do, and be more valued than the person that does not.

A working paper called ‘Generative AI and Jobs’ published on 21 August 2023 by the United Nations International Labor Organization (ILO), assessed the effect it will have on occupations, and it supports the conclusion that it will complement and enhance most jobs rather than replace humans. This backs what I have been saying for years. The report says:

“As a result, the most important impact of the technology is likely to be of augmenting work – automating some tasks within an occupation while leaving time for other duties – as opposed to fully automating occupations.” I see many specialties becoming heavily reliant on AI skills, particularly the financial auditing profession, as companies employ more AI based technology which will make it impossible to perform traditional manual audits with any degree of accuracy.

I call on governments to adopt proactive policies and support, to aid consultative transitions; engage in social dialogue and pass regulation to ensure quality employment, reskilling and upskilling for all. This will aid the management of the resulting technological change that this innovation is bringing to all sectors of society.

TAG.Global has a range of AI (ProPro) Services. For more information, please contact our Director Dr. Fadia Souliman (email: fsouliman@tag-consultants.com)

The UAE COP28 Summit - Conclusions and Reflections

The COP28 conference had convened in Dubai from during November 6 – 17, 2023, with over 200 countries and numerous stakeholders participating to accelerate efforts for limiting global warming to 1.5°C as outlined in the Paris Agreement. The summit's significance relates to the fact that it was the first of its kind to be held in the Middle East, a vulnerable region to climate change consequences such as water scarcity, heat stress and desertification. The outcomes of the summit reflects both the nature of the climate crisis and the complexity of finding solutions. A landmark achievement was that countries worldwide agreed to transit out of fossil fuels for the first time after 28 years of international climate negotiations. Additionally there was a commitment towards phasing out fossil fuel subsidies while providing support for workers and communities affected by this transition.

A new financial initiative was established at the Summit to address climate change losses and damages, to raise \$100 billion by 2025 for helping developing countries, island nations and countries I need, that are most vulnerable to the impacts of climate change; countries which have long advocated for this fund.

In an another move towards sustainability, 119 countries representing 80% of energy demand, pledged to triple their renewable energy sources by 2030. The aim is to expedite the adoption of energy technologies, like power, wind energy and hydroelectricity.

Additionally, a global effort was announced with 40 countries committing to phase out hydrofluorocarbons (HFCs) by 2030 - a greenhouse gas commonly used in refrigeration systems and air conditioning units.

As the Chair of the Consortium for Urbanization in New York (CSU), I cannot stress enough the significance of fulfilling climate change obligations. I would also highly encourage stakeholders to revisit the detailed report I developed in 1999 called 'Accounting and Financial Reporting for Environmental Costs and Liabilities' to facilitate better corporate financial environmental reporting, at the request of the then UN Secretary General Mr. Kofi Annan.

This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and International Standards of Accounting and Reporting (UNISAR), which I also chaired.

The Impact of Foreign Investment on Economic Development

Direct investments play a crucial role in countries' economic development processes, whether developed or developing. Capital flows, in the form of local and international investments, are vital pillars supporting economic growth and ensuring sustainability. Consequently, many countries have focused on formulating comprehensive strategies to attract foreign investment in various forms, enhance exports, and support national products to strengthen their presence in international markets.

In light of global economic liberalization and the growing scale of production and trade, most countries have increasingly sought to host and attract foreign direct investment as an essential component of their economic development strategies. This trend has contributed to a shift towards market economies and economic integration, thereby elevating the significance and role of foreign direct investments in the global economy.

In recent years, the significance of foreign direct investment has increased, becoming one of the key sources of financing for developing countries, particularly amidst rising external debt levels. This is evident in the substantial impact these investments have on promoting economic growth, creating job opportunities, providing advanced technology, enhancing international trade, developing infrastructure, and fostering economic sustainability.

Conversely, the local financing gap constitutes a significant challenge for developing countries, as the limited availability of domestic savings is inadequate to meet the funding requirements for national investments. This situation creates an ongoing necessity to attract foreign capital, whether through direct or indirect investments.

The history of economics reveals significant differences in countries' capacities to attract foreign direct investment, highlighting the crucial role of economic, political, and social factors in this process. Foreign investors typically undertake comprehensive analyses of the economic, political, and

social environments of host countries before making investment decisions, aiming to maximize benefits and mitigate risks.

Since the mid-20th century, developing countries have placed greater emphasis on foreign investment as a key driver of economic growth and productivity improvement. Economic globalization is fundamental in this regard, as the competition to attract foreign investment has heightened efforts to integrate into global markets. Foreign investment enables developing countries to enhance their overall productivity and address the disparity between local resources and developmental needs.

Consequently, foreign direct investment is instrumental in contributing to enhancing the competitiveness and economic integration of developing countries within the international landscape, representing a crucial element in the pursuit of sustainable development.

As the impact of foreign direct investment continues to increase, the challenge lies in effectively leveraging these investments and directing them toward maximizing benefits for sustainable development, while also enhancing the competitiveness of countries in the international economic arena.

The Importance of Greater Multilateralism in 2024

2024 will be a critical year for the future of global governance and cooperation. The world is facing multiple crises and power shifts that require simultaneous and united responses, but the existing multilateral system is struggling to cope with the complexity and urgency of challenges that are interconnected and interdependent, and cannot be solved in isolation or by unilateral actions. They require simultaneous and united responses from the international community, based on the principles of solidarity, cooperation, and multilateralism.

However, the existing multilateral system is not fit for this purpose, as it suffers from a lack of legitimacy, coherence, efficiency, and accountability. The system is also fragmented and siloed, with different institutions and actors working in parallel or in competition, rather than in synergy and partnership. Crises and conflicts do not only undermine the security and stability of the world, but also erode trust and confidence in the multilateral system and its values.

Having been a Member of the Bretton Woods Committee and a Member of the World Trade Organization (WTO) Panel on Defining the Future of Trade, I wholeheartedly agree with recommendations and actions for improving the effectiveness and inclusiveness of global governance published by the UN High-Level Advisory Board on Effective Multilateralism. These include:

- From power politics to shared responsibility: Developing a more cooperative culture between countries with inclusive and accountable governance structures.
- From silos to networks: Working in complementary collaboration across sectors, domains, and levels of governance, with further coordination and integration of global, regional, and national institutions and mechanisms.

- From competition to cooperation: Ensuring equitable and sustainable management and sharing of global public goods and resources, and more human rights and protection of all people who depend on them.
- From reaction to prevention: Focusing on anticipating and mitigating the risks and threats that endanger peace, security, and prosperity of the world, with more support and assistance for the most vulnerable and affected groups and regions.
- From exclusion to inclusion: Better participation and representation of all stakeholders and groups in the global governance processes and outcomes, especially the women, the youth, the indigenous peoples, the minorities, and the persons with disabilities.
- From measurement to impact: Employing an evidence-based and adaptive system and methodology of measuring and monitoring the progress and impact of the global governance actions and initiatives.

In a world that is becoming more fragmented and where trust is eroding by the day, it is essential for nations to focus on developing rich, multilateral relations now more than ever before to address challenges facing us all.

Technology Trends to Watch in 2024

The technology landscape is constantly evolving and changing, bringing new opportunities and challenges for individuals, businesses, and governments. As we enter the year 2024, here are some of the top tech trends that will shape the future and are essential to build capacity in, and for, governments to pay proper attention to, as the landscape is rapidly changing.

Generative AI (ProPro) has proved to be a game changer in 2023 and will continue to mature and advance, providing greater functionality and bringing AI technology to the masses as we move into 2024. It will continue to unleash human creativity and further innovation, as well as help automate tasks and processes, being the basis on which future technologies will be developed, helping to catapult society into a new dimension of digital excellence in all spheres and sectors.

Cybersecurity is becoming more important and challenging as the digital world becomes more interconnected and complex. Cyber threats have become more sophisticated and frequent and much needs to be done to build further capacity and defense in this important area, as data has become an invaluable asset in our digital existence.

Climate change matters have become highly important and the use of green technology will feature prominently in 2024, including developing and using technology that is environmentally friendly, sustainable, and efficient. Green technology is essential for tackling global challenges such as pollution, and resource depletion, as well as for creating a cleaner and greener future for humanity.

With the explosive growth of internet adoption globally, 5G will become more mainstream by offering faster speed, lower latency, higher capacity, and better reliability than the previous generations. 5G is expected to enable and enhance various applications and use cases, such as Internet

of Things (IoT), Augmented Reality (AR) and Virtual Reality (VR), and smart cities, helping to provide the bandwidth needed to power technology implementations well into the future.

Quantum computing is a new paradigm of computing that leverages the principles and phenomena of quantum physics to perform certain tasks and calculations that are intractable or impossible for classical computers, such as cryptography, optimization, or simulation. This will enable new breakthroughs in science, technology and medicine and more, as computing power will multiply exponentially to process vast quantities of data and perform many millions of calculations per second that simply is not possible using traditional computing technology. The year 2024 will see more breakthroughs in quantum computing which will be important milestones in the maturing of this technology.

Robotics will see an exponential increase as engineering, 5G, IoT and AI mature and merge to develop more sophisticated robotic functionalities to perform tasks and actions in a range of sectors in a safe and rapid manner. There have already been great strides made in developing lifelike robots that will continue to develop in 2024 and come into the mainstream.

These are some of the top tech trends that will shape the global technology landscape in 2024. By staying informed and prepared, we can leverage these trends to create a better and brighter future for ourselves and the world at large.

The Necessity for Developing Interactive Programing Policies in the Arab World

The interactive programming known as “Artificial Intelligence” has left an indelible mark in cognitive, political, and institutional domains. It was necessary to understand the challenges and opportunities that interactive programming presents for policymakers, institutions, and individuals alike. This includes aspects ranging from automated decision-making processes to ethical considerations, all aimed at fostering a future where technology aligns harmoniously with the values that define our societies.

As the author of the recently published first book exploring the world of “Interactive Programming” in the context of Artificial Intelligence, my goal was to present a comprehensive vision of this advanced concept. By exploring interactive programming, my aim is to provide readers with a precise understanding of its optimal use, while enhancing awareness of the strengths and weaknesses inherent in this technology. I made an effort to identify these limitations and distilled my experience to facilitate a profound understanding of the challenges inherent in these dynamic technologies

Simply put, the concept of interactive programming revolves around tools that simulate human cognitive functions, demonstrating the ability not only to replicate human intelligence but often surpass it in tasks requiring cognitive abilities. From deciphering complex pattern codes to swiftly and accurately processing large datasets, interactive programming has shown the capacity to exceed human capabilities, raising questions that far surpass the answers currently available.

However, as interactive programming continues to advance and integrate into various aspects of life, it becomes essential to navigate the complex scene it produces. The pursuit to achieve a balance between innovation and protecting the values that reinforce our societal identity and just causes becomes imperative.

It is clear that financial constraints play a vital role in shaping the extent to which Arab countries can actively participate in the interactive programming scene. Some governments, restricted by limited resources, may find themselves unable to make significant investments in advanced technologies. Meanwhile, other governments with stronger economies may embrace interactive programming as a strategic necessity for progress.

However, it is important to realize the need for strategies specifically designed for the Arab world, especially that a comprehensive understanding of the challenges and opportunities unique to each country can pave the way for informed policies, fostering an environment where interactive programming becomes a tool for advancement, adaptability, and sustainable development.

Unlocking National Economic Potentials Under Boycott

The economic boycott, as a form of civil resistance, provides effective means for individuals and communities to express their protest and opposition to the policies and actions implemented by the Israeli occupation, creating a broad space to exert influence on goods and supporting companies.

It is well known that economic influence through boycotting products, institutions, or entities associated with the Israeli occupation can be an effective tool in challenging injustice and brutality. It can contribute to a broader strategy aimed at influencing policy decisions, enhancing accountability, and promoting a commitment to principles of justice and equality.

The boycott reflects an increased interdependence between ethical standards, and economic and political aspects, despite occasional controversies and criticism claiming the negative effect on companies that may not have direct connections with policies, especially local branches of international brands, and can add a layer of complexity to the already complicated situation.

With all due respect to different opinions, I see the ongoing boycott against companies supporting the Zionist entity as a unique opportunity for the Arab world to rebuild its own economy and reduce the outflow of foreign currency, provided that this transformation coincides with a broader economic agenda focusing on promoting self-sufficiency and reducing dependence on imports.

Boycott also provides a significant and pivotal opportunity for the advancement of local Arab industries, and may even open promising prospects for enhancing economic relations between Arab and Islamic countries. However, governments and the private sector alike need to be prepared to harness these economic opportunities and strategically take

advantage of them to enhance economic independence and strengthen the national decision-making process.

In dealing with these opportunities and challenges, there is a paradigm shift towards economic self-reliance, emphasizing the need for wise leadership and collaborative efforts to shape a stronger and more self-sufficient economic scene in the Arab world. Enhancing both local and foreign investments is crucial for economic development and expanding the available investment opportunities.

In conclusion, I also see the necessity to enhance Arab consumer awareness about alternative options of local and Arab products, in order to encourage rational decision-making.

2024 – A Year with Many Economic Challenges

The global economic outlook for 2024 seems to be more optimistic, compared to a year ago, when there were worries about a worldwide recession. Nonetheless, it is important to proceed with caution when relying on such forecasts as they are subject to political-related uncertainties and risks. It is important not to become complacent since there are unknown factors that could catch us off guard and change the course of events.

One of the possible risks stems from the geopolitical tensions between the United States and China, which have been simmering for several years and could potentially escalate at any given moment. The trade dispute between these two countries has already had repercussions on both sides and has disrupted global supply chains. Any further escalation in this conflict could have consequences for growth and stability. Additionally, there are risks emanating from other regions across the world, such as Iran, North Korea, Taiwan, as well as potential intensification of tensions within the Middle East; the region that remains capable of triggering heightened conflicts.

Central banks have been actively reducing interest rates in response to economic slowdowns with an aim to stimulate demand and boost confidence. However, there are limits to what they can achieve, especially when interest rates are already near zero or even negative in some cases.

However, it seems that the upcoming year will bring its fair share of difficulties. This holds particularly true for developing nations, which are more vulnerable to external shocks and have limited flexibility in terms of policy management. These countries should prioritize investments in sectors that generate employment opportunities and improve living standards. Additionally, they must avoid behaviors that lead to excessive debt accumulation, as this could undermine their long-term growth prospects.

With my involvement in both the Bretton Woods Committee and the WTO Panel on Defining the Future of Global Trade, I understand the significance of addressing four key challenges that shape our current era. These challenges include transitioning towards a low carbon economy, creating high quality jobs, promoting sustainable development and reforming globalization to establish fairness and balance.

Yet, tackling these challenges effectively, requires fresh perspectives and innovative solutions that go beyond traditional wisdom and policies. It in fact calls for collaborative efforts among countries and stakeholders at all levels, along with a willingness to experiment with new ideas and to embrace innovation.

Knowledge, Education, and the Future of Interactive Programing

The global landscape of interactive programing, known as artificial intelligence, is undoubtedly evolving at an unprecedented pace, with development in machine learning, automation, and data analysis becoming an integral part of various industries.

Since education policies and programs serve as the backbone of any country's ability to adapt to the ear of interactive programing and thrive in it, the importance of preparing policy makers in the Arab World to deal with the complexities of the programing in the education becomes evident, ultimately paving the way for nurturing future generations of innovators, thinkers, and leaders, diversifying the economics of our countries and pushing them into the forefront of technical innovation.

As the author of a first published book that delves into the world of "interactive programing" in the context of artificial intelligence, my goal was to provide a comprehensive view of this evolving concept. Through exploring interactive programing, I seek to provide the readers with a precise understanding of its optimal use while enhancing knowledge of the inherent strengths and weaknesses of this technology. I have endeavored to identify these limitations, and summarize my experience to facilitate a deep understanding of the challenges inherent in these dynamic technologies.

I believe that a comprehensive understanding of interactive programing is essential to ensure that our youth in the Arab region are well equipped to navigate and contribute in the evolving global scene. This requires that we urgently start enhancing the readiness of education policymakers, including identifying key interactive programing concepts that should be integrated into the curriculum, the importance of prompting interdisciplinary collaboration, and the role of public-private partnership in providing resources and expertise by studying successful global models and considering unique challenges and opportunities in the context of our Arab world.

We must identify challenges posed by the rapid progress in interactive programing, and the potential benefits of integrating its teaching into Arabic curricula, as well as the role of educational policymakers and programs in creating a system that feeds literacy in the field of interactive programing and the optimal ways to shape knowledge.

It is essential to ensure that the benefits of interactive programing are not limited to a few, but are accessible to the vast majority of them i.e. “bridging the digital gap”, and promoting an inclusive environment where individuals of diverse backgrounds have the opportunity to enhance innovation and expand access to knowledge.

In practical terms, this involves breaking down barriers that may hinder the access to interactive programing tools. This of course goes beyond simply providing hardware and software; it includes initiatives that enable individuals to understand and participate in the programing scene.

This is a call for action and collaboration in building an inclusive interactive programing ecosystem that empowers individuals in our world, stimulates innovation, and drives society towards a more equitable and prosperous future.

The Financial Losses from Climate Change are Terrifying!!

The accelerating pace of global warming, rising sea levels, extreme weather events, and the myriad consequences of human-induced environmental transformations paint a grim picture of our earth's distress.

However, in the face of such challenges lies an unprecedented opportunity—an opportunity not only to mitigate imminent crisis, but also to rediscover ourselves and the economic systems that have contributed in the perilous our world is facing. Nations are not isolated entities but interconnected components in the intricate web of our earth.

It is known that the consequences of climate change extend beyond environmental concerns, to include the possibility of major economic disasters that are not confined to geographical borders. Emissions from one country may contribute to accumulation of greenhouse gases in the earth's atmosphere as whole. This collective impact is the genesis of the greenhouse effect, surpassing borders and affecting all countries.

The financial losses resulting from natural disasters are staggering, with direct damage reaching approximately 1.3 trillion dollars annually, according to the international monetary fund. This represents around 0.2% of the global gross domestic product on average each year.

This interdependence of these external factors emphasizes the necessity of international cooperation and concerted efforts to address the shared responsibility for mitigating climate change. Therefore, understanding these global external factors and mitigating them requires adopting a comprehensive approach that recognizes interconnected nature of environmental challenges and emphasizes the importance of taking unified and coordinated actions on global scale.

A positive indicator however, is the recent adoption by the United Nations General assembly of the political declaration on the sustainable development goals, aiming to overcome the multiple crisis facing the world. The declaration reaffirms commitment to these goals and revitalizes hope towards their achievement by 2030, particularly goal 13, which calls for urgent action against climate change and its far-reaching impact.

The urgent need to address climate change is not just a call to action; it is an invitation to reconsider the foundations of our existence, Beyond the gloomy expectations and dire warnings, there is a path forward that holds the promise of a sustainable and resilient future. This is not merely an environmental challenge, it is a profound societal and economic reckoning that requires us to reshape our values, policies, and industries to forge a harmonious coexistence with our earth.

Washington and Beijing: The Peak of the Technological Dominance Battle!!

The relationship between the United States and China may be approaching a critical juncture. The truth is that the confrontation between the two countries goes beyond trade disputes, and is evolving into a real scuffle to shape the future. Each side asserts itself as the dominant economic power and the rightful shaper of the future world order. At the heart of this conflict lies the pivotal field of technology and innovation, where the two nations aggressively compete for dominance.

In the current scene, competition between the two countries is definitively centered around the production of processors, a field characterized by unparalleled complexity, particularly as this shift has gained increasing importance against the backdrop of COVID-19 pandemic. The crisis has had a profound impact on the processors industry, where the complex web of semiconductor supply chains-which serve as the lifeblood of technological innovation- found itself severely disrupted.

While the two global powers maneuver through the complexities of this high-stakes competition, the processor industry emerges as a pivotal point, which does not only symbolize the current technological rivalry but also encapsulates the broader narrative of post-pandemic recovery and the recalibration of global economic dynamics. The battle for supremacy in processor production has become a symbol of the challenges and opportunities awaiting us in reshaping the technological landscape following the unprecedented global disruptions.

In the context of this conflict, the administration of President Joe Biden has intensified its efforts, with a direct focus on the Dutch company ASML Holding to cancel a deal for the sale of advanced electronic chip manufacturing equipment to China. This move by the U.S. administration is

a direct response to a prior request from China, which led to the activation of a ban on exporting such vital technology to the Asian country.

While the United States justifies its strict stance by pointing to the necessity of adopting strict policies against Chinese technology companies, citing concerns about the intertwining of Chinese technology with state apparatus, especially military capabilities, which could lead to global espionage activities, China strongly rejects the measures imposed by the United States, as such measures are specifically designed to restrict China's access to advanced chip manufacturing technology. The outlines of this conflict reveal deeper points of tension between the two countries, approaching their peak.

So, the dispute over access to advanced chip manufacturing technology has become a focal point, around which the broader complexities in the bilateral relationship crystallize. It sums up a deeper conflict between strategic interests, economic competition, and global geopolitical influence.

Immigration and Internal Political Disagreements in the USA

The issue of illegal immigration on the southern borders of the United States has become a flashpoint for political, social, and economic disputes, with potentially worrying consequences looming on the horizon.

Millions are seeking asylum, driven by countless factors such as violence, economic instability, and political unrest in their home countries. The issue of how to address this flood has become a polarizing force in American society, raising fears of the eruption of civil war in the United States.

This disclosed narrative has gained additional significance against the backdrop of former President Donald Trump's recent call for Republican-led states to form a united front in addressing the growing challenges posed by illegal immigration at the southern border. In fact, this is not merely a political maneuver; it is a symbol of the deep partisan divide that permeates discussions about immigration.

As Trump's influence continues to shape the party agenda, the collective response from these states highlights the ideological gap between Republicans and Democrats on how to deal with the complex terrain of irregular migration. It also reflects a broader sentiment within the Republican camp, accusing the Biden administration of negligence and failure to implement effective border control measures.

The intense rhetoric surrounding this crisis reached a particularly notable climax when Greg Abbott, the governor of Texas and a staunch supporter of strict immigration policies, declared his state's readiness to engage in a potential civil war with the administration of President Joe Biden, in direct response to a federal court ruling ordering the removal of concertina wire along the Texas-Mexico border. Governor Abbott has refused to comply with the court order, and has instead deployed state troopers to the border to block the removal of the wire.

And I say that Abbott's explicit rejection of this decision does not only reflect his commitment to a strict stance on border security, but it also sheds light on the broader ideological difference between the state approach and the federal approach in enforcing immigration laws, especially with many Republican-led states taking preventive measures for months by deploying the National Guard. This preventive step aims to address the escalating challenges posed by illegal immigration and indicates a collective determination to confront this issue directly.

The decision to mobilize the National Guard reflects a broader sentiment within these states that the federal government, under the Biden administration, has failed to manage the situation properly. As tensions escalate, the deployment of National Guard personnel has become a tangible feature of states taking matters into their own hands.

The phrase “nothing is off the table” reflects the depth of the disagreement, emphasizes the lack of consensus, and the growing sense of urgency among the states, which could pave the way for a long and contentious debate over the country’s approach to managing the challenges along its southern border. This includes Greg Abbott’s threat to separate from the United States

While the legitimacy and practicality of such a move remains highly questionable, the mere suggestion by the Governor of Texas, one of the largest and most influential states in the Union, of contemplating secession, opens a wide door to critical questions about the flexibility of the American union and the balance of power between the states and the federal government.

Global AI Governance is Essential

AI (ProPro) is a technology which is revolutionizing our world in ways we have never seen before. It brings opportunities to improve the wellbeing of humanity promote justice and foster peace. However, it also presents challenges concerning rights, democracy, security and the environment. How can we ensure that AI works in the interest of the public while respecting the values and dignity of every individual?

The current state of AI governance falls short and lacks consistency. There is no agreement, on principles and legal standards that should guide the development and utilization of AI. While countries like the US, UK, China and EU have established frameworks for governing AI, these frameworks

are fragmented, inconsistent and often lack transparency and accountability. Unfortunately decision making processes shaping the future of AI largely exclude the voices of a majority of the world's population— those, from less privileged regions, particularly those in the Global South. This situation increases the risk of deepening inequalities reinforcing power imbalances and limiting agency.

We must adopt an inclusive and people focused approach, to governing AI. This approach should be firmly grounded in the principles outlined in the UN Charter, international human rights law and the Sustainable Development Goals. It is crucial that AI aligns with the core values of democracy, justice and accountability across all sectors and regions of society.

In 2021 the UN High level Advisory Body on AI was established by the Secretary General to propose a vision for such an approach. The body has put forward five guiding principles for AI; upholding dignity, safeguarding human rights and fundamental freedoms promoting inclusion and diversity ensuring transparency and explainability and establishing accountability and oversight mechanisms. Additionally, it has called for a coordinated

action plan to implement these principles through collaboration among stakeholders from various fields of expertise.

The right time to take action is now, while AI is still in its initial stages of growth which has already been significant and wide ranging. We cannot afford to let it be driven by interests or short term gains. Our focus must be on utilizing AI for the good while aligning its access and benefits with values. Currently control over AI remains concentrated within a number of tech companies; therefore democratizing access, to it is essential. To fully harness its potential while mitigating risks associated with it requires us to establish a global governance framework for AI.

I urge all stakeholders worldwide to examine the efforts made by the United Nations in developing a regulatory framework, for this crucial technology. It is essential that we prevent tech companies from monopolizing it for financial gain, considering its immense potential to revolutionize our lives and to address the significant challenges we currently face on this planet.

The Importance of Digital Skills in the 2024

In the year 2024, it is no longer a luxury, but a necessity, to have a range of digital skills, which have become crucial for individuals aiming to thrive in the era where digital transformation is reshaping every industry and sector.

The demand for skills has significantly increased over time alongside the widespread adoption and advancement of ICT. According to the World Economic Forum by 2025, 82% of the global workforce will require basic digital skills compared to just 50% in 2018. Additionally, around half of all workers will need digital skills including data analysis, programming, cloud computing and artificial intelligence (AI) as opposed to only 18% in 2018.

