

the Islamic **World Study:**

Introduction Episode

POSSIBLE FUTURES OF THE **ISLAMIC WORLD TOWARD 2050:**

Co-creating New Paradigms for the Islamic World



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Preamble

The Strategic Foresight Center of ICESCO and Dr. Sohail Inayatullah have elaborated this episode of the major study 'Possible Futures of the Islamic World' jointly.

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1. CONTEXT

Most scholarship is historical, that is, data based on what has occurred. Writing about the future thus is fraught with challenges as the future does not yet exist. What then should we do, can we do, to populate the future with "data"? Too meet this challenge, there are four recognized approaches (Inayatullah, 2002).

The first is predictive, based on empirical social sciences. The future is populated with data through trend forecasting as well as through pre and post-test studies on how the future is used. This approach has become considerably more complex with concepts borrowed from complexity and chaos theory wherein the future forecasted is not seen as linear but as multi-causal with initial factors decisive. Language in this approach is seen as neutral merely describing reality.

The second is interpretive, based not on forecasting the future but on understanding competing images of the future. Meanings given to a possible future are analyzed. Expert interpretations of possible futures are often interspersed with quantitative forecasts, thus linking the qualitative with the empirical. A triangulation of experts, citizens, and historical data ensures greater confidence. The interpretive can be civilizationally oriented in that different civilizations have different views of the past and present, and thus perspectives of the future. The differing imaginations of the future becomes central in this research approach. Language is considered opaque participating in the reality it seeks to describe, and thus, the language we use is not just an issue of technical precision but one of worldview and epistemology. Language symbolically creates the future we wish to describe. It is not neutral.

The third is critical, derived from poststructural thought and focused on asking who benefits by the realization of certain futures and which methodologies privilege certain types of futures research. While truth claims are eschewed, the price of epistemology is not: every knowledge decision privileges reality in particular ways (Shapiro 1992, Foucault 1973). This is text-based research focused on what is missing in particular discourses; for example, how the Islamic discourse is often silent in world modelling projects. Islamic assumptions on reality – the role of children, the family, and community, for example – are not considered. Narratives claiming to be neutral are often civilizationally biased. Language decisions are thus not just epistemological but political as language creates worlds, futures.

The fourth approach is participatory action learning/research. This approach is far à democratic and focuses on stakeholders developing their own future, based on their assumptions of the future (for example, if the future is linear or cyclical) and what is critical to them (Inayatullah, 2007). Participatory futures workshops are used in this approach. Case studies are focused on how a group changed its views and practices through a futures process including what new values and strategies were created. Impact can this be measured. Policy recommendations and real projects are critical here, that is, it is not just enough to study the changing future, but we need to change it. To design and invent.

As an example of these four approaches, the first might forecast the number of Muslims by 2050. The second would explore the images of the future held by different categories of Muslims, that is, search for variation in perspective, asking

what are causal factors (religion, class, gender, access to power)? The third would ask why are we forecasting population per se, why not communities or other categories such as humans with ecosystems that give and create meaning? It would seek to deconstruct and reconstruct. The final approach moves beyond forecasting, interpretation, critical theory, and moves to action, that is, articulates action learning projects based on different renderings of population.

In this project, we begin with a mix of interpretive and critical. Thus, views of the futures of Islamic civilization particularly by those trained in the field of Futures Studies are highlighted. We then take global studies of the future, specifically the 2021 American National Intelligence Centre's study on global futures 2050 and seek to locate the Islamic world within their scenarios. This is done first by developing youth scenarios and then by asking what is missing in the National Intelligence Centre's scenarios. We follow this up with scenarios written from a those within the Islamic world in particular Egypt and Pakistan. We explore the grand challenges facing the Ummah the next thirty years and conclude with an exit strategy.

Scenarios are the core methodology used in this study. Scenarios have numerous uses. They map out alternatives; help avoid worst case and undesired futures; can optimize strategy (Miller, 2018); assist in developing preferred futures; and most significantly, they create a distance from the present, in time, and sometimes in space, so that the present is seen as remarkable, as malleable. They as well integrate rational and emotive analysis; indeed, they assist in feeling our way to the desired future. Scenarios thus help us understand the changing future, and how we can use the future to change the present. In this report, we have used different scenarios techniques, including the double variable, multivariable, and the change progression (Inayatullah, 2015). The year 2050 is used a guidepost not as a fixed date - it symbolizes the expectation that the world will change dramatically and there is time to adapt and change current trajectories.