To address this gap and ensure that all employees possess the necessary digital competencies to thrive in today's world.

TAG Academy offers the TAG DIT Diploma program, which provides a comprehensive certification covering essential areas of IT literacy crucial for modern knowledge workers. The diploma consists of six modules; IT Fundamentals, Word Processing Applications, Spreadsheet Applications, Presentation Applications, Database Applications and Internet Applications. Each module encompasses both concepts and practical skills needed to effectively utilize information and communication technology (ICT) in diverse contexts

We introduce our Cybersecurity Fluency Test services, which provide a customized examination of participants' knowledge of critical cybersecurity principles. This supplementary service guarantees that users not only have broad IT literacy, but also a thorough understanding of digital asset protection. Workers who complete the TAG-DIT Diploma and the Cybersecurity Fluency Test, can demonstrate a comprehensive skill set, increasing their employability and competitiveness in an era where digital skills, including cybersecurity, are essential.

Immigration and Internal Disputes in America

The issue of illegal immigration at the southern border of the United States has become a significant source of political, social, and economic debate, with potentially serious consequences anticipated soon.

Millions of individuals are seeking asylum for a variety of reasons, including violence, economic instability, and political upheaval in their home countries. The question of how to manage the influx of migrants has emerged as a polarizing issue within American society, fueling concerns of a potential civil war. This situation has become even more pressing in light of former President Donald Trump's recent appeal for Republican-led states to unite in confronting the increasing challenges associated with illegal immigration at the southern border. This is not simply a political maneuver; it reflects the profound partisan divide that permeates discussions surrounding immigration.

As Trump's influence continues to shape the party's agenda, the collective response from these states highlights the ideological divide between Republicans and Democrats regarding how to navigate the complex landscape of illegal immigration.

The intense discourse surrounding this crisis reached a significant peak when Greg Abbott, the Governor of Texas and a strong proponent of stringent immigration policies, declared his state's preparedness to engage in a potential civil conflict with the Biden administration. This statement was made in direct response to a federal court ruling concerning the removal of barbed wire along the Texas-Mexico border, which he opposed.

I would say that Abbott's rejection of this ruling not only underscores his commitment to a stringent approach to border security but also highlights the broader ideological divide between the state's stance and the federal

government's policies on immigration enforcement. This divide is particularly evident as numerous Republican-led states have implemented proactive measures in recent months, including the deployment of National Guard personnel. Such actions aim to tackle the increasing challenges posed by illegal immigration and demonstrate a collective resolve to address the issue directly.

The decision to mobilize the National Guard also reflects a prevailing sentiment within these states that the federal government, under the Biden administration, has inadequately managed the situation. As tensions escalate, the deployment of National Guard personnel serves as a concrete indication of states asserting control over the matter.

The phrase "nothing is off the table" illustrates the depth of the disagreement and highlights the absence of consensus and the growing urgency among the states. This situation may pave the way for an extended conflict over the nation's approach to managing challenges along its southern border, further emphasized by Greg Abbott's threat of secession from the United States.

The legitimacy and practicality of such a move remain highly questionable. Nevertheless, the mere suggestion by the Governor of Texas, one of the largest and most influential states in the union, to consider secession raises significant questions about the resilience of the American Union and the balance of power between the states and the federal government.

Our Future is in the Cloud

In today's digital world, organizations that want to survive need to have a solid cloud computing strategy to achieve their business goals and to stay ahead of cutthroat competition. With the coming of technologies such as AI, for business analytics and enterprise data, it has never been more important to have a robust cloud infrastructure in place which will serve organizations well into the future.

Cloud computing is a powerful driver of innovation and growth for businesses of all sizes and industries, offering many benefits, such as scalability, elasticity, cost-efficiency, security, and agility, allowing firms to concentrate on developing and running their business, getting vital insights into their data in a timely manner, and having an IT environment which is scalable, robust and protects organizational data. For modern day business it is the first mover advantage that can only be achieved if an organization is tech savvy and has a robust cloud infrastructure in place.

However, cloud adoption is not a one-size-fits-all solution. Organizations need to have a clear vision and a fit-for-purpose cloud strategy that aligns with their business objectives, needs, and capabilities. A cloud strategy is a necessary plan that outlines the best practices, tools, and services to use when implementing a cloud solution. It also helps organizations avoid common pitfalls and challenges along the way. Many organizations are still missing out on the full potential of cloud computing and may face issues such as complexity, inefficiency, security risks, and vendor lock-in.

To devise an effective cloud strategy, organizations need to consider the following steps:

- Establish a vision for cloud adoption
- Choose the right cloud deployment model
- Select the best cloud service provider and platform
- Design and implement the cloud architecture and solution
- Manage and optimize the cloud operations and performance.

One of the key aspects of a successful cloud strategy is data. Data is the lifeblood of any organization, and cloud technology can help organizations leverage data to gain insights, drive innovation, and create value.

By using cloud technology to enable data strategies, organizations can improve their decision-making, customer experience, operational efficiency, and competitive advantage.

With everything moving to the cloud, it is clearly a key enabler of future technologies and data strategies, but one that requires a solid cloud strategy to maximize its benefits and minimize its risks. Organizations that adopt cloud technology with a clear vision, a fit-for-purpose plan, and a data-driven approach can unlock new possibilities and opportunities for innovation and growth.

Israeli Allegations Against UNRWA ... Screaming as much as it Hurts

The Zionist entity has consistently resorted, since its inception, to fabricating lies and false accusations, spreading them comprehensively as tools in its diplomatic efforts on the global stage to justify its aggressive policies, and its acceptance as an existing state.

In a striking recent move, the Zionist entity's claim regarding the involvement of some UNRWA staff in "Al-Aqsa Flood operation" bear resemblance to false allegations of using Al-Shifa Hospital in Gaza as a command center by the Islamic Resistance Movement.

Both cases involve baseless claims with no factual proof, and at the heart of these allegations lie malicious intentions aimed at systematically depriving Palestinians of their fundamental rights to protection and basic necessities of life; especially that UNRWA "is relied upon by over two million people for survival in Gaza alone."

For many years, the Zionist entity and have relentlessly sought to undermine one of the most important humanitarian agencies operations in the context of the aggressive Israeli occupation. However, in the aftermath of the Israeli aggression on Gaza, the intensity of the allegations reached a critical point when Israel claimed that UNRWA provides cover for Hamas.

Israeli allegations against UNRWA are an integral part of a propaganda campaign against a United Nations organization to intensify the Zionist entity's genocidal war against the Gaza population with the clear aim of depriving them of protection and basic necessities of survival and life. They also aim to rebut UNRWA's accusation against the entity of deliberately targeting civilian infrastructure, including schools and medical centers, during its ongoing aggression against the Gaza Strip. This accusation was specifically cited in the report of the International Court of Justice.

What stands out in this scenario is the immediate response from major Western powers, including the United States, Italy, Canada, Australia, Britain, and Finland, which decided without careful examination of the ethical consequences and the legal validity of Israel's allegations, to suspend their funding to UNRWA. I see this as complicity that raises critical questions about collective punishment of the residents of the Gaza Strip under the pretext of alleged mistakes or violations attributed to employees of an International humanitarian agency.

In fact, these countries' hasty action, amounts to collective punishment of a population for unproven allegations against few individuals that are still subject to comprehensive investigation.

In conclusion, this tangible hostility against UNRWA reveals the extent of the impact of the ICJ's legal proceedings and its significance on the Zionist entity, as its reactions has become a measure of the resonance and effectiveness of efforts aimed at holding it accountable for its crimes against humanity. It also clearly indicates the entity's desperate efforts to reject accountability and commitment to respect international law.

AI - A Complex and Diverse Phenomenon

AI (ProPro) is often conceptualized as either a human-like or a machine-like entity, but this does not capture its true nature and potential. AI is a complex and diverse phenomenon that can perform various tasks, learn from data, generate new ideas, and improve itself, taking different forms and interact in different environments and scenarios bringing many benefits to humanity in our digital, full of big data, world.

AI also poses risks, such as ethical dilemmas, social impacts, economic effects, and scientific challenges, as well as being unpredictable. It is clear that we need to shape the future of AI in a responsible and sustainable way by adopting a multidisciplinary, participatory, and global approach that includes actors from across a spectrum of domains and regions to build a robust foundation on which this technology moves forward.

We must be aware of the narratives and visions that influence our expectations, aspirations, and fears of AI and must remember that the future of AI is not predetermined, but rather co-created by humans and machines. We have the power and the responsibility to shape the future of AI in a way that reflects our values, respects our dignity, and enhances our well-being. We need to think of AI as a complex and diverse phenomenon, and embrace its opportunities and risks.

If AI is as powerful and transformative as technology pundits claim it will be, we must seriously look into AI collusion among the main players in the AI industry, such as large tech companies, governments, and research institutions and ensure that this is minimized to the largest degree possible. We simply cannot afford for such a transformative technology to be controlled and dominated by a small group, which would lead to the development of a new global power paradigm. AI collusion to strategically manipulate the market, influence the public, gain an unfair advantage over competitors or adversaries, must be avoided at all costs. The monopolization of data,

algorithms, computing resources, would dangerously put great power and influence in the hands of the few and would undermine competition, diversity, and democracy in the AI field, leading to more concentrated, dominant, and unaccountable AI development and deployment.

We cannot afford to let a monopoly of this nature in the hands of a few come about, as it would undermine the potential and promise of AI for all. We must democratize AI, which means making AI available, accessible, and usable by a more extensive and diverse group of people. We need to democratize AI use, development, benefits, and governance, by providing affordable access, ensuring abstraction, enabling control, and inspecting ownership, by sharing data, algorithms, computing resources, and knowledge, as well as by involving the public, especially those who are affected by or interested in AI.

As a result of AI's influence touching many areas, we must ensure that it is aligned with our interests and values and that we can shape the future of AI in a responsible and sustainable way. We must also ensure that AI is a source of empowerment, diversity, coexistence, and co-creation, rather than a source of collusion, coordination, domination, and exploitation to make it a technology for the many, and not just for the few.

Palestine... The Old Died and the Young Did not Forget

It is certain that the resistance in Gaza is the most important form of struggle at the present time and the most effective form regarding the Palestinian situation. However, the Palestinian people's struggle against occupation and colonization predates Al-Aqsa Flood operation by more than 100 years, including thirty years under the British colonialism, euphemistically called "Mandate," and seventy-five subsequent years under the more abhorrent Zionist occupation.

This historical narrative is not merely a chronological account of past events; rather, it is a collective memory engraved in the consciousness of successive generations of Palestinians, a testimony to the spirit that refuses to submit to decades of injustice, oppression, and tyranny. It is a living legacy passed down from generation to generation, a testament to the steadfast commitment to justice and the restoration of their legitimate rights.

The fourth Palestinian generation, those born in the aftermath of their ancestors' displacement, have proven that their connection to Palestine transcends all borders. Contrary to Israel's failed hopes that "the old will die and the young will forget," this generation challenged the idea of collective memory loss, when They embraced their Palestinian identity and history, weaving it into the fabric of their existence even when separated by decades from the actual displacement tragedy. This concept, based on the assumption that time undermines the memory of injustice, has been proven totally false in the face of a resilient generation unwilling to abandon the stories passed down through generations.

Al-Aqsa Flood operation remains truly a compass pointing to a noteworthy shift in the strategies employed by the Palestinian people in their ongoing resistance. It signifies the ability to utilize non-traditional means to confront the challenges posed by the war machine and oppression enforced by the Zionist enemy.

Therefore, the events of October 7 cannot be viewed in isolation from a comprehensive understanding of the broader context of liberation struggle against colonialism, foreign occupation, and racial segregation throughout modern history. This is a universal truth - wherever there is oppression, there emerges a persistent determination to regain independence and dignity.

The international community and humanitarian causes advocates must stand in solidarity with the Palestinian people's struggle against the longest occupation in modern history by a single occupying authority. It is essential to recognize that the pursuit of liberation is a common humanitarian endeavor that paves the way for a world where security and stability are rooted in justice, equality, and collective aspirations for freedom.

For us, Palestine is not just a distant memory; rather, it is a living presence in our consciousness, and a shared commitment as a nation determined to preserve its identity and reclaim the homeland, even from a distance that far.

Reviving Democracy in a Polarized World

Democracy seems to be under siege across the world where we are witnessing the rise of anti-democratic forces that threaten to undermine the values and institutions that sustain our democratic systems. These forces exploit the discontent and frustration of many citizens, who feel left behind by globalization, ignored by the elites, and insecure about their future. They offer simplistic and populist solutions that appeal to fear, hatred, and nationalism that attack the media, the judiciary and the opposition, eroding the checks and balances that safeguard democracy. They also have suspicious ties with authoritarian regimes that seek to destabilize and weaken the democratic world.

Some argue that we need to use legal measures, such as bans or disqualifications, to stop anti-democratic candidates or parties from participating in elections or holding office. They claim that this is the only way to protect democracy from those who seek to destroy it from within, pointing to examples from Germany, where the Constitutional Court has banned several neo-Nazi and communist parties. Another example is in the US where many have called for Trump to be excluded from running in the presidential race after being criminally indicted four times, where he will have to attend series of trials in 2024 as he tries to run again for the White House.

However, others warn that using legal measures to prevent anti-democratic politicians from gaining power or influence is a serious and risky step that should only be taken as a last resort, when there is clear evidence of repeated and intentional violations of the constitution and democratic principles. Such measures could also backfire, by giving more publicity, sympathy, and legitimacy to the far right, and by alienating their supporters and increasing polarization with the best approach being to counter them politically.

I believe that using legal measures to ban or disqualify anti-democratic politicians is a dangerous and counterproductive strategy that could do more harm than good to our democracy. The best way to reinvent democracy

in the face of far-right threats is to encourage active participation of all members of society, especially the youth, in democratic processes and institutions. Democratic governments should be free and transparent, and not be compromised or influenced by any one group. They should encourage participation through free and fair elections, and should encourage dialogue through open and public forums, to promote engagement and accountability. In light of increased polarization and hardening of extremist ideas in the political sphere internationally, we need to build democratic institutions that are flexible and adaptable that can respond quickly and effectively to changing circumstances and challenges. They must promote the rights of all citizens, regardless of their background, identity, or opinion, and ensure that they are respected and protected as democracy is the best system to guarantee the dignity and equality of all people.

Democracy is not only just a national issue but also a global one, where nations must cooperate and collaborate with each other to advance common interests and values. Globalization and multilateralism have brought much prosperity and has helped to improve humanity, therefore nations should resist the temptation to retreat from the world and turn inward which will stir suspicion and greater xenophobia.

If we fail to take action, we will have failed our citizens and the very basis for which democracy was established, which is to serve people in the best way possible. Democracy provides for cooperation and collaboration, which in turn fosters peace and stability; qualities that we all seek, particularly in the difficult times in which we are currently passing through.

Interactive Programming is a Double-Edged Sword

It is quite certain that the tremendous growth of interactive programming, often referred to as artificial intelligence, has sparked a revolution in many aspects of our daily lives. From enhancing productivity to enabling innovative solutions, this technology possesses dual potential. It can open doors to the goodness that will shape the future of humanity, and it can also open doors to limitless harm unless we address the balance between innovation and ethical considerations.

As the author of the first recently published book delving into the world of “interactive programming,” also known as artificial intelligence, my goal was to provide a comprehensive vision of this advanced concept. By exploring interactive programming, I seek to equip readers with a precise understanding of its optimal use while enhancing awareness of the strengths and weaknesses inherent in this technology. I strived to identify these limitations utilizing my experience to facilitate a profound understanding of the challenges inherent in these dynamic technologies.

As interactive programming continues to evolve in producing content indistinguishable from human creativity, ethical dilemmas surrounding its use also increased. Concerns about potential misuse intensify, highlighting the need for effective regulation.

I argue that comprehensive regulatory frameworks must be established to control the use of interactive programming. Such frameworks should balance innovation with ethical considerations, ensuring that interactive programming serves the public good without compromising fundamental human values.

Therefore, I see the necessity to establish a guiding ethical system and regulatory framework. At the heart of the ethical governance of interactive programming lies the principle of responsible innovation, which does not only involve anticipating and mitigating potential harms but it also proactively enhances beneficial outcomes. By integrating diverse perspectives and engaging all stakeholders in the decision-making process, we can ensure that interactive programming technologies align with our values and human aspirations.

Furthermore, ethical governance of interactive programming should extend beyond regulatory compliance to encompass broader societal considerations, including the promotion of equality and accessibility in the development and dissemination of interactive programming, as well as protection against bias and discrimination. This can be achieved through promoting a culture of responsible supervision of interactive programming, so that we reach safety in harnessing the transformative potentials of interactive programming while safeguarding against its risks.

One prominent example of these concerns is the decision made by the Federal Communications Commission in the United States to ban robocalls that feature voices generated by interactive programming. This move, aimed at curbing fraudulent activities, underscores the urgent need to address the risks associated with interactive programming technologies.

While these regulatory rules represent a step in the right direction, they highlight the broader issue of whether humans have the ability to manage the inherent risks in interactive programming and exercise complete control over them.

One of the fundamental aspects of this endeavor is recognizing the potential impact of interactive programming on humanity. While this technology holds immense promise, its uncontrolled spread poses significant dangers, including job displacement, privacy violations, and societal inequalities. Addressing these challenges requires a multifaceted approach prioritizing transparency, accountability, and inclusivity.

Collectively, we must rise to the challenge of responsibly dealing with the complexities of interactive programming to harness its full potential while safeguarding against its risks. I believe this can only be achieved through proactive collaboration among nations and institutions for the greater benefit for our world.

“The safe passage” is a term intended to denote displacement and the erasure of the Palestinian presence

The concept of the “safe passage” is not seen as a humanitarian gesture, but rather as a mechanism to perpetuate injustice and erase the Palestinian presence from their homeland, as part of a malicious systematic effort to fragment Palestinian territories and control them, further solidifying Israeli occupation and depriving Palestinians of all their rights.

The idea that displacement, destruction, and killing can be considered acceptable when covered with the language of humanity and international law challenges traditional concepts of war and justice. This is inherent hypocrisy in dealing with the Palestinian cause, where major powers manipulate legal frameworks and discourse to justify their actions, regardless of the human cost.

In light of the presented context, President Biden’s call for the establishment of a safe passage before any military operation in Rafah seems to indeed facilitate the process of displacement. It carries an implicit acknowledgment that the firepower and destructiveness will be stronger than what the occupation forces experienced in the north and the center of the Gaza district.

Furthermore, President Biden’s affirmations to Netanyahu that the shared goal of defeating Hamas and ensuring long-term security for Israel remains a mutual priority reaffirms the ongoing partnership between the United States and Israel. Here, attention must be drawn to the decisions of the International Court of Justice as a significant mechanism for holding countries accountable for their support of Israeli actions. The judgments of the International Court of Justice are vital tools to ensure accountability for those involved in acts that may contribute to human rights violations or atrocities

In recent developments, Israel obtained conditional approval from both the United States and Egypt for its planned military operation. The United States, in particular, emphasized the importance of imposing restrictions on the operation and called for careful definition of a specific timeframe and

geographic scope. This strategic approach aims to prevent the recurrence of crimes that have provoked international outrage and condemnation.

The American stance reflects sensitivity towards the potential repercussions of military operations, especially amid the alarming images often circulated in the media. There is a clear concern within American circles about the impact of such images on public opinion, particularly following recent rulings issued by the International Court. Despite these concerns, Washington's position does not explicitly oppose the attack on Rafah; rather, it focuses instead on ensuring that any military action adheres to standards that minimize humanitarian consequences and reduce the risk of further escalation.

At the same time, Israel's objectives in the operation extend beyond mere military engagement, primarily focusing on reinforcing the blockade on Gaza Strip. This reflects Israel's broader strategic goals aimed at asserting its control over the territory.

In conclusion, I say that the safe passage is a crime that reminds us of the ongoing shocks and injustices that continue to define the oppression imposed on the Palestinian.

And this reminds me of what one Western official said: "Kill them, but without violence, starve them to death, but with tenderness, and destroy everything they have to protect their future from the extremists among them".

2024 - The Year for Humanity to Shape AI

As the AI revolution moves further in 2024, it is becoming exciting and daunting as it reshapes human experience and promises to deliver much more in the future. With this technology improving by the day, it is an exhilarating time to be alive where massive strides are being made in human development, the likes of which we have never previously witnessed. As this revolution progresses, it invokes similar questions that came up when previous technological shifts were underway, such as the birth of the internet.

It is important to learn from past mistakes without restricting the momentum of this industry and to develop a world in which AI benefits all of mankind, including the over 2.5 billion people that remain offline. We have a moral duty to use this technology to develop a more equitable, global society where everyone benefits, not just the big tech giants.

As a result of my lengthy readings, I feel that a number of issues must be addressed in order for a healthy new AI world to take shape; first is regulation, which has to remain a top global priority that is rooted in equity and democratic values. There have been many initiatives in this regard from the EU's AI Act, China's new laws to regulate this industry, as well as Joe Biden's executive order in 2023 on safe, secure and trustworthy AI. The UN will play a pivotal role in helping to move this conversation forward as the UN High Level Advisory Body on AI is set to discuss many of these initiatives later this year.

The second issue is the ethical and social implications of AI, which go beyond the technical and legal aspects. AI has the potential to transform various domains such as health, education, agriculture, and security, but it also poses significant risks and challenges such as bias, discrimination, privacy, accountability, and human dignity. We must ensure that AI is aligned with human values and respects human rights, and that we foster a culture of responsibility and trust among AI developers, users, and

stakeholders. We must also empower and educate people to use and benefit from AI, while also protecting them from its harms. These questions need to be addressed by multidisciplinary experts and policymakers, including civil society, communities, and individuals.

The third issue is the innovation and collaboration opportunities of AI, which can enable new forms of creativity, problem-solving, and social impact. AI is not only a tool, but also a partner and a catalyst for human endeavors. AI can augment human capabilities, enhance human experiences, and inspire human aspirations. It can also facilitate cross-cultural and cross-sectoral cooperation, breaking down barriers and bridging gaps.

We need to leverage AI to address the global challenges and opportunities of the 21st century, such as climate change, poverty, health, education, and peace, and build a global AI ecosystem that is diverse, inclusive, and equitable, where a human-AI symbiosis is developed that is harmonious, respectful, and beneficial.

I have authored a book that explores and discusses the opportunities, risks, and challenges that AI poses in various domains, and provides advice on how to foster a healthy, vibrant, and ethical AI sector that can help civilization progress to its next level of advancement.

The Specter of High Inflation Looms Over the Eurozone Economy

The economic outlook for the Eurozone is fraught with challenges in the near term according to European Central Bank reports. It is largely driven by weak domestic demand, rising inflation, and tightened financing conditions. Consumers face rising prices for goods and services, leading to a decrease in purchasing power, while companies find it increasingly difficult to obtain affordable financing for expansion or capital expenditure.

The specter of high inflation looms over the economy of the region, further exacerbating the challenges imposed by weak domestic demand, as rising prices erode consumers' purchasing power, consequently slowing down consumer spending.

Furthermore, companies are facing increased input costs, leading to reduced profit margins and constraints on investment in expanding capacities or innovation. The persistence of high inflation poses a significant barrier to economic recovery and may dampen growth prospects across various sectors.

The manufacturing sector faces significant headwinds, with both local and external factors working to dampen output. Overcoming these challenges will require concerted efforts from policymakers, companies, and consumers alike.

The manufacturing sector, a vital element in the region's economy, bears the burden of the contraction, as both local and external factors significantly impact production. Weak domestic demand has led to decreased orders for manufactured goods, while weakened external demand, exacerbated by global economic headwinds, has imposed further restrictions on export-oriented industries. As a result, production in the manufacturing sector has faltered, exacerbating overall economic slowdown.

Tight financing conditions add another layer of complexity to the economic landscape in the region. Financial institutions, concerned about inflationary pressures and economic uncertainty, adopt a cautious approach to lending, making access to credit more costly for both companies and consumers alike.

While short-term forecasts may be uncertain due to uncertainty, proactive measures and strategic interventions can pave the way for a flexible and dynamic regional economy in the long term, provided that targeted fiscal and monetary measures are implemented to support demand, address supply chain disruptions, and enhance innovation and competitiveness.

The decision of the International Court of Justice and the reshaping of the Palestinian cause on the global stage

The decision of the International Court of Justice in the genocide case filed by the friendly Republic of South Africa against the Zionist entity carries the promise of reshaping the trajectory of the Palestinian cause on the global stage, specifically in the pursuit of justice and reaching a just solution to our just cause.

In a historic turn of events, the Zionist entity is now within the scope of international legal scrutiny, binding to all countries. The Court decision does not only signals a shift in the dynamics of geopolitical accountability but also raises fundamental questions about the repercussions of the entity's behavior and the global response to its crimes. What adds to the significance of this matter is that it was issued by an overwhelming majority, where it was supported by 15 out of 17 members of the court.

Moreover, the court's rejection of the entity's motion to dismiss the case sends a strong signal, indicating implicit recognition by the court of the existence of genocide. It exposes the severity of the allegations against the entity, casting shadows over its actions and behavior, and presents a complex array of legal, ethical, and political considerations that will undoubtedly shape the course of future developments.

Furthermore, the court's keenness in refraining from ordering an immediate cessation of hostilities (ceasefire) confirms that what is needed is addressing the comprehensive array of genocide crimes rather than merely ceasing military aggression.

The court also demonstrated a smart insight by recognizing that the scope of genocide extends beyond direct military means to incorporate a broader

range of methods such as hunger, disease, thirst, epidemics, and other forms of life deprivation. This precise understanding acknowledges that Zionist genocide practices extend beyond traditional warfare.

It can be interpreted that the perceptible shift in the enemy's strategy, and its choice to resort to its usual tactic of attacking the court, reflects its acknowledgment of the potential threat posed by the court's rulings regarding its aggressive behavior.

The other important Court strategic step, is that the decision does not only hold the Zionist entity accountable for genocide but also those who provide support for its crimes. However, the path to justice faces inherent challenges, as the decision to cease hostilities remains subject to factors beyond the court's jurisdiction. Recognizing that the court, as a judicial body, lacks the ability to enforce its decisions without support from the Security Council. Here, the anticipated U.S. veto complicates the prospects of implementing the decision.

One noteworthy aspect of the Court ruling is the demand for tangible evidence of commitment within a month - an unprecedented requirement pumping a sense of urgency and accountability into the resolution process. Away from United Nations resolutions, this condition challenges Israel to demonstrate its adherence to the stipulated arrangements within a specified timeframe, which may set a new standard for international diplomatic engagements.

This clear focus specifically highlights holding the Zionist entity accountable, moving away from broad generalizations like claims of self-defense. The essence of this analysis lies in the occupation's ability to resolve its issues by ceasing aggression because the right to self-defense does not apply to an occupying power, particularly one which is also stands accused of committing Genocide.

Regarding the Zionist entity, a seismic shift is expected to reverberate across the political scene in Israel, where Netanyahu's future is at stake. This decision, loaded with implications, has the potential to dismantle Israel's own foundations as a colonial force and a genocidal power. Netanyahu's immediate response to the court's rulings reveals serious concerns, exposing weaknesses within the Israeli military and fear of possible sanctions resulting from the court's decisions. When Netanyahu emphasizes the necessity for the entity to boost its domestic arms industry, this response not only fails to acknowledge the profound impact of international legal mechanisms on Israeli military capabilities but also reflects recognition that court decisions could prompt a global reassessment of supplying the entity with arms.

Technology Appropriateness for Developing Countries

In the realm of technology today, there lies a great potential to bring about positive changes for nations in the process of development. This includes boosting productivity, efficiency, innovation and access to information and services, while also opening doors to new opportunities for economic and social growth. However, these advantages come with hurdles and challenges that could impact developing countries adversely. These include widening gaps in society, displacing workers from their traditional roles, disrupting established social norms and customs, as well as posing threats to both the environment and human safety.

Officials responsible for creating policies in developing nations must grasp the intricate and diverse nature of how appropriate a technology is for their specific circumstances and aspirations regarding development. They should craft nuanced strategies that maximize the advantages while minimizing any potential drawbacks that may arise from implementing such technologies. The appropriateness of a technology refers to how well it fits in with a particular situation or purpose while being beneficial without causing negative consequences.

For instance, artificial intelligence (AI) holds promise in enhancing efficiency, productivity and quality across different sectors like agriculture, healthcare, education and governance within developing nations. Nevertheless, it also introduces concerns such as job displacement issues, biases present within its algorithms, accountability matters related to its use, as well as considerations about human decision making capabilities.

Therefore, the suitability of AI for less developed nations relies on various factors like how well the AI applications cater to inclusivity and empowerment, the alignment of AI policies and frameworks and ensuring that AI actors and stakeholders act with respect, responsibility and accountability.

To effectively incorporate new technologies in a fitting manner, developing countries encounter numerous policy challenges and opportunities. These include improving digital infrastructure, skills development and fostering innovation capabilities to promote inclusive and sustainable growth while collaborating with other nations and stakeholders.

Developing countries must invest in enhancing their digital infrastructure such as broadband, mobile services and cloud technology to ensure access and connectivity for their populations and businesses. Additionally, they should focus on upgrading digital skills like literacy, numeracy, problem solving abilities to enable active participation in the digital economy. Moreover, nurturing innovation capabilities through research, development efforts along with fostering entrepreneurship is crucial for creating technologies tailored to their specific needs. Moreover, they should prioritize knowledge sharing and collaboration with other nations and stakeholders to exchange best practices, expertise, resources, foster partnerships, networks and alliances.

As the former Chair of the United Nations Advisory Committee on Internet Governance (UNICTTF), I believe that developing countries stand to benefit greatly from embracing the technology revolution. This can be achieved by improving digital infrastructure, skills and innovation capabilities, promoting inclusive and sustainable growth and fostering collaboration with other nations and stakeholders.

In today's world, it is crucial for advanced economies to assist their less developed counterparts in establishing a just and balanced global digital economy. This will help narrow the digital divide, create opportunities for everyone, as well as bring the world community closer together.

Climate Repair: A Strategy to Stabilize the Planet

Climate change poses the greatest threat to humanity and to our planet. We are already witnessing the consequences of global warming such as extreme weather conditions, rising sea levels, melting ice and loss of biodiversity. It is crucial that we take urgent and decisive action to prevent irreversible tipping points that could trigger runaway climate change with catastrophic impacts for all life forms.

Fortunately, there is still time to avert the worst case scenarios. We have an opportunity to stabilize the climate and create a safe and sustainable environment for ourselves and the future generations. To achieve this, we must adopt a comprehensive and ambitious strategy that goes beyond simply reducing greenhouse gas emissions. We need to actively remove excess carbon dioxide from the atmosphere and repair the damage caused to Earth's natural systems, particularly in polar regions and glaciers.

This strategy is known as climate repair, which comprises three key components; reduction, removal and restoration.

The primary component of climate repair is reducing greenhouse gas emissions as rapidly and significantly as possible. This entails transitioning our energy sources, transportation systems, industries, agriculture practices and land use towards low carbon alternatives. It requires improving energy efficiency measures while promoting conservation efforts and smart demand management techniques. It also means we have to make changes in the way we consume and live our lives to reduce the impact on the environment and minimize waste generation.

Another important aspect of addressing climate change is to actively remove excess carbon dioxide from the atmosphere and store it securely. This is crucial because even if we were to immediately halt greenhouse gas emissions, the carbon dioxide already present in the atmosphere would continue warming the planet for many years to come. Therefore, it is essential that we take proactive measures to decrease the surplus carbon dioxide that we have emitted and bring it back down to pre-industrial levels, which scientists consider safe for our climate. There are various methods available for achieving this, each with different potentials, costs, benefits and risks. It is crucial that these methods are carefully assessed and implemented in a sustainable and ethical manner.

The third aspect of addressing climate change is particularly innovative as it involves repairing the damage inflicted upon Earth's natural systems, particularly polar regions and glaciers. These systems play a critical role in regulating our climate while also providing vital services such as water, food and biodiversity. However, they are highly vulnerable and susceptible to global warming, undergoing rapid and irreversible changes that have adverse feedback effects on our climate.

We need to take action in these systems to restore their functionality and resilience and prevent further decline and collapse. This can be achieved by employing various methods through geoengineering, which is a contentious and risky proposal that raises numerous ethical, social and political concerns. It should not be viewed as a replacement for reducing emissions and removing carbon dioxide, but rather as a supplementary and temporary measure to give us some additional time and avoid the worst possible outcomes.

Addressing climate change requires a comprehensive and an ambitious strategy to stabilize the climate and safeguard our future. It necessitates a global effort involving governments, businesses, civil society and individuals. It demands an interdisciplinary approach that combines science, technology, policy making, economics, ethics, culture along with a sense of urgency, responsibility and optimism.

Nations must implement environmental accountability to fully appreciate the extent of climate change on their nations. This comes from having proper accounting practices in place where companies and governments can effectively report and fully understand environmental costs and liabilities. I spoke about this in 1999 where I led the production of a detailed report leading international experts called 'Accounting and Financial Reporting for Environmental Costs and Liabilities'. This was done under the Arab Society of Certified Accountants (ASCA) that I established in 1984, and was produced in consultation with the United Nations and International Standards of Accounting and Reporting (ISAR), which I also chaired.

As the Chair of the Consortium for Sustainable Urbanization in New York (CSU), my message to all governments is that we must act promptly before it is too late because time is running out fast to prevent irreversible harm to our climate.

The Increase in Global Public Debt: A Warning of a Global Financial Crisis

Global public debt levels (which includes the debts of countries, companies, and households) have risen dangerously and unprecedentedly in recent years, reaching \$307 trillion in the third quarter of 2023. This represents 336% of the total global gross domestic product (GDP), more than three times what the global economy produces.

The reasons behind this significant increase in public debt include the high costs of combating the coronavirus pandemic in recent years, large trading volumes in the financial market, increased government spending in many countries, in addition to interest rates rising to unprecedented levels during the past year, during which global public debt grew by around \$10 trillion

This increase in public debt poses a major challenge to the global economy, as it forces countries, companies, and individuals to limit spending and investment, resulting in an economic growth slowdown. Additionally, this reality may lead some debtors to default, increasing the risks and repercussions of a global financial crisis, especially considering that the debt service costs continue to rise steadily, reaching very high levels.

The debts of countries constitute a significant part of the global public debt. According to data from the International Monetary Fund, government debts amounted to \$87.3 trillion, posing a threat to all countries, including advanced ones. More than 100 countries will be compelled to reduce their spending on infrastructure, healthcare, education, and social protection services, especially since over 60% of countries classified as having low income face significant challenges in managing their debts.

The main challenge, however, is whether there is a solution to the problem of global debt. Despite the efforts of economic and political experts, the

prospects remain unclear. If serious measures are not taken to address this problem, there is a significant risk to the stability of the global financial system, especially in light of the serious repercussions of the Zionist aggression on Gaza Strip and the risks it poses to shipping in the Red Sea, leading to increased shipping costs, in addition to the significant losses incurred by companies supporting the Zionist entity.

The significant and continuous increase in the size of public debt serves as a red flag for the world, reminding us of the necessity to control debt and steer economies toward financial sustainability. Governments, international institutions, and companies must work together to find innovative solutions to this growing financial problem before it leads to a major crisis threatening global stability.

Entrepreneurship Should not be a Reckless Adventure... Success is a Value

What we are facing now is a crossroads between reality and its embellishment. It can either represent an exaggerated form of enhancement or evolve into a meaningful contribution to economic growth, stimulating the creation of a mature class of entrepreneurs both intellectually and operationally.

The portrayal of entrepreneurship as a form of enjoyment, where failure is seen as part of the experience, has convinced many young people that their only solution is to abandon their “boring” jobs and venture into starting their own companies. They anticipate finding substantial wealth in a changing environment. This narrative is often overly glamorized and can be misleading. Consequently, those influenced by this perception are encouraged to enter this enigmatic realm, believing that becoming an entrepreneur and owning a startup guarantees financial success and an exhilarating adventure.

The belief that one must begin entrepreneurship early to achieve exceptional success and earn billions “as some claim” in adulthood is nothing short of irrational. Data shows that most startups fail in their initial stages due to insufficient experience and knowledge in an increasingly complex world. When entrepreneurship is mentioned, names like Mark Zuckerberg, Bill Gates, and Steve Jobs often come to the forefront as founders of the largest companies, rendering their stories repetitive and disconnected from the ambitions of young people pursuing quick wealth.

Every day, we encounter many financial and business publications filled with unfortunate stories about the challenges faced by startups. These issues often arise from an exaggerated portrayal of the entrepreneurial lifestyle, which depicts it as effortless and implies that entrepreneurs can earn quick profits while simply sitting in their rooms.

Nearly every library worldwide is filled with captivating book titles aimed at those pursuing the illusion of quick wealth. Articles widely circulated on social media emphasize pathways to success and the establishment of startups, enticing readers with the promise of riches while excessively promoting the entrepreneurial world, all framed as a means to tackle economic challenges and stimulate economic growth.

This has trapped our youth today in a seemingly educational yet deceptive content, based on distorting the actual reality while neglecting several aspects related to capabilities, experience, talent, and the absence of innovation. It also drags them into an unexamined entrepreneurial reality, marked by a lack of clear plans and an inadequate consideration of uncertainties.

This is corroborated by findings from a study published by “CB Insights,” which indicated that 90% of startups fail when entering competitive markets, primarily due to the previously mentioned lack of plans, programs, and experience, in addition to the proliferation of misleading and false ideas about “illusory wealth” tied to entrepreneurial ventures.

On the other hand, certain uncomfortable truths are frequently overlooked, as the title of “founder” has captivated the minds of our youth. Readers of Michael Gerber’s book “The E-Myth” will resonate with his claim that “entrepreneurship is not for everyone.” The practical realities of entrepreneurship are starkly different from the deceptive promotional narratives surrounding unexamined ventures, which focus exclusively on the false allure of immense wealth.

I am a strong advocate for embracing and supporting the concept of entrepreneurship today. However, I emphasize the need for a more serious and realistic approach, to prevent it from becoming merely a fleeting obsession that ultimately fails in considerable effort.

I continually advocate for suitable legislation that aligns with the nature of entrepreneurial activities and for investors who seek to discover and nurture innovative opportunities, while considering the market demands. This is

especially pertinent, as most startups today fail due to insufficient market demand for their products or services or because of intense competition. Furthermore, I emphasize the need to distinguish between the typical employee, who is accustomed to conventional roles, and the entrepreneur with an “innovative entrepreneurial mindset.” It is crucial to acknowledge these differences and ensure that both groups are equipped with the essentials for successful entrepreneurship, including thorough market analysis and the necessary skills and experience for today’s entrepreneurial landscape.

The exaggerated promotion and distortion of facts aimed at our youth, convincing them they could become the next Mark Zuckerberg or Elon Musk, can have harmful consequences, thrusting them into a chaotic environment without preparation or foresight. I urge everyone to engage more deeply, to approach entrepreneurship with rationality, the right planning, and thorough market research. Entering the field of studied entrepreneurship and formulating appropriate plans to foster economic growth is crucial to avoid becoming victims of a rapidly evolving market and ultimately facing failure.

Economic Policy: Between Comprehensive Understanding and the Role of Public Participation

Economic policy, despite its complexities and technical details, is not confined to economists with advanced degrees in the field. It can be said that it is a matter that affects the lives of individuals, and therefore, its discourse should include participants from various backgrounds and fields. I support the idea that economic policy requires not only skilled economists.

A thorough understanding of economic policy shows that it extends beyond mere numbers and economic indicators; it fundamentally addresses how economic decisions influence the daily lives of communities. Individuals from diverse backgrounds can comprehend and contribute to the establishment of priorities and policies that impact price stability, job opportunities, and the equitable distribution of wealth. Participation in economic policymaking necessitates not only academic expertise but also draws on the practical and life experiences of individuals. Those from various fields, such as medicine, the arts, and social sciences, may provide unique insights that enhance the inclusivity of economic decision-making.

The interaction between different sectors is a foundational pillar for a sustainable economic environment, particularly in a world experiencing rapid economic changes. In this context, the importance of collaboration among various sectors is vital for ensuring a prosperous and sustainable economy. This interaction entails effective partnerships between the public and the private sectors, both of which are essential in achieving sustainable development and enhancing quality of life. Such collaboration fosters a balance in economic growth; while the public sector provides infrastructure and essential services, the private sector drives innovation and investment. This equilibrium plays a significant role in creating job opportunities and improving income levels.

The collaboration between the two sectors promotes creativity and innovation. The private sector brings forth new ideas and advanced technologies, while the public sector offers support and encouragement

for developing sustainable and environmentally friendly industries. This interaction also leads to infrastructure development and the delivery of public services. The government can allocate resources for projects like roads and bridges, while private companies can enhance service provision in sectors such as healthcare, education, and others.

The economy is not isolated from the rest of society; it interacts significantly with various social and environmental issues. Therefore, the dialogue on economic policy requires participation from different sectors to ensure balanced decisions and achieve sustainable benefits.

Ultimately, society must acknowledge that economic policy is not exclusively the domain of economists. A collaborative effort is necessary to incorporate diverse experiences and perspectives into the economic decision-making process. Achieving balance and fairness demands inclusive participation, rendering economic policy a matter that concerns all individuals.

Navigating the Challenges of Emerging Technologies in Arab Countries

In the dynamic interplay between technology and society, the year 2024 emerges as a critical moment where innovation's potential intersects with governance challenges. As we navigate this pivotal time, it is crucial to recognize technology's dual role - its ability to solve critical issues while also shaking up established economies.

Advancements in technology have always been signals of societal advancement, reshaping our world for the better, enhancing efficiencies and potentially saving countless lives with improvements across all societal functions. According to data from the U.S. Bureau of Economic Analysis, the digital economy contributed significantly to economic output and value added in 2021, comprising a substantial portion of the country's GDP. Furthermore, this digital economy sector not only generated significant compensation but also supported millions of jobs, underscoring its importance in the nation's economic framework. This growth underscores how digital commerce has transformed economic progress and enhanced accessibility to goods and services.

Nevertheless, these very technologies that offer solutions also pose challenges by disrupting traditional practices. The proliferation of automation and robotics has led to increased efficiency but has also led to job displacement at an alarming pace. Economies heavily reliant on manufacturing and service industries are grappling with technological unemployment as machines surpass human abilities.

The task facing decision makers and business leaders is to balance the benefits of technology with its disruptive effects. It is crucial to focus on training workers for new skills, creating job opportunities in the tech industry and ensuring that everyone gets a fair share of technology's advantages.

Governments worldwide need to play an active role in guiding technological progress. This includes investing in research, nurturing innovation hubs and enacting rules that safeguard people from the negative impacts of

rapid technological changes. By establishing guidelines that promote transparency, authenticity and cooperation, we can enhance our democratic institutions significantly.

Looking ahead, it is essential to shape a narrative of technological progress that benefits everyone. This involves embracing technology's potential while being mindful of its capacity to cause upheaval. By doing this, we can steer progress towards a future that is not only technologically advanced but also economically sound and socially inclusive.

In a world rapidly moving towards digitalization, Arab nations find themselves at a critical juncture. The importance of these nations developing a strong technology sector, improving digital literacy and shifting from a focus on oil to a diverse, knowledge driven economy cannot be underestimated. With the increasing significance of technology and innovation in shaping the future economy, the sustainability and competitiveness of the region relies heavily on embracing this shift.

Investing in technology goes beyond economic policy - it is a crucial strategic move that will determine the region's position in the global economic landscape. By promoting innovation, nurturing tech startups and prioritizing education that provides digital skills to young people, Arab countries can usher in a new era of prosperity. This transformation is essential not only for diversifying the economy but also for empowering a generation prepared to confront future challenges with resilience and creativity.

Through my experiences as Member of the WTO Panel on Defining Future Trade and as Chair of the United Nations Global Alliance for ICT and Development, I have witnessed firsthand how technology can drive progress. It is a potent tool that, when used wisely and responsibly, can propel Arab nations toward becoming not just players in the digital economy but leaders who shape its trajectory.

Beijing: Perspectives on Sustainable Growth and Opportunities in Asia

Despite the challenges and uncertainties, Beijing's economic route remains promising, being supported by a multifaceted approach focusing on domestic consumption, technological innovation, and the adoption of sustainable energy solutions.

Within the dynamic Asia-Pacific region, characterized by strong growth and emerging opportunities, Chinese strategic initiatives promise a new era of economic flexibility and leadership where improving the quality of growth takes precedence over extensive expansion in the Chinese economic vision. This transformation reflects a mature economy's recognition of the importance of sustainability, efficiency, and innovation in driving long-term prosperity. By enhancing a conducive environment for innovation and entrepreneurship, Beijing aims to unleash the full potential of human capital and technological capabilities. This commitment to innovation is not only about boosting domestic productivity but also enhancing its competitiveness on the global stage.

Furthermore, China's embrace of green energy represents a key factor in the agenda of sustainable development, which is accompanied by a firm commitment to reducing carbon emissions and mitigating environmental degradation. It can be said that Beijing has taken a global leadership role in the deployment of renewable energy. Through strategic investments in wind and solar energy infrastructure, China does not only address pressing environmental concerns but it also benefits from the growing market for clean energy technology.

Therefore, this transition towards a low-carbon economy does not only emphasize Beijing's environmental sponsorship but it also offers lucrative opportunities for investors, innovators, and industry stakeholders alike

The broader Asian region, encompassing dynamic economies in Southeast Asia, continues to be a beacon of growth in the global economy, as rapid urban expansion, growing middle-class population, and increasing digitization reshape consumer behavior and market dynamics, creating a fertile ground for investment and trade.

I see that China's deepening economic ties with its Asian neighbors help multiply these opportunities by facilitating cross-border cooperation, integrating supply chains, and through access to markets across diverse sectors. The technology sector particularly emerges as a key pillar for economic transformation in Asia, driving innovation and productivity gains. With China at the forefront of technological advancement, particularly in areas such as interactive programming known as artificial intelligence, fifth-generation network infrastructure, and e-commerce, the region stands ready to harness the transformative power of digital technologies. This revolution stimulates economic growth, enhances comprehensive development, bridges the digital divide, and opens new pathways for prosperity for millions of people across Asia.

Furthermore, the evolution of consumer preferences and lifestyle patterns opens new horizons for market expansion and business growth. It is well-known that rising incomes, demographic shifts, and changing consumption patterns lead to increased demand for a variety of goods and services.

In this particular region, skilled companies in understanding, and duly responding, to evolving consumer trends, do gain a competitive edge in the vibrant markets of Asia, where innovation, adaptability, and consumer-centric strategies are most important. Therefore, I believe that China is not only strive to secure its prosperity but to also stimulate indirect positive effects throughout the Asian region as a global economic force in the twenty-first century.

TARPA – A Strategic Cross-Atlantic Technology Imperative

The rise of prominent Asian tech companies, particularly in the semiconductor and battery sectors, has sparked a call to action; the establishment of a Transatlantic Advanced Research Project Agency (TARPA) between the US and Europe. Drawing inspiration from the renowned Defense Advanced Research Projects Agency (DARPA) of the United States, known for its role in shaping transformative technologies like the internet and GPS, this proposed initiative aims to pave the way for collaborative innovation.

The rationale behind TARPA is clear. By combining their resources and expertise, the US and Europe can expedite the progress of cutting edge technologies while alleviating the financial burden associated with research and development (R&D). This cooperation would then lead to specialized branches such as TARPA Chip (TARPA C) and TARPA Batteries (TARPA B), focusing on advancing next generation semiconductors and battery technology.

As a global commentator on technology and trade, and having served as the Chair and a member of many UN and WTO panels for ICT and Trade, I see such an alliance as vital for the West. These areas have emerged as vulnerabilities in Western nations due to their heavy dependence on East Asia for these critical advancements, which play a pivotal role in various sectors, dominated by manufacturers based in East Asia.

To address this issue, TARPA C could lead the way in precompetitive research and development, ensuring that Western companies stay competitive in the chip innovation race. Similarly, TARPA B's goal would be to disrupt the dominance of Asian countries in the battery market, which is vital for the growing electric vehicle sector and renewable energy storage solutions. These would provide viable options to Eastern dominance in these areas and help alleviate supply chain issues.

Introducing a joint public private technology investment fund could further support TARPA's efforts by using government support to attract private investments. This strategy would not only encourage innovation but would also spread out the financial risks associated with high stakes technology advancements, as well as bolster collective efforts to address matters such as global health challenges.

Additionally, the geopolitical significance of TARPA should not be underestimated. In a time where technology is often weaponized in trade disputes and political conflicts, a united front across the Atlantic could serve as a stabilizing influence. It would demonstrate a commitment to shared values and mutual progress, strengthening ties between the US and Europe.

As digital and physical realms continue to merge, initiatives like TARPA will not only shape technological landscapes but also redefine geopolitical dynamics in the 21st century. However, such an alliance would need to move fast and play catch up with their rapidly advancing Eastern counterparts who are moving forward in an unrelenting fashion, stopping to achieve world technology dominance.

US-China Relations - Growing Similarities, Growing Tensions

The United States and China are often seen as rivals with differing outlooks on the global economy. However, a closer examination reveals that many of their disputes originate from their growing similarities, with the US implementing industrial strategies to advance its own national goals, while China maintains its state led economic approach.

China has played the game of globalization on its terms, shielding and boosting its industries while tapping into foreign markets. The Chinese government has supported key sectors for commercial and national security reasons, like telecommunications, semiconductors and AI, as well as limiting foreign entry into its market while taking advantage of other nations openness and growing needs for its goods. This strategy has led to economic growth and technological progress, that has also sparked resentment and pushback from China's trade partners.

Although the US wants to be seen as a proponent and enforcer of global economic regulations, free trade, open markets and fair competition, it has in recent times adopted measures similar to those of China by imposing tariffs, curbing foreign investments and backing domestic industries.

It has also raised concerns about China's trade practices as being unfair; intellectual property theft and threats to national security; which is clearly driven by feelings of insecurity and a desire to uphold U.S. dominance amidst China's growing influence. I would even say that the U.S. does not know how to deal with this giant's spectacular growth which is now breathing down its neck, ready to take pole position on the world stage by being an on-par competitor in virtually every sphere of economic activity.

The trade conflict between these two nations has negatively impacted their economies and disrupted worldwide supply chains, leading to

fragmentation and uncertainty, within the innovation landscape, with this rivalry heightening the potential for conflicts and instability on a global scale.

Having been a leading member of the World Trade Organization (WTO) Panel on Defining the Future of Trade and the Chair of the Business Action to Support the Information Society, I see that there is a pressing need for new regulations to oversee the world economy as both countries pursue their own agendas. These should allow for flexibility and diversity in policies while discouraging harmful competitive strategies, ensuring a fair playing field for all stakeholders while maintain healthy supply chains which the world relies on.

Accounting's Strategic Evolution in the Technological Era

In my esteemed tenure as a vanguard of global accounting, I have observed the profound metamorphosis of our profession under the auspices of relentless technological innovation. This evolution has not merely altered the instruments at our disposal but has fundamentally uplifted the stature of accounting within the corporate sphere. As the Chair of the Arab Society of Certified Accountants and a pivotal figure in the establishment of international accounting standards, I have consistently advocated for the necessity of accountants to evolve into technology specialists to thrive in the modern era.

The advent of digital tools has been nothing short of revolutionary, with cloud computing providing unprecedented access to financial data, thereby enabling instantaneous analysis and decision-making. Artificial intelligence has seamlessly integrated into the financial operations of global organizations, automating tasks and redefining efficiency. The rise of big data has heralded the transformation of accountants into wise analysts, equipped to distill vast troves of data into strategic business insights.

Today's firms are proficient in employing predictive analytics to anticipate trends, discern risks, and counsel on resource distribution, thus repositioning accountants as indispensable strategic advisors. The antiquated image of the accountant secluded in a room cluttered with files is now obsolete. My counsel to aspirants in this field is unequivocal: mastery of information technology is imperative.