Islamic nations are considered in this study comprising of four regions, MENA, South Asia, Central Asia, and South-East Asia, i.e., nations with dominant Muslim majorities. While demography is one variable - particularly the youth bulge in Muslim nations - it is not destiny. Similarly, while COVID-19 is the most important variable today, it may not be as we move toward 2050. This may or may not be the age of pandemics. Finally, while artificial intelligence and peer to peer economics is emerging as a critical comparative advantage - the fourth industrial revolution (Schwab, 2016) - there is considerable uncertainty in the future to suggest it may not be as dominant by 2050, other technologies could rise by then (space, the end of agriculture, mind over machine, the end of oil, for example, could be decisive new factors). There could be as well a dramatic shift from GDP as defining to Wellbeing (King et al, 2018). We are often blinded by the present and thus futures thinking asks us to jump outside our presentism. Finally, all forecasts and scenarios are not just methods that describe the future insofar as the future is an open system, they influence which future emerges, that is, to some extent they play the role of selffulfilling prophecies. The vision of the preferred future thus can be decisive in what results (Polak, 1973).

We begin with the vision of the Islamic world.



Twenty-five years ago, at the International Islamic University of Malaysia, Muslim scholars from around the world met to debate and imagine the futures of the Islamic Ummah. The following points emerged as fundamental. These were (Inayatullah, 1996):

- An alternative economics to world capitalism
- A borderless Ummah where trade, ideas, and labour travels without restrictions
- Cooperation between the genders based on dignity and fairness, that is, full participation of women in all areas of life
- Self-reliant ecological communities instead of nations as the primary governing units
- Use of advanced technologies to link these communities
- Tolerance as the guiding value of the Islamic world
- A world governance system that is fair, just, representational and guided by wise Leadership

The use of digital health technologies, for example (Sheraz, Inayatullah, and Ali, 2013) – generally the vision so far has not eventuated. The dominant mode of reality – capitalist, nation-state based – continues. There have, however, been advanced in gender equity and certainly COVID-19 has pushed the mantra of virtualization throughout the world. New technologies have as well not linked traditional communities, as those at the 1996 meeting imagined, rather, they created new communities around Facebook and other platforms. Thus, the vision while important in setting a possible direction was weighed down by history, by the contradictions of the past.

A few years earlier, futurist Madhi Elmandira (1990) writing on the futures of Islamic civilization took great pain to assess these contradictions even as he imagined alternative futures. First, however, he sought to distinguish between the unknown and the future i.e., the framework of the future with the Islamic episteme.

In Islam, a clear distinction must be made between the Arabic word "Al Ghayb" (unknown) which is within the realm of God, and the word "Mustagbal" (future) which implies the anticipation of developments arising from what we do or fail to do today. We are not talking about prophecies but about forecasts.

Second, as most authors do, he lamented the backwardness of thought throughout the Islamic world because of colonization (economic and cultural), lack of women's involvement, and a lack of vision of the future among elites. In particular, he focused on several areas. While written three decades ago, they remain relevant today (1990):

- 1. Lack of real time data on economic and socio-cultural activities in the Islamic world
- 2. High illiteracy rates including most recently the rise of conspiracy theories
- 3. Lack of scientific research, leading to brain drain. Foundational to this issue is the lack of iitihad.
- 4. Exogenous development models
- 5. Gender imbalance

While the Arab Spring (Inavatullah, 2011a) intended to reshape many of these core points, clearly in 2021, especially with the advent of COVID-19, the spring has for most become a worsening winter. COVID-19 illness and death rates continue to rise (Organization of Islamic Cooperation, 2021). Poverty continues to increase (World Bank, 2021). But staying with the earlier work of Madhi Elmandira, let us reflect what he offers for the future. He argues for three possible scenarios (Zakaria, 2013: 102-103) These are:

- (1) Continuity and stability.
- (2) Reformist. In this future, basic reforms are implemented in response to the genuine needs of citizens throughout the Islamic world. These issues, he argues are, poverty, economic disparity, and low levels of literacy.



(3) Radical. In this future there is world economic prosperity, social justice, and democracy are achieved. To achieve this future, backwardness in thought first needs to be challenged, a vision for the future needs to be created and shared, and democratic institutionalization especially through women's participation is necessary (Zakaria, 2013: 104).

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In the same period, the late 1990s, the Muslim futurist Ziauddin Sardar reached similar conclusions. To move toward this vision, Sardar recommends three foundational challenges. These are (Inayatullah and Boxwell, 2003: 33).

Ordinary Muslims around the world who have concerns. questions and considerable moral dilemmas about the current state of affairs of Islam must reclaim the basic concepts of Islam and reframe them in a broader context. Ijma must mean consensus of all citizens leading to participatory and accountable governance. lihad must in its complete understood spiritual meaning as the struggle for peace and justice as a lived reality for all people everywhere. And the notion of the ummah must be refined so it becomes something more than a mere reductive abstraction. As Anwar Ibrahim has argued, the ummah is not 'merely the community of all those who profess to be Muslims'; rather, it is a 'moral conception of how Muslims should become a community in relation to each other, other communities and the natural world'.