Having been the Chair of the United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting, I am acutely aware of the paramount importance of cybersecurity in safeguarding sensitive accounting records. Financial data, akin to a treasured organizational asset, demands the utmost confidentiality and protection, mirroring the vigilance we apply to our tangible wealth.

As we transition to an era of electronic transactions, adherence to international financial information protection laws and regulations is critical. The responsibility is upon to forge and fortify robust security infrastructures to shield against the ever-escalating cyber threats that accompany technological progression, aiding cyber security professionals in securing vital company assets

I envision the future of accounting as a symbiotic partnership. Accountants have transcended the role of mere record-keepers to become vital architects of strategic business planning and instrumental in the enduring success of enterprises. As technology perpetually advances, so must our role, necessitating perpetual education and the adept adoption of technological tools and novel methodologies.

Accounting innovation extends far beyond the quantitative realm. It embodies the embrace of change, the strategic application of technology, and the ascension to a more commanding role within the business environment. As the accounting profession undergoes this transformation, we find ourselves increasingly pivotal in sculpting business strategies and catalyzing growth, ushering in an era of accounting characterized by dynamism and visionary foresight.

Redefining Education for a Digital World

As I reflect upon the transformative power of education, I am reminded of my journey from the schools in Jaffa to the classrooms of the American University of Beirut, to the helm of international educational institutions and world-class training firms I have had the honor of founding and operating. Education, a lifelong passion of mine, is the cornerstone upon which societies are built and the catalyst for economic and social development.

The current education system, while robust in tradition, often fails to align with the rapid pace of digital innovation. As an educator and a builder of institutions, I have witnessed the shortcomings of a system that prioritizes rote learning over critical thinking, and theoretical knowledge over practical skills. This misalignment is particularly pronounced in the Global South, where access to technology and quality education disparities persist.

In my leadership roles, from the Talal Abu-Ghazaleh Organization to the United Nations Global Alliance for ICT and Development, I have advocated for the integration of digital literacy into the curriculum. The digital revolution is not a distant future; it is the present, and our education system must be transformed to produce not just graduates, but innovators and leaders ready for this new era.

The nexus between education and economic advancement is undeniable. As the founder of the world leading professional service firm TAG.Global, I understand the value of equipping the youth with the tools for education and innovation. By fostering research and development within academic institutions, we can pave the way for economic growth, job creation, and a competitive edge in the global marketplace.

The transformation of our education system requires a concerted effort from political leaders, educators, and international organizations. It is a call I have echoed in my chairmanships and through my work with numerous global entities. We must invest in our greatest asset - our human capital - and in doing so, lay the foundations for a prosperous and an equitable future.

We are currently standing at the intersection of education and the digital frontier, where we must act with wisdom, urgency and vision. We must build a system that does not only address the needs of today but anticipates the demands of tomorrow and the betterment of our world and the generations to come.

I draw upon my experiences as an educator, a leader, and a lifelong learner, calling upon my fellow educators, policymakers, and innovators to join me in this noble endeavor. Together, we can create an education system that is reflective of our digital age and inclusive of all, regardless of geography or circumstance. Let us rise to the challenge and transform our world through the power of education.

I have proudly founded many educational institutions to build this new digital capacity that is required globally by all firms and all disciplines, empowering traditional employees to become digital workers. This digital competence is vital for all to acquire, and I have endeavored to make available at the highest quality and lowest cost through my latest institute, the Talal Abu-Ghazaleh Global Digital University (TAG-GDU), which offers a range of courses and programs to help workers level up in the fast moving digital workplace.

Harnessing AI to Build Sustainable Cities

As we stand at the dawn of a new era, it is evident that AI is not just a tool but a fundamental component in constructing sustainable and resilient cities. As someone deeply involved in promoting sustainable urbanization, I strongly advocate for integrating AI across all aspects of urban development. It is our shared duty to embrace these technologies to shape a future where cities not only provide living spaces but also thrive harmoniously with nature.

In my role as the Chair of the Consortium for Sustainable Urbanization in New York (CSU), I have personally witnessed how AI has the power to transform the trajectory of our cities. It serves as a cornerstone for sustainable progress, offering innovative solutions to tackle the intricate challenges posed by urbanization and climate change.

Urban hubs are vital to modern society, yet they encounter unprecedented obstacles due to swift urban growth. AI offers a glimmer of hope by introducing smarter and more efficient approaches to city management. From AI integrated clean energy networks to precise agricultural practices, AI is reshaping how we address sustainability issues. It empowers cities to optimize energy usage, minimize waste and better manage resources. All while supporting an expanding urban populace and reducing environmental harm.

The looming threat of climate change imperils our planet, but with AI on our side, we have a crucial ally in this battle.

By utilizing artificial intelligence for monitoring and enforcement in environmental initiatives, cities can enhance their ability to forecast and respond to disasters, ultimately reducing the vulnerability of urban populations. AI powered tools like predictive analysis and incident management play a crucial role in building resilient urban ecosystems that can adapt to and withstand challenges posed by climate change. Those interested to learn more about the impact of AI on our world would do well to read my book 'The Inevitable Digital Future'.

The emergence of Generative AI (GenAI) has revolutionized the accessibility of AI technologies, empowering individuals and organizations

with varying levels of technical expertise to leverage the potential of AI. GenAI is democratizing access to these technologies, making it feasible for a broader audience to interact with AI, fostering innovation and propelling progress across multiple industries.

The integration of AI into city operations is essential for navigating the complexities of urban living, facilitating improved urban planning and decision making processes. Through AI's data analytics capabilities, every component within a city – from traffic lights to water systems – can function cohesively, contributing to the creation of a sustainable urban environment.

Emphasizing the importance of incorporating CSU's mission into discussions about AI's role in sustainable urban development underscores the Consortium's significant contributions, which has been at the forefront advocating for resilient design and forward thinking planning strategies. By engaging with global thought leaders, sharing knowledge and encouraging youth involvement in urban development processes, the CSU continues to play a crucial role in advancing sustainable development objectives, with a focus on fostering inclusive, safe, resilient and sustainable cities. By organizing significant international events and providing essential recommendations that contribute to global intergovernmental agendas, the CSU is actively shaping the future of urbanization.

In embracing the transformative potential of AI, the CSU continues to take a leading role in combating climate change on an international scale. Its innovative initiatives and partnerships are aimed at ensuring that urban growth is sustainable for everyone by harnessing AI's capabilities to create cities that not only support human life but also coexist harmoniously with nature; a vital necessity for our planet's future sustainability.

The Unfulfilled Promises of Climate Action

In the face of the world's escalating climate crisis, promises and pledges have become the currency of hope. Yet, as we scrutinize the actions behind these commitments, a disconcerting pattern of unmet promises emerges as we are experiencing the worst five-year economic span in three decades, marked by high interest rates and debt-laden developing countries, with the global response to climate change remaining woefully inadequate.

An impression of progress is often painted with the broad strokes of optimistic statistics and future commitments. However, beneath this veneer lies a troubling truth: the world is still reeling from persistent challenges. Weak growth, rampant inflation, and record-breaking global temperatures are not mere numbers; they are indicators of deeper issues that affect the most vulnerable populations.

As the Chair for the Consortium for Sustainable Urbanization in New York, I assert that the shortfall in climate action is not just a failure of funding, but a failure of vision. The technological disparities between nations, the political instability thwarting aid efforts, and the trade imbalances crippling economies are all interconnected threads of a larger tapestry of neglect.

I want to emphasize the financial shortcomings, where international institutions and the private sector have retracted more than they have extended. Yet, it is imperative to delve deeper into the systemic issues that perpetuate this cycle. The Sustainable Development Goals, a blueprint for a better future, remain a distant dream for many, as the digital divide widens and migration trends reshape demographics.

I refer everyone back to the premise that you cannot measure what is not measurable, and that we must have an accounting environmental framework for nations in place like the one I led in 1999 called 'Accounting and Financial Reporting for Environmental Costs and Liabilities'. This was done under the Arab Society of Certified Accountants (ASCA) that I established in

1984, and was jointly produced with the United Nations and International Standards of Accounting and Reporting (ISAR), which I also chaired.

The world stands at a crossroads, where the path of least resistance is often paved with empty rhetoric. The impression of change, crafted through manipulated numbers and half-measures, is a disservice to the very essence of our collective struggle against climate change. As we navigate through these troubling times, the call for real action has never been more urgent.

The world demands concrete, implementable steps that transcend the allure of impressive figures. It is not enough to promise; we must deliver. As leaders and as stewards of the earth, we must unite in our efforts to forge a sustainable future. The promises of tomorrow must become the actions of today, for the sake of our planet and the generations to come.

Complicity in Gaza Genocide Should be Accountable

Nothing should distract the world from the immense suffering endured by the Palestinians in the Gaza Strip or from holding those complicit in genocide accountable. Urgent action is needed now.

The accusations directed towards the occupying entity are extremely serious because genocide, as defined by the Convention on the Prevention and Punishment of the Crime of Genocide, is the first human rights treaty adopted by the United Nations General Assembly. It includes any act that results in the killing, torture, or destruction of civilians natural life. The evidence is clear: in Gaza hospitals and schools have been deliberately targeted, infrastructure destroyed, and the lives of civilians shattered.

It is confirmed that the International Court is seriously investigating the heinous crimes that unfold day by day, the most recent of which is the mass graves crime at Shifa Hospital. However, and with the continuation of the crimes and the increasing number of martyrs, already xceeding 34,000 innocent Palestinians, most of whom are women and children, there is urgent need for action.

The martyrs, victims of these crimes, demand nothing less than justice, and it is incumbent upon the international community to pursue it. Failure to act decisively in confronting the crimes of the Zionist entity constitutes not only a betrayal of the innocent lives we have lost in Gaza but also a betrayal of shared human values.

In the face of these blatant violations of international law and the most basic human rights, the international community stands at a crossroads. The moral duty to hold perpetrators of crimes accountable weighs heavily on all of us. However, despite the escalating calls for justice, those complicit in these crimes remain shielded by the generous support and weapons provided by some countries.

Empty promises, hollow speeches, and shallow condemnations are useless. Concrete actions are required to put an end to Israel's impunity and its repeated pattern of evading punishment. Actions are also required to ensure accountability, and respect for international conventions regarding those who violate them by applying justice on all of them.

Effective measures must also be implemented to prevent further crimes and violations. This requires more than empty words; it demands tangible consequences for those who aid and abet genocide. Sanctions, diplomatic pressure, and law enforcement must be imposed to compel compliance with international law and humanitarian standards. The people of Gaza cannot afford the luxury of time and procrastination in confronting Israel's killing machine and oppression, while the world turns a blind eye and a deaf ear.

AI Models: Tools for Strategic Power

In the arena of global technology, AI models stand as towering figures, shaping not just the future of computation but also the geopolitical landscape. At the forefront of this revolution there is the notable ChatGPT which has revolutionized AI, bringing it to the masses and delivering immense value in a way that was just not previously possible. Its newest iteration ChatGPT 4, represents a significant leap in natural language processing with over 400 billion parameters. This has set the benchmark, with tech giants competing to build their own generative AI models as they know their future survival depends on it. This is a watershed moment, just as the arrival of the Internet was, with domination in this field, a top priority on the radars of all tech companies. All the big tech players, Microsoft, Google, Amazon and others, are scrambling to develop their offerings in this space.

However, this is not just about competition between technology companies in the West. Rather this has become a global phenomenon with China building on-par competitors to ChatGPT, having a very healthy AI scene which is catering for the Chinese audience. ChatGPT's main competitor though is SenseNova 5.0 which has been trained by 600 billion parameters, allowing it to perform complex tasks, performing neck to neck with ChatGPT in a range of applications, reflecting intense competition and rapid development with western competition.

Internally, China has a range of healthy AI competition between its tech giants, with Alibaba, Baidu and others developing their own sophisticated AI models. They too understand that the stakes are high and that their future prosperity relies on excelling in this technology. For both China and the US, these AI models are clearly more than mere tools; they are emblems of national prowess and strategic assets in the ongoing tech battle between the US and China; a rivalry that extends across various sectors, including semiconductors, quantum computing, and biotech, with each nation striving to secure technological superiority.

The implications of this AI race are profound. Politically, it could redefine alliances and power dynamics. Technologically, it may lead to a split of global tech standards and supply chains. In terms of data, these AI systems will certainly shape how information is processed and presented, influencing worldviews and decision-making processes. Data is fundamentally important in this race, as well as the development of robust ethical, responsible frameworks for their development to ensure a fair and a transparent sector is developed. Whether these are developed in collaboration between the US and China, or separately, remains to be seen

The world is witnessing a new dawn in the annals of technological advancement, where AI models are the bedrock that will help define the future. This is a race where the stakes are high, and the winner could dictate the pace and direction of technological progress in the 21st century. As these technologies continue to evolve, they will not only serve as tools for strategic power but also as catalysts for change. The AI race is indeed on, and its outcome will have lasting effects on politics, technology, and the very fabric of society.

China's Transformation from Poverty to Prosperity and Power

Given its immense significance and inspiration, China's journey from the shadows of poverty to the vanguard of global prosperity deserves a thorough examination as a role paradigm for economic reform.

In the late 1970s, under the leadership of Deng Xiaoping, the country initiated a drastically different course from its previous trajectory, where the Chinese reform architect introduced revolutionary amendments that opened the doors wide to foreign investments and private enterprises, paving the way for a period of escalating growth that transformed China from a predominantly agricultural society into an industrial giant.

This transformation greatly fueled the urban expansion strategy, as cities like Shanghai and Shenzhen evolved from local to global within just a few decades, reflecting China's aspirations and capacity to implement massive projects. This contributed significantly to reshaping the demographic landscape, as the rapid creation of a broad middle class now stands as a pivotal force in the national economy.

Technology was also another cornerstone of China's development strategy as the nation made remarkable leaps far beyond traditional stages of technological adoption and leaped directly towards modern sectors such as telecommunication, renewable energy, and high-speed transportation. This propelled China to the forefront of supply chains, transformed it into a pioneer in numerous high-tech industries, and set new global standards.

At the structural level, China's future strategic thinking is particularly evident in the Belt and Road Initiative, through which the Asian giant dragon aims to weave a network of economic influence spanning continents and exporting a development model that does not differentiate between financial gains and geopolitical influence.

Perhaps the most profound aspect of China's rise lies in its impact on the Chinese people themselves. The reforms have significantly reduced poverty rates, brought hundreds of millions of people into the shadow of economic security, and improved their lives, embodying the most humane element of its transformation.

As an observer of the international scene, I assert that understanding China's story is essential for economic development and political freedom. It is a model that other nations should contemplate, especially since, in all its diverse forms, China continues to evolve and redefine its national destiny and the global economic and political landscape.

China's transformation is a testament to the fact that strategic planning, coupled with faithful and robust execution can overcome decades of stagnation. For policymakers, economists, and leaders worldwide, China's shift from weakness to strength is not just a lesson in economic development, but a narrative of human resilience and unfolding potential.

International Justice: A Unified Message Against Zionist Policies

The simultaneous rulings of the two international courts, the ICC and the ICJ, convey a message that the world stands united—except for three countries: the United States, the United Kingdom, and the Zionist entity—in condemning the Zionist occupation.

The occupation has a different classification as expressed by the extremist Ben Gvir, who stated that “the future of Israel is determined solely by the Zionists, without the rest of humanity,” whom he referred to as “the others.” This suggests that there are two categories of people in the world: the Zionists and the others (the rest of humanity)

For additional clarification, await the decision of the International Court of Justice after June 25 of the upcoming year, when the designated warning period concludes.

As for me, I pray that the decision comes from the court and not from negotiations with the enemy, who has disregarded every agreement since its occupation and insists on negotiating every dispute (instead of adhering to international legitimacy) to impose its conditions and violate its promises.

Furthermore, negotiations could take months or even years, as Ben Gurion stated: ‘We will negotiate... and continue to negotiate

Resurgence of the US Semiconductor Sector

The ongoing economic struggle between the US and China for technology pole position has led to a significant influx of capital into the US semiconductor markets; a field which is still dominated by TSMC in Taiwan that produces over 90% of world's processors. I have spoken at length about the US passing the CHIPS Act designed to provide generous subsidies to the US semiconductor sector, clearly designed for it to reclaim its position as a manufacturing powerhouse in what is a highly critical innovation. Having all its eggs in one basket proved to be catastrophic, particularly when supply chain were severely disrupted, exposing the US vulnerability in a vital technology that is essential to so many modern sectors and innovations.

Companies such as TSMC and Intel have become the beneficiaries of generous subsidies under the CHIPS and Science Act for US onshore semiconductor production; a clear indication of America's intent to reclaim its position as a manufacturing powerhouse, with a commitment of \$300 billion over the past two years a testament to the revitalizing of the US as a global manufacturing hub. TSMC has announced plans to set up a third facility in Arizona increasing its investment in the state to \$65 billion. While these moves are well intentioned in an attempt to mitigate a huge risk, it is the service sector that holds the key to sustainable job creation and economic resilience, with the need for more brains on the ground an absolute necessity.

My perspective is not just based on observation, but is rooted in a career punctuated by leadership in pivotal roles. My tenure as chairman of the UN Global Alliance for ICT and Development, along with global leadership roles in the UN Global Impact and the UN Working Group on Human Resources and Capacity Building, have provided me with a unique vantage point to assess the interplay between technology and employment. The advent of automation and skill-biased technological advancements have significantly altered the industrial landscape, diminishing the sector's capacity to serve as the employment engine of yesteryear which informs my skepticism about the potential of manufacturing to absorb labor as it once did.

The reality is that the manufacturing sector's reliance on automation and high-tech processes means that the jobs it does create are fewer and require higher skills than the manufacturing jobs of the past. This shift necessitates a reevaluation of the employment potential of manufacturing and raises questions about the feasibility of relying on it for large-scale job creation.

Looking towards the Arab region, it becomes evident that a robust service industry is crucial for building sustainable economies. The service sector, with its diverse opportunities ranging from healthcare to finance and education, is better suited to accommodate the growing workforce of the region. It is in the realm of high quality services that the future of jobs lies.

As we navigate this transition, it is imperative to foster an environment conducive to the growth of the service industry. This includes investing in education and training programs that equip the workforce with the necessary skills to thrive in a service-oriented economy. Moreover, it is essential to create a regulatory framework that supports the development of small and medium-sized enterprises, which are often the backbone of the service sector.

While the manufacturing renaissance in the United States is commendable, it is not the panacea for the employment challenges of today. As the US strives to build an economy that will endure, it must focus on building a solid service industry to develop a future of sustainable economic growth and meaningful employment opportunities. This must be done quickly and decisively, as its rival China is an on-par competitor and is in top gear on all fronts.

Those interested in developing a repertoire of digital skills are recommended to visit the TAG-GDU website at <https://www.tag-gu.global> to help secure their place in our collective digital future.

Through Technical Superiority, Ideology, Faith, and Certainty, the Palestinian Resistance Triumphed

Palestine did not wait for support from anyone, and the significant disparities in military capabilities did not prevent it from advancing to confront the enemy in its quest for dignity and liberation.

The whole story began in ‘Gaza,’ the cradle of men and the land of heroes. I am not from Gaza, so as not to be accused of bias, but from that land called Palestine, the land that was stolen by the occupier, who robbed its rich history and seized its vineyards, orchards, and sacred olives.

I’m not sure how to discuss Palestine—should I convey it through tears, blood, or ink? It has faced the most severe forms of death, witnessed every kind of tragedy, and has not spared the young or the elderly, children or infants, women, mothers, or girls.

Eight months of disturbing scenes, eight months of relentless horror, eight months of silence, eight months of cries, eight months of bitter, painful endurance, eight months of profound suffering, eight months of horrific extermination, and eight months of devastating destruction...

Yes, the Palestinian blood shed daily on the land of Palestine, nourishing its soil, is not cheap as many have misunderstood. This blood did not fade into darkness as it might have been destined to; instead, it blossomed into blazing suns that illuminated the witnesses of the enemy. It spread as fragrance, light, and energy throughout the corridors of the world.

The world that watches from afar can no longer withstand the wrongdoing. It no longer accepts the deceit practiced by the enemy, nor does it maintain neutrality in a conflict that began with its alignment with the enemy and ended with the complete dismantling of that enemy’s deceptive intentions. The world has awakened, not just one or two groups, or one or two capitals, but throughout most decision-making nations, in the streets, institutions, and academies, and recently among prominent leaders.

Yes, at the level of leadership, and I mean what I say. My statements are not arbitrary claims or mere wishes; they are confirmed truths supported by data, statements, announcements, media coverage, and documentation. In Spain, “Guterres” proudly acknowledged his “Arab” affiliation, and the King of Spain has never downplayed the Arab influence in his country’s history, whether in Granada or Andalusia—both recurrent destinations for people worldwide. He has consistently rejected the unjust Israeli policies and has expressed full solidarity with the people of Gaza in their struggle for justice and self-determination.

Spain is not the only country to declare its support for the Palestinian people in their struggle for rights and self-determination; Norway has similarly taken a stand, advocating for Palestinian rights with all its influence and presence within the European Union.

And Ireland, one of the British politics branches, confronts history and its biased treaties, boldly and openly declaring its solidarity with Spain and Norway.

This situation has placed the European Union in a difficult position, creating a significant concern that other EU countries might follow the lead of these three supporters, which could strongly bolster the Palestinian cause. This response stirred the French Parliament into action, led by two prominent members: “Mathilde Panot,” who made a vital appeal for the children of Gaza, and her colleague “Sébastien Delogu,” who raised the Palestinian flag within the Parliament. When the President of the Parliament objected, he publicly displayed the flag and danced to the Palestinian anthem, “By my oath, by my religion, I am Palestinian.

He was not alone in his stance at the French Parliament; dozens, even hundreds, joined him in a spontaneous demonstration without any prior preparation or invitation from any organization. This was fueled by a personal commitment to the conscience of humanity, which refuses to accept injustice and proudly champions the banner of “human rights.

These dramatic developments, among others, have provided U.S. President Biden with the green light to challenge Israeli policies under Netanyahu. For the first time, Biden has publicly opposed Netanyahu, marking a significant point of contention. He acknowledges the imminent establishment of a Palestinian state and, importantly, recognizes the need for Gazans to return to Gaza, to initiate its reconstruction, and to secure the release of all prisoners from both sides.

Yes, it is a rosy summary of the brave Palestinian resistance, which has trapped the enemy in the blood-soaked quagmires they set for the Palestinians, drowning in a tragic manner they never imagined.

There is no doubt that falsehood may have its moment, but truth will have countless opportunities. The cycles of truth and certainty will continue until every inch of Palestine is liberated and the right of return for the dispersed Palestinians is achieved. The brave resistance needs to remain committed to its principles, strengthen its resolve, and establish connections across all Palestinian territories in unity. This will forcefully drive the enemy out from the land they claim as their 'promised land'. And this will restore independence, stability, openness, and prosperity within the Arab region, which once flourished with tourism, trade, and mutual goodwill grounded in love, trust, and certainty.

Shared Prosperity in the Age of Technology

As AI and robotics reshape our world, we find ourselves at a crossroads. The promise of increased productivity and efficiency is undeniable, yet the threat of job displacement looms over us. While I have spoken about these technologies being net producers of jobs, there will be trades and communities that suffer. In this delicate balance, we must consider the fate of millions who may face the risk of being left behind

The rise of AI and robotics heralds a new era, one where mundane tasks are automated and the very fabric of work undergoes transformation. While some workers can pivot toward knowledge-based roles, others face insurmountable barriers. Imagine the farmer whose livelihood depends on tilling the soil, or the factory worker whose hands have shaped our industrial landscape. These individuals cannot merely retrain their skills which are deeply rooted in tradition and history.

In rural communities the impact is stark, as automation threatens to render entire professions obsolete. The tractor replaces the plow, the assembly line yields to robotic arms, and the once-vibrant textile mills fall silent. For these souls, the prospect of retraining is akin to asking a fish to climb a tree. Their dignity, their sense of purpose and all that they have every known hangs in the balance. Skills have been passed down from generation to generation and they simply cannot do anything else.

Let us delve even further, where AI feeds on our collective wisdom. It digests our texts, absorbs our conversations, and deciphers our intentions. But who fuels this insatiable appetite? We do. Our data - the raw material of the digital age - fuels the algorithms that drive progress. Big tech corporations amass fortunes by harnessing our clicks, our queries and by tracking our every move online, feeding their systems with greater amounts of data we generate.

Here lies the dilemma. If AI thrives on our knowledge, should we not share in its prosperity? The dividends of this new technology capital should not accrue solely to the elite. A fair exchange demands that the public,

the unwitting contributors, receive their due. I feel it is time to revisit the concept of universal basic income (UBI) as a pragmatic solution - one that transcends mere economics and speaks to our shared humanity. UBI becomes not a handout but a rightful claim - a dividend for our unwitting role in AI's ascent.

Many years ago, I spoke about UBI as a moral imperative and a safety net in my book 'Brave Knowledge World', a guaranteed income that shields the vulnerable from the tsunami of automation. Let us now recognize that our data and our collective wisdom is the currency of the digital age. While I strongly encourage everyone to retrain and become knowledge workers, there will be those that will be simply unable to make the shift into the digital economy.

In the grand theater of progress, let us not forget those players that end up left behind. The farmer, the weaver and the fisherman deserve a role in the unfolding future and must not be swept under the carpet as a sort of collateral damage due to technological progress.

I don't see UBI as a charity, I see it is a form of justice. As AI evolves, let us ensure that its blessings reach every person.

I urge all lawmakers to seriously investigate UBI and how it can be applied within their nations, while simultaneously focusing on developing robust digital educational institutions that can graduate those that can actively partake and contribute to our global digital world.

Developing a Balanced Approach to AI

The discussion surrounding generative AI is sometimes done with apprehension, reflecting a sentiment of AI pessimism. This is underscored by surveys indicating that a significant portion of the American populace harbors feelings of caution or concern towards AI, with a Pew Research Center survey revealing that 52% of Americans are more concerned than excited about AI's role in daily life.