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To create this future, can Muslims (Inayatullah, 2011: 106) asks Sardar (1993) recover the dynamic principle of ijtihad – sustained and reasoned struggle for innovation and adjusting to change – that has been neglected and forgotten for centuries? Can Islamic civilization avoid the future that being programmed by globalization and create an alternative modernity? Not destroying tradition but adopting it critically, challenging feudalism and patriarchy and authoritarian knowledge politics, and creating a world, modern but different from the West?

To create this different world, we must focus on core epistemological concepts, suggests Sardar. These are (Inayatullah, 2011 105):

Tawheed articulates the larger Islamic unity of thought, action and value across humanity, persons, nature and God. Khalifah asserts that it is God who has ownership of the Earth. Humans function in a stewardship, trustee capacity, taking care of the Earth, not damaging it. The goal of the Islamic worldview is adl,

social justice, and it is based on the larger needs of the people, istislah. To reach these goals. ibadah, worship or contemplation is a beginning and necessary step. From deep reflection, inner and outer observation, ilm or knowledge of self, other and nature will result. One's actions then are halal, praiseworthy and not haram, blameworthy. Moreover, with this framework. dhiva (waste) of individual and collective potentials is avoided as is zulm, tyranny, the power of a few, or one, over many, or the power of a narrow ideology over the unity within plurality that the Islamic paradigm advocates. The science that emerges from it is not reductionist objective but synthetic and values-based.

The overall context in the application of these concepts is futures orientation (Chen, 2020). This means a clarity on the vision, an understanding of the alternative futures ahead, and an appreciation that the emerging future is likely to be disrupted by internal and external forces (as COVID-19 does today). Decades ago, Toffler (1970) suggested that this acceleration of change would lead to future shock (Westphal, N.D.).

Acceleration produces a faster turnover of goals, a greater transience of purpose. Diversity or fragmentation

leads to a relentless multiplication of goals. Caught in this churning, goalcluttered environment, we stagger, future shocked, from crisis to crisis, pursuing a welter of conflicting and selfcancelling purposes

The way out of this hamster wheel is creating anticipatory systems and cultures, of which vision is a central variable. Vision takes us to a different world; however, it is not utopian, contradictions are built into the vision. There is an appreciation and understanding of disowned futures, that opposites exist within all visions.

Thus, there are different types of imagination. Robert Jungk posits three types (Jungk, 1971: 116). The first is logical imagination. This is the extrapolation of current trends to show their absurdity, thus allowing new ideas to emerge. By focusing on exponential growth curves (instead of linear or s-curves) the problem with current trends can be easily seen. The second is critical imagination. Critical examination asks us to probe deeper, searching for structural weaknesses in existing situation and thereby creating the context for alternative futures. This is deeper than traditional critique which only reveals what is wrong. Critical imagination shows what is wrong and points to desirable futures. The third approach is creative imagination. The latter breaks out of the present and makes a radical departure from the present. It imagines the novel. We focus on all three in this report especially critical and creative. We begin the next section with critical imagination.



In a remarkable report by the US National Intelligence agency scenarios for the world of 2040 are developed. Given the context of COVID-19, disruptions are a core part of the study. They do not shy away from the likelihood of dramatic change. Yet, they understand the power of long-term secular trend such as demographics.

As they write (National Intelligence Council, 2021: 1)

During the past year, the covid-19 pandemic has reminded the world of its fragility and demonstrated the inherent risks of high levels of interdependence. In coming years and decades, the world will face more intense and cascading global challenges ranging from disease to climate change to the disruptions from new technologies and financial crises. These challenges will repeatedly test the resilience and adaptability of communities, states, and the international system, often exceeding the capacity of existing systems and models. This looming disequilibrium between existing and future challenges and the ability of institutions and systems to respond is likely to grow and produce greater contestation at every level.

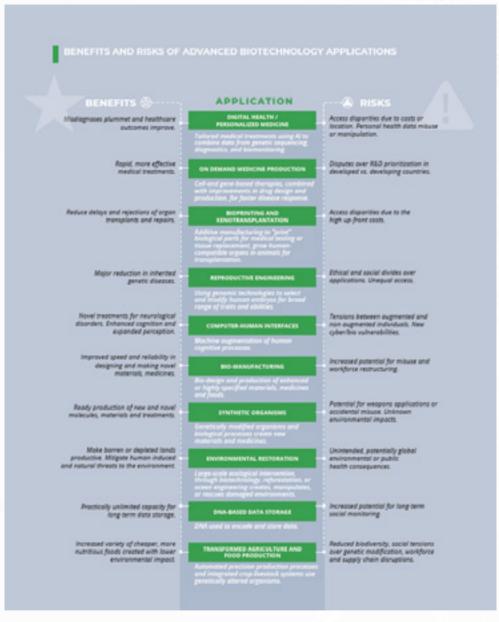
In this more contested world, communities are increasingly fractured as people seek security with like-minded groups based on established and newly prominent identities; states of all types and in all regions are struggling to meet the needs and expectations of more connected, more urban, and more empowered populations; and the international system is more competitive (...)