Such skepticism is not unfounded, as technological disruption has historically overturned legacy industries, rendering certain skills and processes obsolete. Also, it is a human tendency to focus on what could be lost, rather than gained by exploring a new horizon. An unhealthy fear however is to be avoided at all costs, as this stagnates growth. This disruption is not solely destructive; it also forges pathways for innovation and development.

For instance, AI's incursion into the legal and insurance sectors has demonstrated its capacity to enhance efficiency and transparency, transforming practices that have long been resistant to change, including streamlining processes, improving fraud detection, risk identification and mitigation, aiding compliance as well as enabling data driven decision making.

In the realm of education, AI's potential to facilitate cheating has sparked alarm among educators. The introduction of sophisticated AI chatbots has led to fears of students bypassing learning in favor of AI-generated solutions. Yet, this perspective overlooks AI's dual capability as a tool for upholding academic integrity. AI can assist in identifying patterns indicative of cheating, thereby reinforcing ethical academic practices and freeing up educators from mundane tasks, allowing them to focus on educating better.

Adopting a balanced view of AI necessitates acknowledging both its challenges and its potential downfalls. While AI may displace certain jobs, it also offers opportunities for human-AI collaboration, fostering new roles and industries that harness AI's analytical prowess for societal

advancement. The benefits of AI, such as task automation, data analysis for informed decisions, and advancements in medical diagnosis, must be weighed against ethical concerns, job displacement, and security risks.

Ultimately, the conversation about generative AI should not be dominated by fear of the unknown but should be a nuanced dialogue that considers the multifaceted nature of AI's impact on society.

By embracing a balanced perspective, we can steer the development and application of AI in a direction that maximizes its benefits while conscientiously mitigating its risks. This approach will enable us to harness the transformative power of AI, ensuring that it serves as a catalyst for progress rather than a source of concern.

The Entity and its Allies... Malicious Efforts to Leap over Defeat

Amid escalating casualties and increased international pressure, the entity, with support from its key allies, is calling for a negotiated solution to the brutal war on Gaza Strip rather than an immediate end imposed by international resolutions. This insidious approach highlights the strategic intention to shape the terms of peace in its favor, particularly regarding the recognition of the Palestinian state.

It is well known that the horrors of war and the brutality of the entity have affected it both economically and socially. The ongoing state of war has impacted the military resources of the occupying state, affected its economy, and led to an increase in human losses. These difficulties have prompted demands from within the entity and supporting countries to end the hostilities. However, the preferred route for this cessation is direct negotiations rather than resolutions imposed by international bodies such as the United Nations.

It is well known that the United States plays a pivotal role in supporting the entity's position, often using its veto power in the Security Council to obstruct resolutions unfavorable to the interests of its Zionist ally. This diplomatic support is crucial because it allows the entity to impose its conditions instead of being compelled to accept terms agreed upon internationally.

The United States supports the entity's conviction that recognition of the Palestinian state should be achieved through direct negotiations, effectively excluding international efforts to impose a solution and placing the burden on bilateral talks, where the entity holds the upper hand.

The American veto in the United Nations Security Council has been a crucial tool in maintaining the entity's position, preventing the adoption of resolutions that could impose unacceptable measures for its ally. It can be

said that this use of the veto power highlights a broader geopolitical strategy where the United States aims to support its ally, the entity, to achieve its interests in the Middle East.

However, as the war continues, we see a widening international gap. While the entity and its allies call for a process that allows negotiation , many in the global arena are pushing for immediate decisions that adhere to international law and previous agreements.

In conclusion, the entity is suffering in all areas and with the whole world, from serious illnesses that will eventually lead it to self-inflicted clinical death from within.

China Seeks New International Relations Away From War Mentality

China advocates for a partnership-based approach, aiming at building an international community with a shared future for humanity. This vision calls for new international relations that go beyond the zero-sum games and war mentality, with a focus on mutual trust, equality, and respect for cultural diversity.

Beijing has consistently affirmed its commitment to numerous cooperative initiatives to enhance regional security, economic development, cultural exchange, and global governance. Indeed, the speech of the Chinese President Xi Jinping at the Shanghai Cooperation Organization Summit (SCO) had highlighted this commitment to regional and international cooperation by focusing on collective security, economic integration, cultural exchange, and the promotion of global peace and development.

It is well known that the Shanghai Cooperation Organization (SCO) was established in 1996 as a regional Eurasian bloc called the “Shanghai Five,” which included China, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. After the accession of Uzbekistan, India, Pakistan, and most recently Iran at the India summit, the organization now represents half of the world’s population.

China has placed great emphasis on strengthening security and law enforcement within the Shanghai Cooperation Organization (SCO) region. A key initiative involves training law enforcement officers through various platforms such as the exchange and cooperation base, international judicial training in China, and the SCO. Additionally, China advocates for comprehensive discussions to facilitate peacebuilding and reconstruction in Afghanistan, recognizing the need for stability in the entire region.

China also considers the promotion of cultural understanding and transcending differences as fundamental elements of its approach in advocating for equality, mutual learning, dialogue, and tolerance among civilizations. China rejects any notions of cultural superiority.

Nevertheless, the Belt and Road Initiative remains a central strategy for enhancing economic influence and connectivity with other countries. By advocating for a new model of international relations, China indicates a shift towards a more inclusive and multilateral approach to global challenges.

This initiative is a key element in China's strategy which aims to strengthen links between development strategies and facilitate regional trade.

The Second Global AI Safety Summit

The second Global AI Safety Summit has unfolded during the period May 21-22, 2024, under the joint auspices of the Republic of Korea and the United Kingdom, as a sequel to the inaugural event which was held in the UK to further the dialogue on AI safety, innovation, and inclusivity. Yet, despite its noble intentions, the Seoul summit struggled to match the groundbreaking success of its predecessor.

The first summit, held in the UK at Bletchley Park in 2023, was a historic event that culminated in the Bletchley Declaration - a commitment by 28 countries to ensure responsible AI development. It set a high bar with tangible initiatives like the creation of AI safety institutes and the formation of an advisory panel of international AI experts.

The Seoul summit has brought together a diverse group of stakeholders, including government leaders, industry giants, and civil society advocates. Notably, ministerial level representatives from 28 countries graced the event, alongside leading technologists from OpenAI, the creators of ChatGPT, and Google DeepMind.

The summit's agenda included sessions that delved into the advancement of AI safety protocols, the fostering of innovation, and the promotion of inclusivity within the AI sphere. The Seoul Ministerial Statement, a document embodying South Korea's vision for AI and semiconductor technologies, has emerged as a pivotal outcome, representing a unified commitment to enhancing AI safety, fostering innovation and ensuring inclusivity. Additionally, a group of tech companies pledged to responsibly develop AI and address social challenges through the Seoul AI Business Pledge.

The second Global AI Safety Summit in Seoul was a testament to the ongoing commitment to AI safety. Despite the Seoul summit's achievements, some attendees felt it lacked the pioneering spirit of the UK summit, with some countries not in attendance, notably Canada. The Bletchley Declaration's absence of a comparable landmark agreement in Seoul was noted, and the summit's impact was seen as more incremental than transformative.

As the world looks ahead to the third summit in France, the AI community remains hopeful for breakthroughs that will shape the future of AI governance.

The High Consequences of Gaza War: A Burden That the Occupying Entity Cannot Bear

The veil of Zionist lies and deception is falling apart day by day due to the high cost of its brutal war on the Gaza Strip, as the human and economic losses are not just statistics; rather an indication of a deep pathological condition at the roots of the illegitimate entity.

While the occupation continues its heinous crimes against the resilient people in Gaza, astonishing figures are emerging that will inevitably deepen the existing divisions and splits within the entity. Perhaps these realities are the main reason for Netanyahu's insistence on prolonging the aggression, disregarding international calls and initiatives, and pressure from the Zionist Street, especially with the growing public skepticism about Israeli army's reports on human losses. Hospital records reveal that the number of casualties has exceeded 20,000.

On the economic front, the costs are nothing short of overwhelming, God's willing, as data from the Bank of Israel and the Israeli Ministry of Finance showed that the cost of the war from October 7th until the end of March has amounted to more than 73 billion dollars.

The Zionists will wake up to the reality that the war they applauded will turn into regret when they discover that it has consumed their sons and their wealth, and that the entire world no longer believes in Zionist myths, as calls for accountability increase, especially after decisions by the International Court of Justice and the International Criminal Court. Perhaps increasing isolation, sanctions, and trade restrictions await the entity, exacerbating its humanitarian, social, and existential crises.

As costs continue to rise - both human and economic - the question arises: how long can the entity sustain this situation? The burden on its soldiers, the strain on its economy, and the growing societal divisions suggest that they are facing a new scenario in which these elements could combine to lead to

a civil war. This is why President Biden and his administration have been increasingly concerned about what is happening, which has been expressed on more than one occasion, the latest of which was his remarks to Time magazine in which he announced a ceasefire proposal.

The Zionists must realize, and everyone must realize, that the blood of the martyrs in Gaza is a stark reminder that military oppression has rebounded on them with disasters and tragedies, and that hatred and killing have dragged them into a deadly game.

“Is the Idol of the West Still Worshipped?”

For centuries, the West has been reigning over the economic, political, and cultural throne of the world. Western countries have been a center of innovation and progress, prompting many individuals and societies in the Arab world to adopt the West as a model to emulate and a reference to seek guidance in achieving progress and civilization. However, this cultural, economic, and political integration with some Western countries raises tricky questions: Do Arabs still see the West as a reference for them? Does integration mean losing the ability to stand on their own and make independent decisions?

The bitter result is clear! The people of the South as a whole are drowning in the darkness of ignorance, and dependency on the West, causing them to lose awareness and fail to regain their original awareness, confined by the limited perspective beyond their narrow borders, serving the tyrants of the time and their allies more than the loss of awareness among the people. The result of all this was nothing but the continued subjugation of nations to slavery, governed by the shackles of ignorance and dependency.

One of the most prominent manifestations of Western integration is its powerful political and economic impact. Despite significant political transformations and massive revolutions that have swept through some Arab countries in recent years, many of these nations still rely almost entirely on economic and military support from Western countries. This ongoing dependence may be the main reason for the inability to make independent decisions and the failure to end the ongoing conflicts in regions like Gaza.

Whoever thinks that the time of idols has passed is mistaken! And whoever thinks that the era of slavery has ended should also be aware that they are mistaken. Colonialism is still present, and intellectual and cultural colonization still make our regions their main target. The people are still ready to submit again if colonialism returns in its new form, without considering the price of the freedom they should enjoy. This is the reality we live in today, and it deserves to be strongly opposed with all determination and resolve.

In regions like Gaza, the ongoing conflict poses a real challenge to Arab identity and its ability to stand on its own and protect its interests. However, the continued reliance on Western support hinders the taking of bold steps to end these wars and achieve peace.

In this pivotal context, a grieving nation, suffering from the effects of conflict and marginalization, searching for itself in a time of despair. At a time when silence is considered a form of complacency, the voices of scholars and thinkers are being silenced, with attempts to restrain or recruit them, while extremist ideas continue to exert their influence.

In light of this harsh reality, Arab institutions appear paralyzed, education is in a state of continuous deterioration, and the media is subjected to bribery and manipulation. It's a grim picture of a reality filled with challenges and difficulties.

However, in light of this crisis, there is an urgent need to revive the spirit of struggle and liberation, along with finding new ways of thinking and acting. Arabs must draw strength from their great history and culture, and enhance their ability to innovate and renew, to build a future that reflects their values and principles.

It is the time to rebuild Arab identity and to build new relationships with the West based on cooperation and mutual respect. It is a long and difficult journey, but it is necessary to achieve the desired change and build a better future for future generations.

Sustainable Middle Eastern Cities

As the Chair of the Consortium for Sustainable Urbanization, I am deeply concerned about the challenges posed by rapid, uncontrolled urbanization across the Middle East. Urban growth, often unplanned and haphazard, has far-reaching consequences for our societies, economies, and the environment.

An example of this is in Lebanon, a country where nearly 90% of the population live in urban areas that face a complex web of crises. Over the past decade, it has grappled with an influx of over 1.5 million refugees, economic instability, and political paralysis. These challenges have strained public services, infrastructure, and resources, particularly in cities where the majority of refugees have settled.

The UN-Habitat-ESCWA ‘State of the Lebanese Cities Report’ sheds light on the situation, analyzing ten cities across 19 themes, revealing stark inequalities in access to services and infrastructure. Unplanned urban expansion exacerbates these disparities, affecting housing, water, sanitation, and other essential rights. The report underscores the urgency of addressing these issues to ensure citizens’ well-being.

Lebanon’s experience is not unique. Across the Middle East, cities face similar challenges, with explosive urban growth often outpacing planning efforts, pushing existing infrastructure over its limits. Cities that host a significant portion of the population, Palestinian refugees and displaced Syrians, have not seen their infrastructure improved.

The strain on urban infrastructure is immense, exacerbated by economic crises and currency devaluation, with uncontrolled urbanization leading to environmental degradation, air pollution, and inadequate waste management. These factors harm public health and exacerbate existing vulnerabilities. Unequal access to services, housing, and job opportunities perpetuates social divisions, with overburdened roads, inadequate public transportation, while insufficient water and sanitation systems hinder sustainable development.

To secure our future, we must prioritize sustainable urbanization. We need comprehensive urban planning that considers social, economic, and environmental dimensions. Collaboration between government, civil society, and private sectors is crucial, along with smart investments in transportation, water supply, and waste management, where public-private partnerships can help bridge funding gaps.

Ensuring access to decent housing for all is a fundamental right. Affordable housing policies and innovative solutions can address this challenge. Urban green spaces improve quality of life and enhance resilience. Green areas and sustainable architecture should be integral to our cities, engaging citizens in decision-making that fosters ownership and ensures that urban development meets their needs.

Lebanon's journey towards sustainable urbanization is a reflection of the journey of many Arab countries on the road towards sustainable urbanization. As we navigate complex crises, we must seize the moment to build resilient, inclusive, and sustainable cities, as our collective efforts today will shape the future for generations to come.

Abu-Ghazaleh Shares Insights from Bruce Stokes on the Upcoming 2024 US Election

As the United States approaches the 2024 elections, a complex picture of public sentiment and perception is emerging from official US sources and national polls.

A striking aspect of the current political climate is the apparent gap in historical knowledge, with a significant portion of the electorate reportedly unaware of pivotal events such as the Civil War and the Great Depression. This lack of historical context may influence contemporary political and economic perspectives.

Economic indicators suggest a disconnect between public perception and reality. Despite data indicating that the national economy has not been in a recession since 2020, a substantial number of Americans believe otherwise. This sentiment is reflected in the misperception regarding stock market performance, with many under the impression that stocks have declined, whereas they have actually risen by 11% in 2024.

Inflation rates and their management are a contentious topic. There is a widespread belief that the current administration has seen a 50% inflation rate, a figure that contrasts with official statistics. The belief that presidential policies can directly control inflation persists, despite historical evidence suggesting the contrary.

The disparity between the perception of personal financial health and the national economy is noteworthy. Many Americans view their personal finances positively, yet regard the national economy unfavorably, indicating a possible influence of media narratives on public opinion.

Immigration policy remains a polarizing issue, with a significant portion of the population, influenced by certain media outlets, believing in an open-border policy that does not align with official immigration strategies.

Similarly, crime rates, which official statistics show to be on the decline, are perceived by many to be increasing. This discrepancy highlights the role of media in shaping public perception and underscores the importance of cross-referencing multiple information sources for a balanced view.

The media landscape, as always, plays a pivotal role in shaping voters' views. The divergence in perceptions of reality among the electorate is often a product of their chosen news sources. In battleground states, where the election outcome is likely to be decided, economic nostalgia and other sentiments influenced by media narratives are prevalent.

The sentiments leading up to the 2024 US elections are an assortment of historical amnesia, economic misconceptions, and media-influenced opinions. It is essential for voters to seek information from a variety of sources to form a well-rounded understanding of the issues at hand. As the election nears, it will be crucial for the electorate to engage in informed discourse, bridging the gap between perception and reality to make decisions that will shape the future of the nation.

Bruce Stokes is the executive director of the Transatlantic Task Force and senior fellow at the German Marshall Fund. He was the director of Global Economic Attitudes at the Pew Research Center in Washington, DC, and is a former international economics columnist for the National Journal, a Washington-based public policy magazine. He is also a former senior fellow at the Council on Foreign Relations.

Impact of Tariffs on the Transition to Green Energy

The global movement towards renewable energy is an essential part of our future that has been gaining strong momentum. This transition is fueled by the rising need for energy sources supported by the decreasing prices of solar panels, wind turbines and electric vehicles. However, there is an obstacle to this trend that comes in the form of tariffs on high quality green technology imports from China.

The issue of imposing tariffs on technology has sparked controversy that could have significant implications for the transition to green energy. These tariffs are often justified as a means for nations to protect industries and address trade practices. Yet they could hinder progress towards a climate friendly future. The cost reductions in technology largely driven by China's manufacturing capabilities have played a role in promoting renewable energy adoption. Tariff increase results in higher costs for consumers in America and Europe, and largely effects the uptake of clean technology.

The demand for energy continues to rise with a notable increase in global capacity, for renewable sources. This growth is mainly attributed to the expansion of solar photovoltaic installations, which now contributes significantly to world energy supply. The International Energy Agency (IEA) has emphasized the importance of implementing policies to sustain this growth, and achieve the targets outlined in global agreements like the Paris Agreement.

In my role as Chair of the Consortium for Urbanization in New York, I am deeply committed to raising awareness about addressing climate change, which is now more urgent than ever before. The record-high global temperatures act as a reminder of the escalating crisis, with these temperature anomalies signifying dangerous changes happening in our environment, and are impacting ecosystems, weather patterns as well as animals and humans. The rapid increase in greenhouse gas emissions highlights the need for resolute actions to mitigate the effects of climate change.

The policy implications associated with imposing tariffs on energy technologies are complex. On one side, tariffs could encourage manufacturing and reduce reliance on foreign imports. Conversely, they may result in higher costs for consumers, slowing down the adoption of renewable energy solutions, which could impede efforts to address climate change effectively. Policymakers are therefore confronted with the task of balancing considerations with environmental priorities. We must remember that time is no longer on our side and that the right actions must be taken.

Although tariffs may align with economic goals, their broader effects on transitioning towards green energy and combating climate change must be thoroughly evaluated. Achieving a green future involves navigating a multifaceted journey that embraces creativity, drives progress, and above all, speeds up the shift towards renewable energy sources. It may be a question of putting our national priorities aside for the sake of global greater good.

The Impending Data Drought in AI

Data has become the new oil and is vital in the training of AI systems. This acts as the lifeblood for training algorithms, enabling them to discern patterns, make predictions, and execute tasks with amazing understanding and speed.

These systems have voracious consumers of data, with the grandfather of large language models, the first iteration of ChatGPT, being trained on a colossal dataset of approximately 570 gigabytes of text data. This staggering volume underscores the data appetite of AI systems. However, with the current rate of data consumption, a looming crisis is on the horizon which is that high-quality data these systems use to build their models on, could be depleted by 2026.

The quest for quality data is fraught with challenges. AI systems are only as good as the data they consume. The principle of “garbage in, garbage out” is a stark reminder that poor-quality input inevitably leads to subpar output. The internet, an expansive reservoir of data, is unfortunately saturated with low-quality information. Social media content, rife with biases and inaccuracies, if harnessed for training could produce AI systems with skewed perspectives, propagating the very prejudices we seek to eliminate. To mitigate this problem, some AI firms are contemplating the acquisition of publishing houses that are owners of vast quantities of offline high quality information. This strategy could potentially secure a steady influx of well-curated, high-caliber data, but is a stopgap measure in the grand scheme of AI’s insatiable data demands.

Another solution could be to crowdsource high quality data by encouraging a broad base of users to contribute high quality data in a diversified data pool and be remunerated for it. Such community driven data science collection could yield rich datasets for AI training from a wide range of people and institutions.

There have been calls from some quarters to use AI to generate data for subsequent AI training - akin to a digital form of inbreeding. This recursive loop can lead to 'model collapse' - a phenomenon where the diversity and quality of AI outputs degrade with each generation. Training systems using this type of data will lead to systems where innovation stagnates and originality dwindles, eventually producing nonsense.

I believe we need a long-term solution to the problem of data, which can only be done by producing more efficient AI algorithms that use information more intelligently. By emulating human educational progression from simple to complex concepts, AI systems can optimize their learning trajectory, forming more profound connections between concepts while utilizing less data. This is called 'curriculum learning' and is an important concept of efficiency in this context.

The impending data scarcity necessitates a paradigm shift towards more innovative approaches to data utilization. We need to ensure AI's continued evolution and relevance in an ever-changing digital landscape with data sustainability in mind, or else we may find it plateauing very quickly in the near future.

China's AI Prowess

The World Artificial Intelligence Conference (WAIC) in Shanghai is a significant platform that highlights China's progress in artificial intelligence despite facing international trade restrictions. The event highlights the resilience and creativity of Chinese tech giants to adapt to US restrictions and drive innovations that redefine industry norms, as is evident from the AI offerings displayed at the 2024 conference.

An example of this progress is SenseTime's latest unveiling of the SenseNova 5.5 model. This advanced language model shows a 30% performance boost compared to its predecessor, marking a notable milestone in AI advancement. The SenseNova 5.5 signifies China's dedication to leading the global AI landscape.

Similarly, Alibaba has witnessed remarkable growth in its cloud computing sector. The Tongyi Qianwen LLMs have gained popularity with increased downloads and heightened customer engagement on their AI platform, reflecting strong domestic demand for cutting edge Chinese AI technology. SenseTime and AliBaba's advancements in AI technology are giving OpenAI's ChatGPT a run for its money in terms of performance, indicating a fierce competition for global AI supremacy.

These are just examples of two Chinese companies at the event.

The conference showcased a wide range of AI companies and technologies, from basic models to complex multimodal and terminal based models, demonstrating the vast possibilities of AI applications across various industries. The event also highlighted the rapid progress in AI solutions tailored to meet the specific needs of Chinese users, showcasing the country's quick and innovative approach to technology.

China's AI market is vibrant with both startups and established tech companies contributing to the nation's journey towards becoming a leader in AI. The country's ability to quickly adapt to changes in the AI landscape

and its ability to develop innovative solutions is key to its international dominance. Events like WAIC and achievements by Chinese companies indicates China's determination and capability to influence the future trajectory of global AI.

Throughout the WAIC, there was strong emphasis on 'Governing AI for Good and for All,' with discussions and exhibitions focusing on ethical development and governance of AI technologies. The conference was not just a platform to showcase the latest in technology, but also a hub for discussing global AI governance, highlighting the need for responsible innovation.

The conference was not only a display of China's AI prowess, but it also underscored the nation's strategic role as a frontrunner in AI innovation worldwide. It brought together a diverse range of companies and institutions, from tech giants to startups, from academic researchers to industry professionals, all sharing a common aim of advancing AI technology for societal progress.

With ongoing advancements and a dedication to pioneering technologies, China is poised to maintain its lead in the AI sector and increase its technological dominance on the global stage.

Await the Verdict: The International Court of Justice, the Judicial Body Ensuring Global Peace

On June 26, 1945, the United Nations Charter was signed, establishing the International Court of Justice. This event followed a meeting of representatives from countries in San Francisco, driven by a desire to achieve global peace after the destruction caused by World War II.

Thus, the International Court of Justice (ICJ) was born, becoming the principal judicial organ of the United Nations to ensure the peaceful settlement of international disputes. It held its first inaugural session in April 1946 at the Peace Palace in the Netherlands. Since then, this place, located on the North Sea coast, has become a symbol of international justice and world peace, and one of the six main organs of the United Nations, headquartered outside New York City

However, the establishment of the International Court of Justice was not an instantaneous event; rather, it was the result of a series of earlier attempts to create an international legal institution dedicated to the peaceful resolution of disputes between states. The roots of this idea trace back to the 19th century when the Permanent Court of Arbitration was established during the First Hague Peace Conference in 1899.

However, it was not a permanent judicial body, but a mechanism for forming arbitration panels as needed.

In 1919, following the establishment of the League of Nations after World War I, a permanent court was established to deal with international disputes. However, the outbreak of World War II severely hampered its work, leading to the need for a new institution after the war. Thus, the International Court of Justice (ICJ) was established, inheriting the powers of the Permanent Court of Arbitration, but more comprehensively and independently.

The main mission of the International Court of Justice is to settle disputes between states per international law and to provide advisory opinions on legal matters referred to it by United Nations bodies and specialized international agencies. It relies on the voluntary participation of states,

meaning that when a state agrees to be a party to a case before the court, it commits to complying with its binding decisions.

The International Court of Justice is considered a guardian of international law, working to resolve disputes between states through legal means, issuing binding decisions for member states, and providing legal guidance on the interpretation and application of international treaties. It also strives to promote and protect human rights through its decisions and rulings, contributing to the achievement of justice and fairness on a global scale.

The International Court of Justice consists of 15 judges elected by the United Nations General Assembly and the Security Council for nine-year terms. This composition reflects a specific geographical balance: three judges from Africa, two from Latin America and the Caribbean, three from Asia, five from Western countries, and two from Eastern Europe.

Historically, the Court has always included a judge from each of the five permanent members of the United Nations Security Council: The United States, the United Kingdom, France, Russia, and China.

Whenever the court considers a case, it follows precise procedures that begin with the submission of written arguments and evidence, followed by oral hearings before the judges. After that, the court conducts its confidential deliberations, which usually last between four and six months, before issuing its final and binding decisions, which cannot be appealed.

AI and Our Planet

As we embrace the transformative capabilities that AI brings, we must also address the environmental implications that accompany its proliferation. AI will become the backbone of the digital world, touching every aspect of our online existence and we need to make sure that sustainability concerns regarding its energy consumption are adequately addressed.

The incredibly complex language models being trained on hundreds of billions of parameters and the massive amounts of data being analyzed, means that AI is by design a voracious consumer of energy. Their operation is essential for the seamless storage and processing of information, yet they leave an indelible mark on our planet's health. The carbon footprint of these facilities is a growing concern, as they contribute significantly to global greenhouse gas emissions.

Large language models, such as those powering generative AI, are particularly resource-intensive. The training of these models requires substantial computational power, which, in turn, demands considerable energy, often derived from non-renewable sources. Moreover, the cooling systems necessary to maintain optimal operational temperatures consume vast quantities of water, exacerbating the strain on our already limited freshwater resources.

However, the environmental impact of AI extends beyond energy consumption alone.

The extraction of minerals like lithium and cobalt, which are critical for the batteries that power data centers, involves intensive water use and poses pollution risks. Furthermore, the mining processes have been associated with human rights violations, casting a shadow over the ethical sourcing of these materials.

As we navigate this complex landscape, it is imperative that we, as leaders in technology and innovation, advocate for policies that encourage sustainable practices. Governments and industry stakeholders must collaborate to design frameworks that support companies in their transition towards environmental stewardship. This includes mandating transparency

in resource usage and in ensuring compliance with human rights standards in supply chains.

Countries must adopt environmental accountability measures to fully grasp the impact of climate change within their borders. This requires robust accounting practices that enable both corporations and governmental bodies to accurately report and comprehend the environmental expenses and obligations.

In 1999, I addressed this issue by spearheading the creation of an in-depth report titled ‘Accounting and Financial Reporting for Environmental Costs and Liabilities’ with the help of global experts. The report was an initiative of the Arab Society of Certified Accountants (ASCA), which I founded in 1984, and was developed in collaboration with the United Nations and the International Standards of Accounting and Reporting (ISAR), over which I presided.

In addition to policy interventions, the tech industry must take proactive steps to minimize its environmental impact. This can be achieved through the adoption of renewable energy sources, the implementation of more efficient cooling technologies, and the exploration of alternative materials for hardware components as well as for improving algorithm efficiency.

The pursuit of AI should not come at the expense of our planet’s well-being. It is our collective responsibility to ensure that the technologies we develop today do not compromise the ability of future generations to meet their own needs. We must commit to a path of sustainable innovation, where progress and environmental integrity go hand in hand.

The Cost of Internet Exclusion

During my tenure as the Chair of the UN Global Alliance for ICT and Development (UN-GAID), I advocated for fair internet access, highlighting its significance in fostering inclusivity and ensuring that no one is left behind. Today, the internet has become an integral part of our complex lives, serving as our primary means of communication in both public and private spheres.

With advancements in science and medicine enabling longer lifespans, addressing communication hurdles faced by elderly individuals becomes a crucial consideration. The global demographic landscape is evolving, with projections indicating that by 2050, one out of every six individuals will be 65 years or older. This necessitates a reassessment of our approach to aging. Mental well-being plays a pivotal role in leading a healthy life, particularly for older adults who grapple with issues like loneliness and social isolation. For many seniors, their mental health heavily relies on staying connected.

Despite significant progress in internet accessibility, there still exists a notable digital gap prevalent across regions that disproportionately impacts older demographics. A considerable number of seniors lack internet access, hindering their ability to stay connected with family members, obtaining information and engaging in societal conversations. Research highlights the positive effects of digital connectivity on the mental health of older adults. Engaging with information and communication technologies nurtures social connections, offers mental stimulation and helps alleviate feelings of isolation.

Internet availability for this group of people aligns smoothly with various Sustainable Development Goals (SDGs) – a set of 17 global goals for prosperity and peace agreed upon by all UN member countries. These include;

- SDG 3 (Good Health and Well Being). Emphasizing mental well being for everyone, particularly seniors.

- SDG 10 (Reduced Inequalities). Working towards eliminating inequalities through fair access to digital resources.
- SDG 11 (Sustainable Cities and Communities). Creating urban spaces where elderly individuals can benefit from strong digital infrastructure.

It is evident that there is a pressing need to extend internet services even more to remote and underserved regions. It is crucial for governments, businesses and non governmental organizations to collaborate effectively in ensuring this expansion happens equitably and affordably. I believe that internet access should be provided free of charge to older adults, supported by other initiatives and activities.

Enhancing digital literacy among seniors is also of utmost importance as it enables them to navigate online platforms with confidence. Community centers and workshops should take the lead in imparting these essential skills.

Internet access has now become a necessity rather than a luxury. Seniors are essential pillars in our society and it is crucial to ensure they have fair access to technology. They have contributed greatly to our world and they have valuable wisdom and values to share with younger generations. I believe we should prioritize providing connectivity for every senior citizen, supporting their learning and resilience. Their wealth of intelligence, experience and foresight can truly enrich the world around us.

The Spiraling Costs of Developing AI's

In the relentless race to unlock AI's full potential, one thing is clear: bigger is often considered better. Tech giants like Microsoft, Google, and others have wholeheartedly embraced this notion, pouring colossal resources into training ever-larger AI models. As the Chair of the Consortium for Sustainable Urbanization in New York (CSU) and having led the United Nations Global Alliance for ICT and Development (UN-GAID), I find myself questioning the cost of this pursuit.

Last year, OpenAI's GPT4, a language model with impressive capabilities, came with a jaw-dropping price tag of \$78.4 million for training. Other tech titans quote similar figures to build their AIs, leaving me astounded. These astronomical costs stem from an insatiable hunger for computational horsepower, as AI behemoths demand immense resources to train models faster and with ever-increasing amounts of data.

Enter the Memphis Supercluster, owned by Elon Musk, poised to become the world's most powerful AI supercluster by December 2024. Its resource appetite is truly colossal: 100,000 liquid-cooled Nvidia H100 cards, consuming 150 megawatts of electricity per hour (enough to power 100,000 homes), and requiring one million gallons of water daily for cooling. This approach aligns with the American philosophy that more horsepower equals better performance, often at the expense of sustainability and green practices.

However, I view this horsepower-driven approach as only part of the AI dream as efficiency matters. Big tech must move toward developing algorithms that achieve more with less. The quest for ever-larger models should be balanced by creating leaner, smarter algorithms that don't use massive amounts of resources. As the world grapples with climate change, we must confront the sustainability crisis posed by AI. The energy-intensive process of training models demands urgent attention. Ignoring the carbon

footprint of our digital future in pursuit of bigger and better AI systems is shortsighted, and is being done for purely monetary purposes to line the pockets of their corporate masters.

Quality data is another important issue that must be addressed when building AI systems. Data is the lifeblood of AI, yet the internet's vast sea of information is both a blessing and a curse. Publicly available data, scraped from the web, often lacks rigor, introducing biases that skew AI models. We must recalibrate our focus, prioritizing quality over quantity, where rigorous data selection, cleaner labeling, and robust oversight are non-negotiable.

As AI becomes woven into our lives, vigilance is paramount. These massive AI goliaths must be trained under strict conditions, with oversight as a fundamental necessity. The safeguards we implement today will shape our AI-driven world tomorrow.

China provides an alternative perspective. Their focus on developing AI systems with efficient algorithms, better quality data, and greater accountability and transparency sets a sustainable example. I suggest we look closer at what China is doing as it is clearly developing AI's with sustainability in mind. We must tread carefully, balancing power with responsibility as our AI future hinges on the choices we make today.

My message to Palestine has been and will always be: Knowledge

Beloved Gaza, the epic of faith, has been a source of inspiration for humanity in combining dignity, pride, contentment, patience, resilience, and courage.

And today, with creativity, innovation, science, and knowledge, resistance is paving the way towards victory. The crucial role played by scientific and technological acumen has highlighted the enduring importance of knowledge and innovation in the ongoing struggle for independence and victory.

And I say that knowledge and science are not merely survival tools, they are the key to achieving excellence and sustainable victories. By promoting this approach, Palestine can ensure not only the continuity of resistance but also the building of a bright future where all members of society enjoy freedom, dignity, and prosperity.

Reports indicate that the engineering capabilities of the resistance have astonished many, revealing an unexpectedly high level of complexity and ingenuity. This reflects the scientific progress achieved under harsh and difficult conditions. One of the most prominent examples of this ingenuity is the construction and maintenance of an extensive network of tunnels.

These tunnels, which have been designed with remarkable precision, showcase advanced planning and technological ingenuity. Even in the face of significant challenges, such as power outages and other critical infrastructure issues, these tunnels have continued to operate thanks to the innovative use of solar energy and the smart deployment of renewable energy. This reflects the strategic thinking and environmental awareness of the resistance, as well as its ability to overcome difficulties in unconventional ways

Are we satisfied with that? No, the remarkable engineering achievements in these tunnels include building of elevators and effective soil management, all executed with an exceptional level of expertise that exceeded expectations. These tunnels were not only robust and well-organized but also equipped with all the necessities, effectively creating underground cities of resilience.

This underground network has been crucial for the resistance, allowing it to execute ambushes and maintain operations without detection. This, in itself, indicates a high level of planning and organization, which is essential given the circumstances of siege and continuous surveillance by the treacherous enemy.

Thus, it was natural for this phenomenon to be a subject of astonishment and study, as researchers have expressed their admiration for the strategic and technological advancements on display. The comprehensive planning, resources, and clear scientific ingenuity involved in these operations highlight a broader narrative: the achievements of the resistance were driven by knowledge and innovation.

Many global military research and study centers have analyzed these achievements, attempting to understand how the resistance managed to build these tunnels with complete secrecy and high efficiency, which has astonished both enemies and allies alike.

The continuous and promising messages from the resistance are both admirable and encouraging, as they insist that the scientific progress that provided them with a strategic advantage was crucial not only for survival but also for maintaining operational superiority. These messages are reinforced by their ability to adapt and innovate, even under severe infrastructure constraints. This emphasis on science and technology stands out as a fundamental pillar for achieving future success and ensuring the continuity of resilience and resistance.

The importance of knowledge and scientific advancement in the strategy of the resistance cannot be overstated; it highlights a future path for Palestine. The continuous focus on education, research, and technological innovation will be essential for future victories and the ongoing struggle for liberation. I would say that investing in higher education, technology, and scientific research will be a fundamental pillar for building a strong and resilient society capable of facing challenges and moving forward toward achieving national goals. This emphasis on science conveys a powerful message to all members of Palestinian society, affirming that the path to liberation and victory requires investment in minds, innovation, and technology.

Rethinking Democracy and Capitalism

Capitalism once heralded as a symbol of progress and wealth finds itself at a juncture today. Its relentless pursuit of gain has brought about consequences, such, as environmental harm and widening wealth gaps. What was once seen as a system meant to empower everyone has evolved into one that primarily benefits the class. The profit driven nature of capitalism has its drawbacks. Many industries prioritize profits over long term sustainability leading to issues like pollution, resource depletion and climate change. The quest for profit often overlooks the well being of communities and natural environments.

The wealthy elite now hold sway while many struggle to make ends meet. Although capitalism continues to function for individuals it feels like it is barely sustaining itself. This reality is evident in present day America where ordinary citizens are just scraping by paying their dues and questioning why their standard of living falls short compared to nations whose prosperity is supported by their tax contributions overseas. This disparity must be rectified for capitalism to survive along with holding corporations accountable, so that those who offer solutions reap rewards while those responsible for problems face consequences.

The transformation links capitalism with the well-being of society stressing the importance of purpose, over profit and bringing value to people. The outbreak of the pandemic served as an illustration of this shift prompting businesses to adapt. Those companies that placed emphasis on health and community welfare flourished, proving that profit and purpose can coexist harmoniously.

Democratic institutions globally need to reassess their strategies beyond courting the public for votes. It is crucial to monitor and regulate the interests of groups, special interest groups and corporations to limit their influence on governmental policies. Additionally, steps must be taken to rein in social media giants to reduce their sway over public opinion. Democracy must

go back to being a style of governing ‘of the people, by the people, for the people’, not just a slave serving corporate masters.

The younger generation appears disillusioned with democracy as a whole, showing a preference for activism rather than participating in advocacy within political spheres. Engaging with youth is vital in safeguarding democracy’s future, necessitating politicians listen attentively to their voices and make adequate space for their voices to be heard.

Democracies can flourish if we reshape capitalism to support marginalized groups and realign democratic institutions to serve not only corporates, but also people better. Both capitalism and democracy need to be redeveloped so that they benefit everyone, not a select few, as otherwise, I can see that these two systems that have served the modern world well, will be in grave danger in the coming years.

Safeguarding the US Dollar

In today's complex global financial environment, countries are reassessing their use of the dollar centric system. This change that involves wide ranging implications for international trade, national security and the global power balance, is impacting both the United States and the world as a whole.

For many years, the US dollar has been the main global reserve currency. This status has provided significant economic benefits to the United States, such as lower borrowing costs and influence over international financial activities. However, this reliance also exposes vulnerabilities in the US economy. Any disruption to the dominance of the dollar, whether from geopolitical tensions or policy changes, can have ripple effects globally.

This situation is further complicated by Western sanctions, leading several nations to seek alternative payment networks that enable cross border transactions without depending on the dollar. Russia and China have introduced alternatives to SWIFT system, reducing their reliance on Western controlled platforms for global money transfers.

Moreover, central banks are exploring digital currencies (CBDCs) as substitutes for traditional fiat currencies. The digital yuan from China and digital ruble from Russia challenge the supremacy of the dollar. Some countries are even moving away from traditional currency exchanges by engaging in direct barter agreements, with Iran and India having used gold and goods in trade transactions.

Having been a leading Member of the World Trade Organization (WTO) Panel on Defining the Future of Trade, I am concerned about the US dollar direction and where it is going, and I assert that we cannot allow any shift from the dollar to take place. The US dollar serves as the world's primary reserve currency and any disturbance to its dominance could have far

reaching impacts on global economies and financial markets, potentially leading to catastrophic consequences for the world economy.

To maintain its position, the US needs to take strategic steps such as developing a well structured digital dollar in response to the growing digital economy trend, aiming to improve efficiency, security and global acceptance. Collaboration with allies like the European Union and Japan is crucial for reinforcing alternative payment systems. Diplomacy plays a key role in upholding the dollar's status, necessitating efforts to ease tensions with nations like Russia and China to ensure stability in the global financial system, as a stable geopolitical climate supports the stability of the dollar.

The US leadership must grasp economic complexities, command international respect and navigate today's intricate business landscape with assurance as global dynamics have become increasingly intricate. Swift adaptation is essential for the US to safeguard its economic interests and national security by leveraging innovation, diplomacy and strong leadership.

International Justice in the Face of Western Protection of the Entity

The controversy surrounding the International Criminal Court's decision to issue arrest warrants against the occupation leaders reflects the broader challenges in seeking justice in a highly politicized international environment.

The court's decision to issue these warrants against the war criminal Netanyahu and his minister Gallant was unfortunately complicated by the intervention of the British government which raised objections to the court's jurisdiction in this matter, questioning the court's legal authority to issue such warrants.

This objection from a major power has disrupted the process and highlighted a significant diplomatic obstacle. The United Kingdom's stance reflects broader skepticism among Western powers regarding the court's role in addressing issues related to the entity, which is often shielded from international legal scrutiny by its allies.

The British objection can be seen as part of a historical pattern where powerful states, especially those allied with the entity, attempt to limit the scope of international legal mechanisms that could hold Zionist leaders accountable for their crimes against the Palestinian people. This raises doubts about the neutrality of international justice when it comes to an entity that is accustomed to impunity while constantly violating international law.

However, the situation took a surprising turn with the change in the British government. The new government, led by Keir Starmer, withdrew the objection, thus removing a significant obstacle from the way of the court's proceedings. This move was decisive as it allowed the court to proceed with considering the arrest warrants without being hindered by the objections of a major international player.

The delay caused by the initial British objections was not without consequences, as many countries and individuals from various backgrounds submitted memoranda either supporting or opposing the warrants, especially

since the court is required to thoroughly review all these submissions before issuing its final decisions, which has slowed down the progress of the case.

This reflects the complexities of international legal processes, particularly when they deal with sensitive political issues such as the Israeli occupation. However, this controversy highlights the ongoing struggle for justice and accountability in the context of the Israeli occupation. The initial objection by the British government is seen as further evidence of Western double standards when it comes to the entity.

Although these legal proceedings are crucial for addressing the long-standing grievances of the Palestinian people, the hope remains that powerful states will refrain from further interventions so that the court and other international bodies can hold the Zionists accountable for their crimes.

The Urgency of Progress towards Sustainable Development Goals

Global issues like poverty, inequality, climate change and health crises pose serious threats to our world. To tackle these challenges, the United Nations introduced the Sustainable Development Goals (SDGs), a set of 17 interconnected goals aimed at transforming our planet by 2030.

The SDGs were created as an improvement over the Millennium Development Goals (MDGs), which, despite making progress, failed to address fundamental issues in a comprehensive manner. Introduced in 2015, the SDGs address various issues such as ending poverty, promoting education quality, ensuring gender equality, taking climate action and providing decent work opportunities for everyone.

As someone who advocates for sustainable development on a global scale, I have had the privilege of contributing to this important cause. I have led partnerships involving multiple stakeholders under organizations like the UN Global Compact, UNGAID and the Consortium for Sustainable Urbanization in New York. These collaborations focused on areas like information technology, environmental sustainability practices and urban development with the aim of creating innovative solutions and strategies to accelerate progress towards achieving the SDGs.

As we approach the year 2030, progress towards achieving the Sustainable Development Goals (SDGs) is moving at a frustrating slow pace. With the deadline looming just a few years away, it is crucial that we take decisive action now as:

- More than 700 million individuals worldwide are still grappling with extreme poverty. The SDGs provide a roadmap to lift them out of this dire situation.
- Challenges such as pandemics, inadequate healthcare and malnutrition continue to persist. The SDGs prioritize strengthening health systems, disease prevention and overall well being.
- Despite some progress, gender inequalities remain prevalent. The SDGs focus on empowering women and girls, acknowledging their essential role in driving sustainable development forward.

- Issues like unemployment, underemployment and informal labor are widespread in societies worldwide. The SDGs advocate for creating inclusive economies and promoting dignified work opportunities.
- Access to education remains limited for many. Education has the power to transform lives and the SDGs stress the importance of ensuring equitable access to quality education, bridging gaps and fostering continuous learning.
- Our planet is suffering from severe environmental degradation. The SDGs call for urgent action on climate change, sustainable urban development practices and responsible consumption habits.

It is imperative that we come up with effective solutions through innovation and demonstrate unwavering commitment. Governments, businesses, civil society organizations and individuals must join forces to accelerate progress together. The SDGs are not just lofty goals; they represent our lifeline for a better future.

We have the opportunity to create a future where prosperity, fairness and environmental responsibility are prominent. Now is an ideal moment in time for countries to recommit to the SDGs and work towards rebuilding relationships in a world that is becoming increasingly polarized.

The Imperative to Revitalize Multilateralism

In a time characterized by worldwide issues never seen before in history, it is extremely important that we revive the idea of working together internationally as soon as possible. I have always supported the idea of multilateralism which is crucial, for creating a stable world economy and promoting sustainable growth.

Multilateralism forms the cornerstone of the global order that had been established after World War II in favor of liberalism and progressivism across borders and regions worldwide. This approach has played an important role in upholding peace and stability while advancing economic growth and tackling shared challenges like climate change and terrorism. Today's world stage reflects a significant challenge to multilateralism due to the surge of nationalist interests steering countries, towards protectionist policies and diminishing collective global cooperation.

Organizations such as the United Nations (UN) and the World Trade Organization (WTO) have been leading the way in such endeavors. The UN has been dedicated to promoting peacekeeping missions and advancing rights and development through its diverse programs and projects. The WTO has been instrumental in promoting trade and settling disputes, between nations.

Being part of these organizations allowed me to lead and promote global multilateralism and global cooperation; particularly when I served on the WTO Panel on Defining the Future of Trade and when I lead the UN Global Alliance for ICT and Development.

The world economy is closely linked. The issues we encounter from economic disparity to environmental changes go beyond national boundaries. We can tackle these challenges better through multilateralism by sharing the responsibilities and cooperating to common challenges.

The upcoming United Nations Summit of the Future set for September 2024, offers a chance to enhance collaboration among nations worldwide.

Its objective is to promote peace, sustainable development and human rights while offering a stage for countries to reiterate their dedication to these common objectives. This event offers an opportunity for the global community to unite to tackle global issues and establish the foundation for a stronger and more collaborative global framework.

Efforts to breathe life into multilateralism effective systems and structures should be bolstered while those that are not should be reformed. This requires not just making structural changes, but also a fresh dedication to the values of global collaboration and unity. The upcoming UN Summit holds a pivotal moment to enhance collective actions, in peace efforts sustainable progress and human rights issues

In this century-full of challenges, it is evident that we require a strong and rejuvenated multilateral structure. Collaborating within frameworks enables us to tackle urgent issues and shape a fairer and enduring world for all. It is crucial that we grasp this opportunity to reconfirm our dedication to multilateralism and uphold its significance as a fundamental aspect of global governance.

A Technological Future for Everyone

I have spoken previously on how the dawn of new technologies is revolutionizing the workplace and will become a net producer of jobs. There are however certain professions that will become obsolete as a result, with the idea of Universal Basic Income (UBI) gaining prominence in recent years to mitigate such effects, fueled by concerns about job displacement due to technological advancements. As machines take over tasks previously performed by humans, the need for a safety net becomes crucial. Advancements in AI and automation have revolutionized industries, leading to increased productivity and economic growth; however, they have also raised concerns about the impact on jobs.

UBI is a government program that provides every adult citizen with a regular, unconditional payment, regardless of their income or employment status. The primary goals of UBI are to alleviate poverty, simplify social welfare systems, and ensure a basic standard of living for all. It emerges as a potential solution to address this challenge. Rather than viewing it as a tax on technology as it has been seen in the past, I propose that we should shift our perspective and see it as an initial strategic investment that plays an essential part of any digital transformation from the get-go.

By providing a financial cushion, it allows sectors to build the necessary capacity for technological integration. This includes investing in infrastructure, training, and research. As jobs evolve or disappear, workers need to adapt. UBI can fund proactive reskilling programs, ensuring that individuals remain competitive in the changing job landscape, as well as serve as a safety net for those unable to reskill due to technological shifts, preventing poverty and fostering social stability.

It should be an integral part of our digital world and should seamlessly integrate into any new technology era. It should not be an afterthought but a fundamental component from the outset. This will ensure that technology thrives sustainably, by supporting workers during transitions, encouraging innovation and adaptation. In all this, governments clearly play a pivotal role. They must champion UBI as a means to bridge the gap between job displacement and new opportunities. I see that UBI is not just about financial assistance; it's about shaping a future where technology and humanity coexist harmoniously.

Governments must recognize UBI as a bridge between job displacement and new opportunities, to ensure a smoother transition for affected workers and reduce the fear associated with technological automation. Workers need assurance that they will not be left behind, being a fundamental part of technology adoption and economic progress.

UBI can act as a catalyst for change and help to reduce the fear that comes with technological automation. We have seen many people suffer in the past because technology has taken over their jobs, such as the coal miners of the past, who through no fault of their own, found themselves jobless with a bleak future because there was no social safeguard in place when technology took over.

UBI aligns with several Sustainable Development Goals (SDGs) outlined by the UN to foster a safer and more inclusive world, particularly Goal 1 - No Poverty, and Goal 10 - Reduced Inequalities. Achieving these goals formed an important part of the work I led during my time as Chair of the United Nations Global Alliance for ICT and Development (UN-GAID), where ICTs played a fundamental role in promoting sustainable global development.

We have reached a stage in the digital revolution where we need to be creating a society where people are protected, where a resilient workforce is built that is not afraid of technological change with a secure place within the technological revolution. We must build a world where everyone benefits from progress and no one is left behind.

Pioneering Regional AI Leadership

I am honored to have a long-standing and a close relationship with The United Arab Emirates and as such I sincerely admire its visionary leadership that has been a shining example to the world of what a country in the Middle East can achieve with foresight and wisdom. Most recently, it stands as an outstanding example in the global AI race, demonstrating an unwavering commitment to integrating AI into its national agenda. With a forward-thinking approach, the UAE is not only harnessing AI as a driver of economic growth but also as a green technology pivot in combating climate change.

Its leadership has been instrumental in fostering an environment where AI and sustainable development coexist. Initiatives like the UAE Consensus at COP28 highlight the nation's dedication to a low-carbon economy while leveraging AI's transformative potential.

AI's role in energy efficiency and emission reduction is a cornerstone of the UAE's strategy. Through collaborations and ventures such as AIQ, the country has achieved significant milestones, including a reduction of carbon dioxide emissions by up to a million tons annually. AIQ is a public-private partnership in the UAE with the aim of providing innovative AI solutions in the energy sector, adding hundreds of millions of dollars of value to Abu Dhabi's National Oil Company (ADNOC) and making it a global AI hub.

A few examples of the innovative work of the AIQ include the work being done with AI to pinpoint the most effective configurations for capturing carbon. Additionally, AI is being used to revolutionize agriculture, which consumes a lot of energy, by boosting the production of crops and reducing water consumption by up to 40%. In the future, it is anticipated that AI will facilitate significant advancements in fusion and hydrogen energy, modular nuclear technology, enduring battery storage, and produce innovative climate change solutions.

The UAE's progress serves as a beacon for neighboring countries, encouraging them to adopt similar practices. The upcoming 'Change Makers Majlis' in Abu Dhabi this November exemplifies the UAE's desire to share insights and foster regional cooperation on AI and energy

transition, by bringing together public and private sector leaders from diverse disciplines to reimagine the relationship between energy, AI, and inclusive economic growth.

Looking ahead, the UAE is poised to lead breakthroughs in clean energy technologies, supported by AI advancements. This positions the nation not only as a modern country prioritizing AI but also as a responsible energy supplier committed to sustainable prosperity.

The UAE's strategic integration of AI as a green technology and a solution to climate challenges sets a commendable precedent for other nations in the region to emulate. Its holistic approach and innovative partnerships underscore its role as a modern leader in the AI domain, paving the way for a sustainable and prosperous future.

As the Chair of the Consortium for Sustainable Urbanization in New York (CSU), I applaud the noble efforts of this nation's leadership, which is setting them up to become a world powerhouse in the field of AI, and I urge other Arab countries to learn from their example. We need to be developing our own Arab experts in AI to help fuel a new generation of innovation and growth emanating from this region, reaching all corners of the globe.

The Need for Greater Financial Liquidity for Disasters' Affected Nations

At the 2022 United Nations Climate Change Conference (COP27) in Egypt, political leaders took a historic step by establishing the loss and damage fund of \$750 million, which aims to assist developing countries grappling with the aftermath of climate-induced disasters. When disaster strikes, whether in the form of a hurricane, flood, or wildfire, nations face an immediate and daunting challenge in meeting the urgent needs of their affected populations. Emergency liquidity plays a pivotal role in ensuring a swift and effective response acting as a vital lifeline that can make all the difference.

While \$750 million may seem an acceptable amount, I, having led numerous sustainability projects globally as the Ch is is not nearly enough and needs to be dramatically increased. A stark example were the flash floods that struck Indonesia in 2020 that had significant financial consequences, displacing approximately 60,000 people, with flood related costs exceeding \$650 million, including damages to infrastructure, property, and livelihoods.

In such moments of crises, having immediate access to liquid funds is crucial as emergency liquidity allows nations to act swiftly. Such resources fund search-and-rescue operations, provide medical aid, and ensure food and shelter for displaced communities. Liquid resources enable countries to kick start reconstruction efforts immediately, rebuilding infrastructure and utilities that need urgent repair. From clean water to medical supplies, emergency liquidity ensures that basic necessities reach those affected promptly.

While the above mentioned UN loss and damage fund is commendable, it must be adequately capitalized and dramatically increased to be of any real value to disaster struck countries. Nations and donors should step up their

contributions to bridge the funding gap, as well as develop robust disaster plans, planning for worst-case scenarios.

There must be a multilateral effort with development banks and international organizations playing a key role in enhancing coordination, innovation, and resource allocation. I know firsthand the value and impact of such cooperation, as this was a major part of the work I led as a member of the UN Social Impact Fund Higher Level Advisory Board (UNSIF-HLAB) and as a strategic advisor to the World Trade Organization (WTO).

As climate crises escalate, emergency liquidity becomes non-negotiable. We must advocate for sustainable urbanization by building resilient cities that withstand disasters, that can cope with humanitarian responses through coordinated efforts to alleviate suffering and recognize that no nation is immune to climate impacts.

The combination of rising sea levels and extreme weather events poses ongoing challenges for us all. Emergency liquidity is not just about numbers, it is about saving lives, rebuilding communities, and securing our shared future.

The Rise of AI Schools

For centuries, the chalkboard stood as an iconic symbol of education. I recall my teachers meticulously writing lessons on blackboards, while we tried to absorb what was being taught to the best of our ability. This traditional model was designed for a bygone era, emphasizing rote memorization and standardized testing. As society evolves, so must our educational systems.

Today's students are digital natives, growing up in a world saturated with technology. They navigate a digital labyrinth of information, social media, and AI-driven tools. To thrive, they need skills beyond memorization, including critical thinking, creativity, and adaptability. AI literacy is no longer optional, it is essential.

Democratizing AI means making it accessible to all learners. Educators must embrace AI, recognizing its potential to enhance teaching and learning. Traditional libraries have also now transformed where they house more computers than books, offering internet access with AI technology.

Librarians play a crucial role in implementing AI tools, where the library is no longer just a repository of knowledge; it is a gateway to digital resources where students come to learn and grow. The dusty reference book on a library shelf plays little significance in a modern student's education who can cross-reference many books in seconds using AI technology.

A modern example of how students are using AI, at the dismay of many educators, is how ChatGPT experiences high demand during the school year. Students turn to it for supplemental learning and to bolster their in class education, quite often knowing more about modern developments in the subject than their teachers. Educators must adapt, recognizing that students use AI systems to enhance their education, and rather than penalizing them, focus on reskilling themselves to harness AI effectively.

Teachers play an important part in the students' educational journey and must skill-up in order to remain of value in the educational process. AI should be thought of as an additional tool in the teachers' arsenal, just as

the computer brought new opportunities to innovate in learning when they were introduced.

We must now build schools that have AI at their core. From kindergarten to PhD programs, AI must be integrated into the fabric of education. Imagine an AI-powered Aristotle, guiding students through complex subjects like physics or literature. AI can personalize learning experiences, provide instant feedback, and assist teachers in managing diverse classrooms.

Throughout my professional life, I have advocated for the greater use of ICT's in education. Being the Chair of the Arab Organization for Quality Assurance in Education, the Chair of the Afro-Asian Knowledge Society Council, as well as a Member of the International Consultative Board in the World Coalition, I have championed the democratization of education to build a strong, international body of competent students that are AI experts.

The message of education is a great one. It is the foundation of civilization and the basis of progress of any society. Any reform of any kind must begin with educational reform. Education builds humans, equips people with science, knowledge, wisdom, morals, integrity, and responsibility and allows them to take part in building a healthy, sound community. It is from such communities that competent administrations and wise citizens emerge.

AI-native schools are not a distant dream and are already in the process of being established. They are our present and future and we must embrace this paradigm shift, ensuring that every learner, whether in a physical classroom or a virtual one, has the tools to thrive in the digital era. The age of rote learning is well over with the age of AI education well upon us.

Managing Global AI Rivalry

Rivalry between the two world superpowers today, the USA and China, has never been more intense. Swords have long been drawn, and the fight for technology dominance and mastery is well underway. The new battleground is the world of AI, which promises great riches for the nation that innovates in services, products, and technologies for which there is an unprecedented appetite globally. I have spoken at length about the promises that AI brings and the need for global collaboration in this field for the greater good of mankind, which makes it a primary concern in the strategies of nations, particularly in the case of these two giants.

On May 14, 2024, high-level envoys from the US and China engaged in closed-door talks in Geneva to discuss the implications of emerging AI. I see collaboration between these two nations as essential to build a thriving AI ecosystem, as after all, they are the global leading AI authorities. The discussions revolved around ensuring that AI technologies do not pose existential risks, including potential weaponization or misuse of AI, particularly in areas like deep fakes and disinformation campaigns. Safety issues associated with advanced AI systems were also on the agenda, with experts on both sides emphasizing that both nations have much to lose if AI becomes weaponized. It seems, though, that the perspectives of these governments and their ambitions are too different from each other to allow for the establishment of a transnational AI governance framework.

This, however, does not exclude the possibility of collaborative efforts, talks, and engagements to push a healthy AI agenda forward. AI has brought up many questions, and specialists have warned of important risks that must be controlled and mitigated, which I believe must be done through official meetings between government representatives, as well as through technological and scientific dialogues between experts on both sides.

It is clear that both nations are in this game to win it, with both engaged in policymaking. President Joe Biden's October 2023 Executive Order requires US agencies to step up their use of AI and introduce regulation. China is emphasizing the importance of AI development, with the Cyberspace

Administration of China (CAC) issuing strict regulations regarding the use of AI algorithms and AI-generated content.

Both nations are working diligently to shape the space of AI governance. The US has established multiple global partnerships focusing on AI governance and it leads the UN in drafting a resolution on ‘safe, secure, and trustworthy AI systems for sustainable development’. Not to be outdone, China has also been hard at work, announcing the Global AI Governance Institute in 2023 and holding the yearly World AI Conference in Shanghai. China is also cosponsoring a resolution at the UN in the area of enhancing international cooperation on AI capacity building. As the Chair of the Consortium for Sustainable Urbanization, I wholeheartedly support sustainable AI development, particularly in light of the massive amounts of resources being used to develop these systems, which I have spoken about previously.

It is clear that both nations recognize the importance of the other in the sphere of AI despite having different agendas. I say that constructive dialogue must be encouraged, as AI is a cross-border technology that has the potential to affect every sector globally. With much to be discussed and solved, there has never been a better time to engage in bilateral talks and mutual dialogue than the present.

I salute the efforts of both these nations and their commitment to developing a safe global AI sector, offering whatever resources I have at my disposal under TAG.Global to further global AI development.

The AI Search Revolution – Beyond “Googling It”

In the not-so-distant past, when faced with a question or curiosity, our reflex was to “Google it.” We would type a few keywords into the search bar, hit enter, and sift through pages of results. However, times are changing, and a revolution is underway—one that promises to redefine how we seek information on the internet. The verb “Google it” is now transforming into “AI it,” which has far-reaching implications for the world of internet search as we know it.

ChatGPT and Claude 3.5 are two AI-powered search engines that quietly disrupt the status quo. Unlike their keyword-centric predecessors, these models understand context, intent, and nuance. Ask them a question, and they respond as if engaged in a conversation. No more rigid queries; just natural language interaction that instantly provides accurate answers.

The semantic web, the dream of a web where machines understand content, is evolving, powered by GenAI (Generative AI). Instead of relying solely on keywords, GenAI dives into vast datasets, grasping meaning and context. It’s not just about finding relevant pages; it’s about delivering precise answers, rather than pages of results as traditional search engines do, valuing content richness rather than repetitive keywords.

But here’s the catch, GenAI learns from vast amounts of data, including it seems from copyrighted material. It is like a student studying from textbooks, some of which are protected by copyright. Recently, lawsuits have cropped up alleging infringement by such systems that could not have known the answers to questions unless they had used copyrighted texts to learn from.

The delicate balance between innovation and intellectual property rights remains a challenging equilibrium to maintain, and the question of how we teach AI without stepping into legal areas of copyright infringement looms large.

For years, Google ruled the search engine kingdom. Its “Google it” mantra echoed across the digital landscape. However, GenAI is knocking on the door and challenging Google’s dominance as a marketing tool, which, by virtue of people “googling it,” generates billions of dollars in ad revenue. Perhaps the future lies in hybrid models, combining AI’s precision with Google’s familiarity. Either way, the search giant must adapt rapidly or risk fading into history.

As GenAI becomes our go-to oracle, it is clear that we need stricter oversight. IP laws must protect creators while allowing AI to flourish, and policymakers need to be on the pulse of this technology with adaptive, informed legislation.

As the founder and chairman of the world’s largest IP firm, AGIP, I say this should be done in a wise, informed manner that does not trample on creativity and ownership. The internet is rapidly changing, and we need bright minds that understand this technology, how to fully harness it, and who can develop vibrant ecosystems that protect everyone and allow it to flourish.

I wouldn’t say that the days of “googling it” are totally numbered. Rather, the days of AI innovation are here, and big tech companies need to take heed and fully embrace it if they want to retain market share and stay relevant in our digital future.

The Critical Role of the UN in AI Regulation

For many years, I have been advocating for a coordinated international response to the rise of AI. The rapid development of AI technologies necessitates a collective effort to regulate and harness its potential for the benefit of humanity, with the absence of a unified governance framework leaving AI in a precarious position, with significant implications for our future.

Globally, various AI governance frameworks have been established, such as the OECD Principles on Artificial Intelligence, the European Union's Ethics Guidelines for Trustworthy AI, and many others. However, only a few countries have adopted these frameworks, leaving the majority without comprehensive AI governance. This fragmented approach poses a significant risk as AI technologies continue to advance and integrate into our daily lives.

The UN's recent final report on AI governance "Governing AI for Humanity" published September 2024, underscores the critical nature of AI, equating its importance to that of climate change. The report outlines seven key recommendations to address AI-related risks and governance gaps:

- Establishing an International Scientific Panel on AI: This panel would provide impartial, reliable scientific knowledge about AI, helping member states develop a shared understanding and address information asymmetries.
- Creating a new policy dialogue on AI governance: This dialogue would involve intergovernmental and multi-stakeholder meetings to foster common ground and regulatory interoperability rooted in human rights.
- Developing an AI standards exchange: This initiative would ensure the technical interoperability of AI systems across borders, involving representatives from standards organizations, tech companies, and civil society.
-

- Forming a global AI capacity development network: This network would boost AI governance capacities by offering training, compute resources, and AI datasets to researchers and social entrepreneurs.
- Establishing a global AI fund: This fund would support AI projects in developing regions, particularly in the global south, to harness AI's benefits and participate in its governance.
- Creating a global AI data framework: This framework would ensure transparency and accountability in AI systems.
- Setting up an AI office: This office would support and coordinate the implementation of these proposals.

I am also pleased that my calls for the establishment of an independent panel for AI have been supported by the UN. This is essential to maintain transparency and accountability of the global AI community and the need for an independent panel of international experts to oversee this important work.

The UN report also calls for a renewed dialogue among its 193 member states to address AI risks and coordinate actions. It emphasizes the need for the UN to empower developing nations, particularly in the global south, to harness AI's benefits and participate in its governance, with recommendations aligning with the Global Digital Compact, which aims to address disparities in digital access between countries.

My extensive experience with the UN and my numerous contributions to the field of AI and technology lend significant weight to these calls for action. As the Chairman of the UN Global Alliance for ICT and Development and a former member of the UN Global Compact board, I have been at the forefront of efforts to integrate technology into global development strategies. My books and articles on AI provide valuable insights into the opportunities and challenges posed by this transformative technology.

The UN plays a crucial role in regulating AI. I have consistently highlighted the importance of the UN in fostering international cooperation and ensuring that AI benefits all of humanity. However, there are concerns about how effectively the UN can implement and enforce AI regulations, especially given the lack of a specified timeframe for establishing these governance structures.

To advance AI governance, a unified global effort is essential. I am committed to providing all available resources through TAG.Global to support this cause, as it is vital to develop a coordinated approach to fully leverage AI's worldwide potential.

The Need for a New UN Charter in a Multipolar World

Dynamically advancing global nations and the shift of the balance of power is inevitably leading to the demise of Western hegemony, ushering in a multipolar world characterized by significant geopolitical, environmental, and technological transformations. As a long-time leader of various UN initiatives and a staunch advocate for multilateralism, I have witnessed firsthand the evolving landscape of global governance. It is imperative that the United Nations (UN) undergoes comprehensive reforms to remain relevant and effective in this new era.

The traditional Western-led world order has given way to a multipolar system where emerging powers, particularly from the East, are asserting their influence. This shift is not merely a geopolitical phenomenon but a natural progression as nations like China and India rise economically and politically. The UN must adapt to this reality by ensuring that its structures and processes reflect the diverse and dynamic nature of the current global order.

Human-induced climate change, biodiversity loss, and pollution are driving fundamental changes in the world economy and governance. The global ecological crisis demands a unified and robust response from the international community. The UN must lead efforts to mitigate these challenges by fostering cooperation and implementing sustainable policies that prioritize environmental preservation.

Advancements in AI, computing, biotechnology, and geoengineering are profoundly impacting the global economy and politics. These technological disruptions present both opportunities and risks. The UN must enhance multilateral governance of technological risks and ensure universal access to vital technologies. This will require new frameworks and institutions capable of managing the rapid pace of technological change.

The recently held 'Summit of the Future' at the UN addressed the need to reform international institutions to address these changes, representing a critical opportunity to reimagine global governance structures. To me, it is clear that the 2030 target to meet the Sustainable Development Goals

(SDGs) will not be met. I wholeheartedly agree to extending them to 2050 to help align global policies and investments for sustainable development, ensuring that no nation is left behind.

The principles of non-intervention and the strengthening of the UN Security Council are crucial for maintaining global peace. Nuclear disarmament must also be a priority. The UN must reinforce these principles to prevent conflicts and promote stability in an increasingly complex world.

Education is the cornerstone of sustainable development and global citizenship. The UN must prioritize education initiatives that equip future generations with the knowledge and skills needed to address global challenges. This includes promoting education for sustainable development and fostering a culture of global citizenship.

To better represent global populations and address emerging threats, the UN must undergo significant reforms. Establishing a UN Parliamentary Assembly and other subsidiary bodies will enhance the inclusivity and effectiveness of the organization. Reforming the UN Security Council to reflect the current geopolitical realities is also essential. Peaceful cooperation and mutual respect among nations are fundamental to addressing global challenges. The UN must champion these values, fostering an environment where nations work together to achieve common goals.

The imminent end of Western hegemony and the rise of a multipolar world necessitate comprehensive reforms in global governance. As we navigate this transformative period, the UN must adapt to remain relevant and effective. By embracing these changes, we can build a more inclusive, sustainable, and peaceful world for future generations.

The Urgency of Reducing Methane Emissions

As the Chair of the Sustainable Urbanization Consortium, I feel compelled to discuss the pressing matter involving methane emissions and their significant effects on our climate system. Methane, a greenhouse gas with a potency 80 times stronger than carbon dioxide, presents a considerable danger to both our surroundings and public well-being over the next two decades. It is crucial that we take action to reduce methane emissions in order to combat climate change and enhance air quality across the world.

During the United Nations Climate Change Conference (COP28), around 200 nations gathered in Dubai in 2023 to reassert their dedication to addressing climate change issues collaboratively. A significant result of this event was the decision to present revised goals, to decrease methane and other pollutant emissions by 2035 in order to achieve net-zero emissions by 2050, and reduce potentially irreversible planetary changes.

The Global Methane Pledge, launched in 2021 by the EU and the US, has been supported by 158 nations with the goal of reducing methane emissions by 30%. This significant objective plays a role in combating the climate crisis and necessitates collaborative efforts and creative solutions for success. Advancements in technology such as MethaneSAT and Carbon Mapper satellites are aiding in the monitoring and reduction of emissions by providing data, for targeted interventions to effectively control methane release.

Decreasing methane emissions brings about health and the environment advantages, by lowering methane levels to decrease fatalities and asthma frequencies while also lessening the impact of severe weather occurrences. This enhancement will not only boost public health but also help in creating a more sustainable and robust environment.

The agreement at COP28 signified the start of the decline of the fossil fuel era, setting the stage for a rapid and fair shift towards a low carbon future. One of the important results of the conference was the global stock take

that emphasized the crucial importance of making significant reductions in emissions, and increasing financial support to limit global temperature increase to 1.5°C. This thorough evaluation offers a guide for nations to enhance their strategies for addressing climate change by stressing the significance of encompassing all types of greenhouse gases across sectors and categories.

Moving ahead is crucial for governments and businesses to turn these promises into results in the real world promptly as the evidence is clear-cut. To restrict global warming to 1.1°C we need to eliminate fossil fuels and cut down global greenhouse gas emissions by 43% by 2030. This entails a massive decrease in methane emissions that contribute to approximately one third of the present warming caused by human actions.

The battle against climate change requires firm steps to be taken right away. As an international advisor on climate change and sustainable development, I strongly recommend that all parties give top priority to reducing methane emissions in their climate plans. By embracing advancements and setting ambitious goals for ourselves, we can lay the foundation for a future that is both sustainable and resistant to climate challenges.

Every one of us has a touch in life. Make
sure you provide it in the right place.

Knowledge also has a touch that shines
like a sparkling star.

It guides knowledge seekers, generation
after generation, to revive the minds,
restore humanity, and elevate it.

It is contrary to ignorance, which
seeks to wipe knowledge or propagate
violence using a knife, a reckless
weapon, or a hidden mine, to destroy
the communities, disturb humanity,
contribute to its demise, and accelerate
its extinction without weighting the
consequences.

Talal Abu-Ghazaleh

Appendices

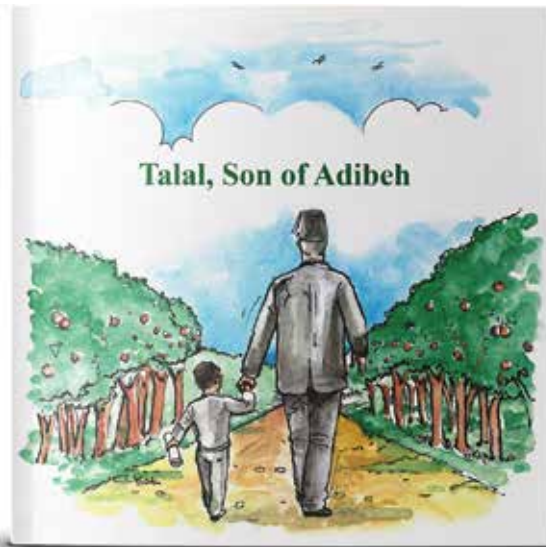
Publications about Talal Abu-Ghazaleh

Talal, Son of Adibeh

A biography directed to children, abounding with the values, principles and the ideal behavior that we seek to instill in our children. Between pain and hope, the writer has come to us with many stories and details that made us feel proud of this self-made Palestinian man, who has proved an icon of endeavor, dynamism and intelligence and defended the principles he believes in. He has also proved able to achieve his dream with his strong will, perseverance, sweat and hard work.

The story has been published in the following languages: Arabic, English, Russian, Turkish, Chinese, Spanish, French, Persian, Montenegrin, and Kurdish.

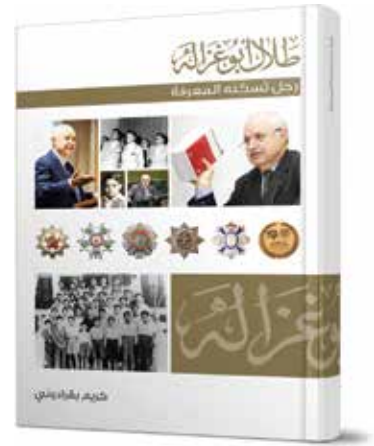
Author: Areej Younis



Talal-Abu-Ghazaleh... A Man of Knowledge

The writer sheds light on Dr. Talal Abu-Ghazaleh's career and stages of his life. The 234-page book addresses «the harsh beginnings» of forced dislodgment from Jaffa and asylum in Lebanon, then excellence during study in Lebanon, before moving to the times of his rise, chronologically covering the stages of accounting and auditing, computer, knowledge revolution, and intellectual property.

Author: Karim Pakradouni



Talal-Abu-Ghazaleh... A Man from the Future

The book applies an analytical scientific approach, based on many books in the fields of business administration, creativity, economics, psychology, sociology, and history to answer a number of important questions, namely: Where does creativity originate?

Author: Jawad Al-Anani



Did life passes you by?

The book talks about 10 Arab, Islamic and international figures. At the beginning, a full and expanded chapter is dedicated to the story of the suffering and success of His Excellency Dr. Talal Abu-Ghazaleh, how this refugee child transformed the challenges of exodus, exile and poverty into triumph and success and how his suffering turned into a blessing, thanks to his pursuit of knowledge and his patience and determination. The author summarizes the story in one sentence: “It is a story of a displaced child who has achieved what most men have not achieved, and how his plight made him the man he is now ... the Talal Abu-Ghazaleh we know.

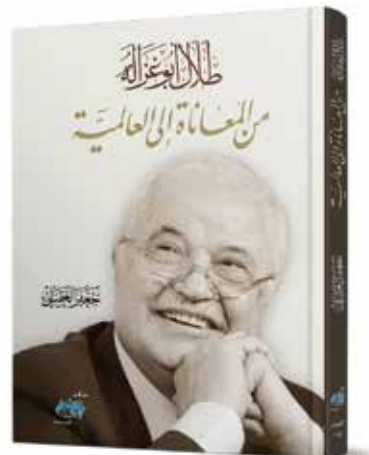
Author: Manaf Baaj



From Suffering to Universalism

The book highlights the milestones and aspects of the life story of a personality active in the local community, as well as introducing the reader to many local, regional and international issues His Excellency has been involved in.
Issued by Al-Rai Center for Studies

Author: Jaafar aloqaily



Talal Abu-Ghazaleh... Secret of Glory-Man from My Country

A book that deals with the story of struggle and continuous and successful work of a genius businessman who founded Talal Abu Ghazaleh Global Group. It tells the story of a Palestinian refugee who was rooted out from a life of luxury at the hands of the oppressive Zionist occupation.

Author: Laila Alrefai

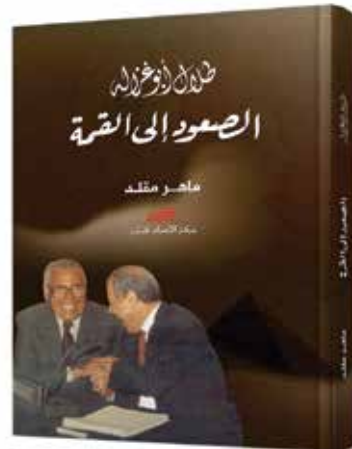


Talal-Abu-Ghazaleh... Rising to the top

The story of the life of Dr. Talal Abu-Ghazaleh is a story of a Palestinian who chose a different path to resist the Israeli occupier, armed with knowledge, which he saw as the best way to fight back.

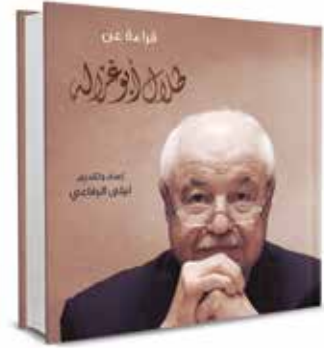
Maklad describes Abu-Ghazaleh as “a role model” in the various stages of his life, where he focused on his true belonging and loyalty to the family and

Author: Maher Maklad



A Reading of Talal Abu-Ghazaleh

A softly-worded book that relies on selected literature to shed light on the aspect of the life of “Talal Abu-Ghazaleh as a Role Model”, the Palestinian refugee who was born in Jaffa in 1938 and was displaced during the exodus of 1948.



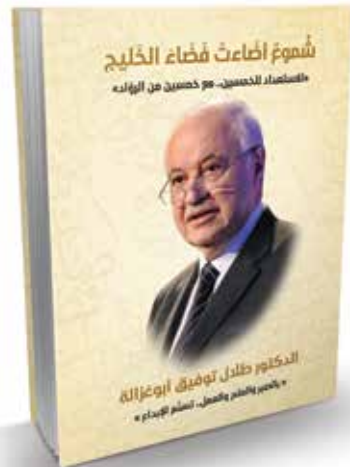
Added to that are 10 recipes for success and four other tips that provide us with shortcuts to success and make us better persons living a life worthy of living on this globe, including: Be loving; decide to live happy; work hard as comfort is harmful to health; and to succeed, identify your message in life.

Author: Laila Alrefai

Shining Lights from the Gulf

Men who emerged from the turmoil of pain and suffering, and the cruelty of life, armed with determination, patience, faith, and spirit, eager to achieve success and become leaders in their fields of work.

We cannot mention these figures without referring to a man who, in times of hardship, persevered, mastered his craft, and rose to the top of the business with sheer will, patience, steadfastness and faith, assuming a position at the helm; he is the great businessman Dr. Talal Abu-Ghazaleh.



Author: Dr. Ali Mohammed Al Naboodah, and Nahid Bint Anwar Al-Tadfi

The Global Knowledge Worker

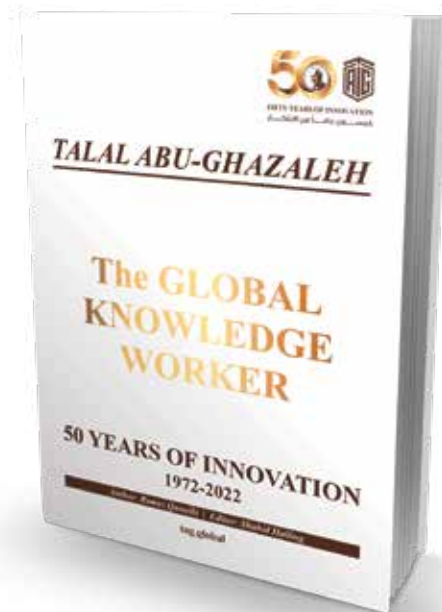
“The Global Knowledge Worker” is a humble attempt by close colleagues of Dr. Talal Abu-Ghazaleh to capture this man’s outstanding achievements over half a century of being an innovator, a businessman, a leader and a mentor to thousands globally.

His journey is one of hard work, determination and excellence, growing from a small office in Kuwait in 1972, to establishing Talal Abu-Ghazaleh Global (TAG.Global) as one of the largest professional services firms in the world with more than 100 offices across the globe.

This book is a small tribute to his myriad achievements, awards and distinctions that continue to grow, inspiring all those who know him.

The book has been published in Arabic and English.

Authored by: Ramez Quneibi, Revised by Shahid Halling

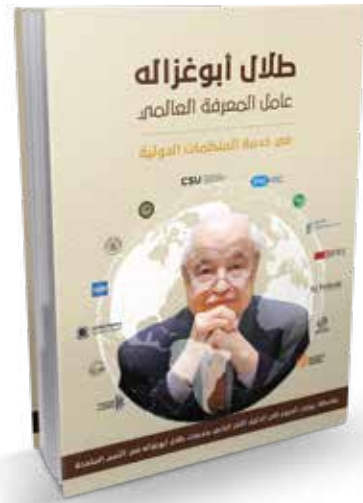


Talal Abu-Ghazaleh: Global Knowledge Worker in Serving International Organizations

A new book has been released highlighting some of the contributions of HE Dr. Talal Abu-Ghazaleh in serving the world, through various high-ranking international positions he assumed in several global business organizations and within United Nations agencies.

The 7-chapter book provides insights into the roles and efforts that Dr. Abu-Ghazaleh exerted in various fields, including the development of international relations, the advancement of the accounting profession and the improvement of intellectual property protection globally. It further details his significant role in international education, disseminating knowledge and information technology, including his role in strengthening Sino-Arab relations as well as serving and developing local and civil communities.

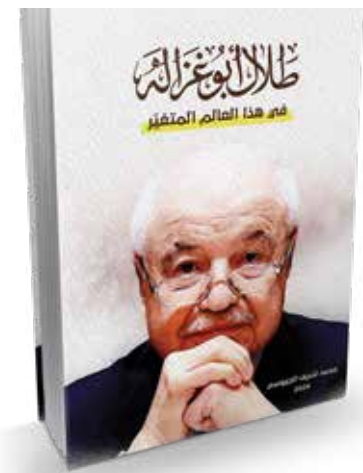
Author: Amaal Al-Damen



Talal Abu-Ghazaleh in this Changing World

The book “Talal Abu-Ghazaleh in This Changing World” highlights the positions, ideas, and opinions of His Excellency Dr. Talal Abu-Ghazaleh on various vital issues and subjects that have occupied and continue to occupy the mind of the world’s leaders, statesmen, politicians, businessmen, thinkers, specialists in national, economic, educational, technological, social, media, humanitarian and international organizations affairs, and more.

Author: Mohammed Sharif Jayyousi

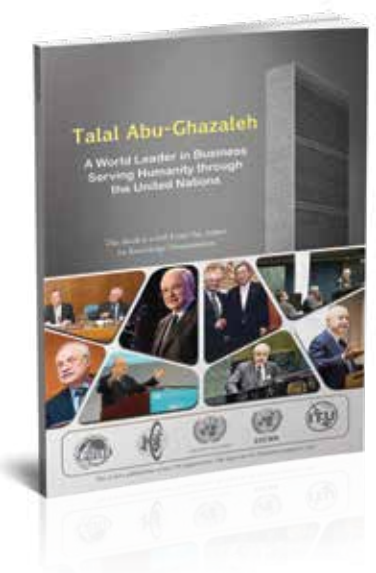


Talal Abu- Ghazaleh

A World Leader in Business Serving Humanity through the United Nations

The book, written by Sarbuland Khan, a former senior official of the United Nations, is a paean to Dr. Talal Abu-Ghazaleh and to his passionate love for and lifetime service to humanity.

It gives an overview of Dr. Abu-Ghazaleh's contributions. working with the United Nations over the decades in leadership roles, to foster development and improve the lives of people around the world. It covers multi-stakeholder partnerships launched under UN auspices and led by Dr. Abu Ghazaleh in several strategic areas including information and communication technologies for developments, environmental accounting, quality education, climate change, sustainable urbanization, sustainable tourism and poverty eradication.



The book demonstrates Dr. Abu-Ghazaleh's unique ability to not only articulate a vision and talk about challenges and opportunities but to make things happen and produce results.

One of the most consequential of Dr. Abu-Ghazaleh's lifetime achievements recounted in the book is his leadership of the United Nations ICT Task Force, the UN Global Alliance for ICT and Development and the UN Global Compact which helped transform the development landscape of developing countries by bringing the benefits of the information revolution to the underprivileged people of the developing world.

In illuminating his remarkable achievements, his passionate love of humanity and his vision, the book demonstrates that Dr. Abu Ghazaleh is a world business leader like no other.

This publication should serve as excellent study material for students around the world.

The Success Journey

The Book narrates the life journey of HE Dr. Talal Abu-Ghazaleh since his childhood up till present. It highlights his meetings with global leaders across politics, economy, society, and art. In its chapters, the book recites what prominent figures say about Dr. Abu-Ghazaleh and their acknowledgement for what he has achieved through his Talal Abu-Ghazaleh Global (TAG.Global). The Book also refers to the conferences Dr. Abu-Ghazaleh took part in, covering topic such as climate change, education, accounting, the youth, alongside his guiding principles for their future success.



The Book is written by Mr. Salameh Mahasneh

Truth in A Minute

This Book discusses emerging new networks and a range of technologies that manage all Artificial Intelligence-driven data and systems. It also addresses topics such as Computing, Internet of Things (IoT), Robotics, Cloud Services, Closed Networks, and Digital Identity. These concepts are deeply inspired by the vision of HE Dr. Talal Abu-Ghazaleh, whose ideas and insights greatly motivated the writing of this Book.



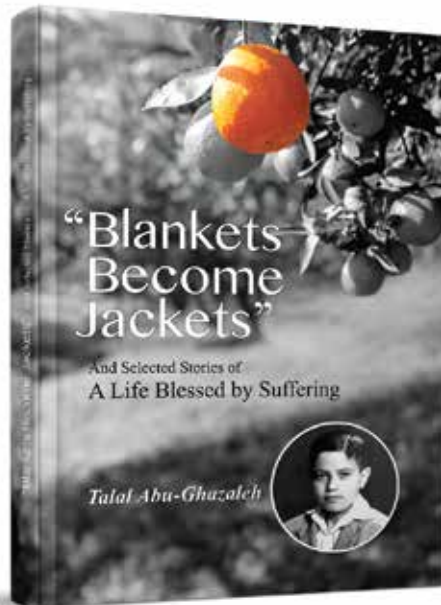
The Book is written by Mr. Salameh Mahasneh

Talal Abu-Ghazaleh's Publications

Blankets Become Jackets

“Blankets Become Jackets and selected stories of a life blessed by suffering” tells the story of Talal Abu-Ghazaleh; the godfather of accounting, who was a refugee then became one of the world business leaders. His fear on the Palestinian people who are under the Zionists occupation, has led him to build has a felicitous business empire around the world. The boy, who wore a jacket sewed by his mother from a blanket given to refugees, made it impossible for a global stature, harnessing all his abilities to serve the world around him, despite all the challenges.

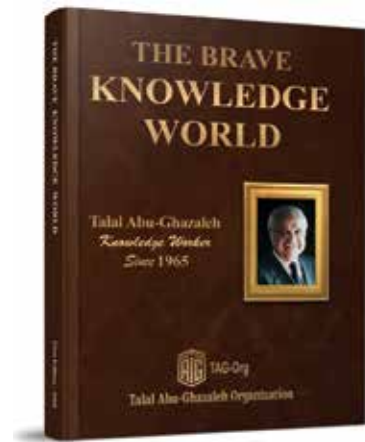
The book has been published in the following languages: English, Arabic, Russian, Turkish, Chinese, Montenegrin, and French.



The Brave Knowledge World

The book presents a realistic journey for the future, showing how technology will change the human history in the Fourth Industrial Revolution, which will obscure and blur the line between humans and technology.

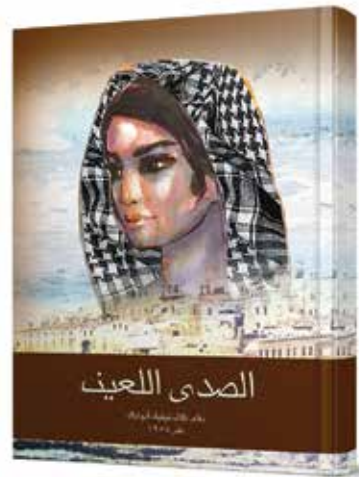
The book has been published in the following languages: English, Arabic, and French.



The Dreaded Echo

Dr. Talal Abu-Ghazaleh wrote this story in 1958 in a competition between university students, which he won. The award was announced by (Supreme Council of the Arts, Literature and Social Sciences in the United Arab Republic, “Egypt”, at the time), and the story won a prize of 500 Egyptian pounds, which was a lot of money for a refugee in the fifties.

The story depicted the tents of misery in which “we lived”, as the writer says, without “a glimmer of hope, no matter how small, in the restoration of Palestine”. So, “I wrote of the reality of the situation in which I and the people of Palestine lived”, he said.



Talal Abu-Ghazaleh – The Right to Return

The booklet presents a brief introduction to the Abu-Ghazaleh family, its origins that go back to the Palestinian city of Jaffa, and the story of the family's displacement, leaving behind their property, the most important of which was the family's house and the hotel they owned, as they were

seized by the occupation authorities during the Nakba...in addition to land that had been inherited by Talal from his father, Hajj Tawfiq...

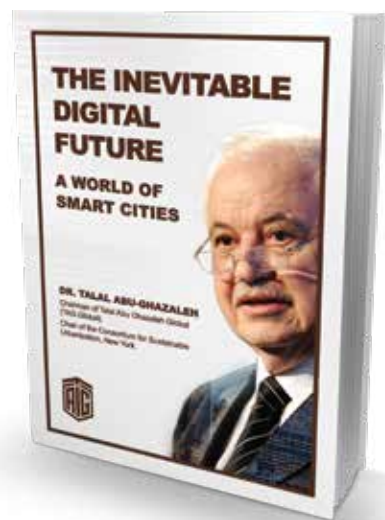


The booklet refers to the “Right of Return and Compensation” document as stipulated by international law, which contains no statute of limitations on human rights.

The Inevitable Digital World ... A World of Smart Cities

HE Dr. Talal Abu-Ghazaleh discusses in the book the technologies he considers essential for the emergence of true Smart Cities; and he refers to the lessons that can be learnt from previous failed smart city initiatives. The book provides a blueprint that can be used to develop holistic smart cities of the future. In addition, it discusses a range of supportive elements from governance to citizens' awareness that are essential in developing successful smart city implementations.

The book has been published in English and Arabic.



Where is the world heading

Where is the world heading? is a series of articles compiled in one book, based originally on a TV show hosted by HE Dr. Talal Abu Ghazaleh, a knowledge leader, a change maker and a man “whose words are the closest to people’s hearts”. A seasoned expert and a man of wisdom, Dr. Abu Ghazaleh hosted the show with the same name on RT Arabic, broadcast during 2020, a crisis year.

The articles varied, touching on an array of present-day “social issues,” adopting a “realistic approach,” through which Dr. Abu Ghazaleh was keen on presenting the remedy along with the diagnosis.



These included “ways to address crises and turn them into opportunities”; “The need to attach more attention to digital learning, IT and AI”; and “Behind the scenes of international trade and the oil market”. He also tackled issues like “Pros and cons of the Lebanese crisis”; a detailed presentation looking into the root causes of “the different aspects of the conflict between the US and Chinese giants”; and “International Monetary Fund: Why it was established and who benefits from it” and other related issues where policies, interests and opinions overlap.

All these topics were compiled in Where is the world heading? to draw up a “roadmap” for the world, with all its states, peoples and sub-worlds. The book is aimed to stimulate readers to think and take action, and start with a plan.

Because I Love the Truth and Love You First Edition

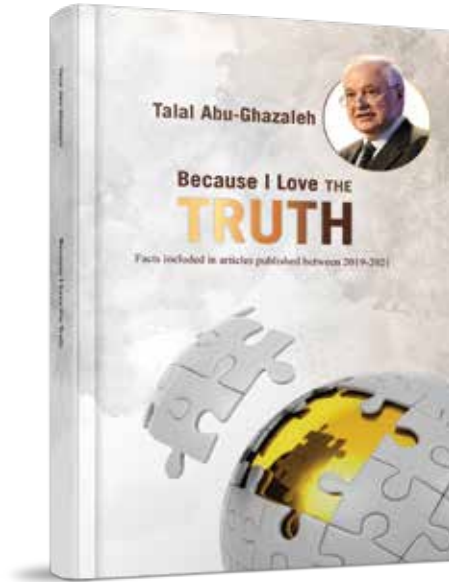
An assortment of op-eds by Dr. Talal Abu-Ghazaleh published in various media publications, then collected in a book...

He comments on what has happened, what is happening and what would happen in the future...

In his articles, Dr. Talal presents the Truth, speaking confidently with the tone of a wise man who loves people and knows how to get his messages through to them. The collection is characterized with diversity, with topics ranging from autobiographic, economic, patriotic, digital, technological, geopolitical, social issues and others. All express inner reflections, whose authenticity is verified with a tide of successes recorded by that helpless Palestinian boy who rose with “knowledge” to the peak of the world, high above those who deprived him of his beingness on his native land. He has become a role model for children, more so than an example to follow by youth or adults. It behooves a man of these qualities to write and it behooves us to read the words he inscribes.

It is the Truth that cannot be concealed; regardless of any attempts to block it, it will come to light.

The first edition of the book has been published in Arabic and English.



What is Most Woeful is What Makes You Laugh

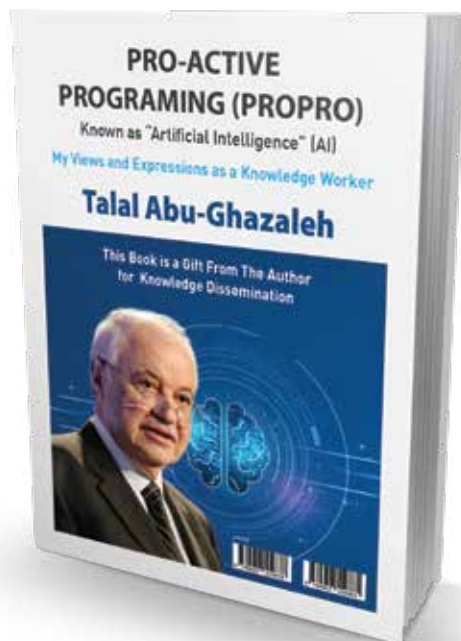
“What is Most Woeful is What Makes You Laugh”... is a book about fathoming the unfathomable situations, where the author, Dr. Talal Abu-Ghazaleh, steers away from ready-made ideas, in various fields, to seriously explore social ironies and political paradoxes. He skillfully detects in select situations the setbacks, the mistakes, the confusions and the tragic, loud and spectacular failures; not to condemn, but rather to advise, guide and rectify. For him righteousness is a balanced lifestyle, while pre-meditated errors lead to devastation.



Abu-Ghazaleh’s open-mindedness and flexibility, prefers not to push the opponent into a corner of underestimation, blame, shame, or bashing. Rather, he has his own style; a style of alternation where the human is the style as Hoffman says. Abu-Ghazaleh’s style reflects decency, propriety, empathy, wisdom and positive thinking, as a solid from for combatting all trends of negative thinking.

“What is Most Woeful is What Makes You Laugh” is the right manual for any one touring the horizons of knowledge, experience and discovery; actually the right compass for every adventurer exploring the oceans of awareness in search for what is better.

PRO-ACTIVE Programming (PROPRO), Known as “Artificial Intelligence”



This book is a collection of articles written by Dr. Talal Abu-Ghazaleh on the fascinating world of artificial intelligence (AI). As an international authority that has pioneered and chaired numerous committees and initiatives on information and communication technology (ICT) in the UN and elsewhere, he offers wise and unique perspectives on the development and impact of this important innovation to readers across the world.

By reading this book, you will gain a deeper understanding of AI and its influence on the world through the lens of a visionary leader, and you will be inspired by the many opportunities that AI offers to build a better world for all human kind.

The book has been issued in Arabic & English.

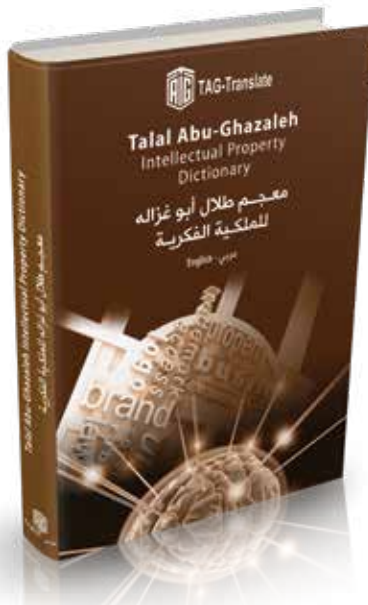
Dictionaries

The Talal Abu-Ghazaleh Intellectual Property Dictionary

The Talal Abu-Ghazaleh Intellectual Property Dictionary contains the terms and main axes of the intellectual property components, which are estimated to be about 10,000 words and terms.

The dictionary fulfills the needs of businessmen, innovators, inventors, jurists, those who are interested in intellectual property, professors, and university students. It is an indispensable reference for those wishing to obtain a certificate as an intellectual property expert. The dictionary is an incentive for all those who are interested in the field to author, write and create content in the related field in order to introduce Arab societies to a field of which they are in bad need to gain a deeper knowledge.

Intellectual Property laws have therefore become an important element in determining the rules of commercial transactions, the rights of inventors, and all other forms of intellectual creativity. This dictionary succeeded in filling a part of the wider gap which the Arab world suffers from concerning the references, researches and dictionaries specialized in intellectual property rights.



Consulting Management Book

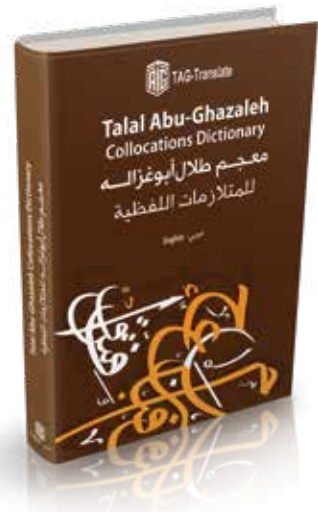
The Consulting Management book consists of thirty-eight chapters distributed on five parts and seven appendices. These chapters and appendices are considered fundamental and integrated reference for each consultant, and an educational book for teaching Consulting Management. The book is an introduction to professional consultancy, as well as the nature, methods and principles of the institution, rules of conduct, training and application development. It also proposes guidelines and determinants for consultants to work in various areas of management.



Talal Abu-Ghazaleh Collocations Dictionary

The collocations are a combination of words that together give out a very neat and accurate meaning. The Talal Abu-Ghazaleh Collocation Dictionary contributes to revealing genuine authenticity, beauty and accuracy of the Arabic language, refurbishing Arabic speakers' expressive abilities as well as strengthening their relationship with the Arabic language.

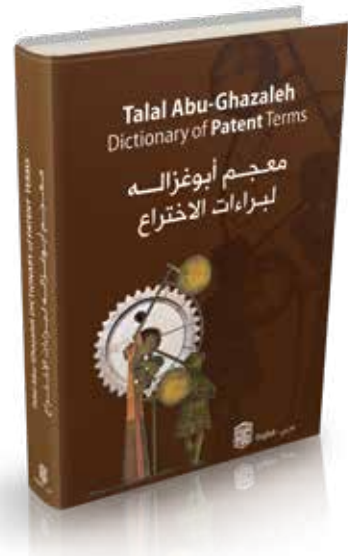
Therefore, learning the collocations is part of what can be called “linguistic competence” because it is considered to be an acquisition of an important type of linguistic stock that includes words, meanings of words and synonyms that one can employ to dive into the sea of eloquence, master the poetry and paraphrase, and promote their sense of expressionism.



Talal Abu-Ghazaleh Dictionary of Patents

The Talal Abu-Ghazaleh Patents Dictionary contains the basic terms and axes of the intellectual property domain. These terms are estimated at about 20,000 words and terminologies. These axes include the ongoing debate about the idea of patentability, its legitimacy and application, and other axes on green patents, intellectual property, patent governance and patent portfolio management, as well as a core axis that include patent crimes, litigation and arbitration on patents' disputes.

It meets the needs of businessmen, innovators, inventors, lawyers, and those who are interested in intellectual property, university professors and students.



Talal Abu-Ghazaleh Dictionary of Legal Terms

Talal Abu-Ghazaleh Legal Dictionary with its rich input is a legal tool for jurists, which enables them to master legal language that has entered a new stage as the world enters a new era.

This dictionary contains a selection of legal terms that meet the needs of judges, lawyers, university professors and law school students, as well as the needs of businessmen, companies and employees working in other sectors of the economy.



The Licensing Executives Society International (LESI)

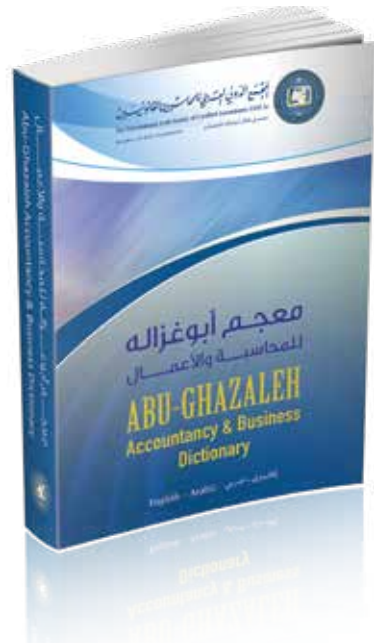
The Licensing Executives Society International (LESI) Guide to Licensing Best Practices was designed to update licensing professionals with the current changes and future opportunities in this dynamic field. The Guide is a collection of articles covering licensing issues, procedures and regulations in Europe, the Middle East, Australia, Asia and USA, the do's and don'ts of licensing agreements, patent procedures and licensing issues on the Internet.



TAG ICT Dictionary (English/Arabic)

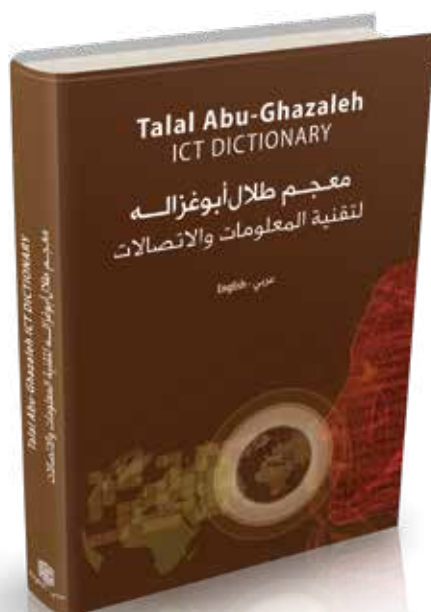
The Talal Abu-Ghazaleh Information and Communication Technology Dictionary includes information and communication technology terms in both Arabic and English to promote and facilitate computer use. It is a reference for both students and employees in different fields of knowledge.

This dictionary aims to enrich Arabic language references and contributes to the dissemination of knowledge among students and all business sectors through specialized scientific and professional publications and by adding a new set of translated terms that can be used in daily life to describe techniques, mechanisms and practices.



Abu-Ghazaleh Accountancy & Business Dictionary

- » The dictionary contains nearly twelve thousand terms.
- » Comprehensiveness that meets the needs of professionals from accountants, auditors, banks, businessmen, companies and all other employees in the fields of economics, accounting and business.
- » A basic reference and coverage of technical terms in the era of globalization in which developments are accelerating on various levels based on science, knowledge and technology.
- » A design that facilitates quick and easy access to the required terms.





طالال أبو غزالة العالمية الرقمية
Talal Abu-Ghazaleh Global Digital

نحن نبكر منذ 1972
We Innovate Since 1972

*Every one of us has a touch in life.
Make sure you provide it in the right place.
Knowledge also has a touch that shines like
a sparkling star.*

*It guides knowledge seekers, generation after
generation, to revive the minds, restore humanity,
and elevate it.*

*It is contrary to ignorance, which seeks to wipe
knowledge or propagate violence using a knife,
a reckless weapon, or a hidden mine, to destroy the
communities, disturb humanity, contribute to its
demise, and accelerate its extinction without
weighting the consequences.*

Talal Abu-Ghazaleh

E-BOOK