Thus, the importance of developing visions, shared and contrasting - as well as alternative futures for the Islamic world becomes ever more important.

Climate change, the rise of China, new diseases, the ageing of the West and East Asia, and the youth bulge in the Arab world and in Africa, and dramatic new technologies (artificial intelligence, additive printing, drones, the internet of things, to mention a few) are likely to begin a long wave of disruption after disruption.

These technologies include (National Intelligence Agency, 2021: 61)





Each technology as the chart above suggestions has benefits and risks, not to mention ethical considerations. For sure, they are all possible disruptions that could change wealth patterns throughout the world. The report adds that the economic weight to the world will shift toward Asia with nations having dominant Muslim majorities (Indonesia, Pakistan, Bangladesh) and minorities (India and the Philippines) to play a far greater role in the world economy argue the authors. (National Intelligence Agency, 2021: 51).



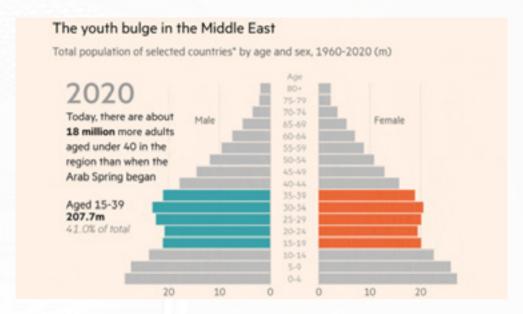
Thus, argue the authors, the vision of the Arab Spring 2.0 is unlikely be transformative. Space for change will shrink and shrink. And the contradictions between new technologies and communication plus a youth bulge weighted down by traditional systems will create systems that are likely to break, not transform (Financial Times, 2020).

Thus, instead of waves of every expanding identity, planetary Gaian imaginations of humans with nature - an ecosystems approach to the Islamization of knowledge and identity - there have been pendulum reversals (Inayatullah, 2011a). However, the youth bulge remains defining. If we take at as a core driver, what then are the alternatives? The next section imagines alternative futures of youth (Gidley and Inayatullah, 2002).



Based on earlier work (Inavatullah, 2016), we present the following scenarios. These scenarios are youth focused and imagine different worlds to 2040. We focus on youth not just because of the youth bulge in the Islamic world but because the emerging youth will be different. Each generation sees the future from its historical context. For example, those who grew up during World War 11 and the independence struggles see the world through these lenses. We know that children grown up today will be shaped by multiple foundational factors (McCrindle and Fell. 2021), including COVID-19, digitalization (the world of selfies, YouTube, Google, Facebook, Instagram), mobility (not just because of smart phones but the likelihood of many jobs and alternative forms of work - freelance, portfolio - (Inayatullah, 2020), climate change and the rise of renewable energies. Each generation (Strauss and Howe, 1991) has the possibility thus of creating a break from the past, a different world. Weights from history, however, can entrap the generation, moving them toward similarities with earlier generations, but this is far from certain. Demography matters and is not destiny.





(Financial Times, 2020, February 10).

4.1 VIRTUAL RETREAT OF YOUTH IN THE ISLAMIC WORLD.

Within this world, youth create their own forms of currency - bitcoin today, for example - and forms of identity - avatars, for example. In a way this is like the reality of many developing nations where some youth live in traditional agrarian society, others live in growing middle class urban environment and others in westernized enclaves in capital and commercial cities with direct links to youth from all over the world. In this fragmented future, inter-generational links become broken with extended families in developing nations disappearing and coming together, if at all, only for economic reasons. Digital natives are not in conflict with the elderly,



they live in different worlds. The main assumption behind this future is that the new technologies allow the creation of alternative worlds. Education and training are focused on digital spaces detached from other parts of the economy. Groups can be in similar physical spaces but different techno-mental spaces – strangers in the virtual night some chasing Pokemon Go and other new forms of holographic identity. COVID-19 and emerging pandemics create the impetus becoming key amplifiers of virtualization. Youth retreat as geopolitics allows no entry space. They use their agency to impact worlds that they can.

To present this scenario we use the structure of Causal Layered Analysis (Inayatullah, 1998, 2004, 2015). This has four parts: the litany or visible aspects of the scenario; the system of the future; the worldview, and the core metaphor or myth.

Litany	Retreat to virtual realities	
System	New technologies in contradiction with culture create techno-cultural enclaves	
Worldview	Disruptive technology-led	
Myth/metaphor	Strangers in a virtual night	

4.2 SCENARIO TWO - UNEMPLOYED AND DISEMPOWERED

In the second future, youth are not only unemployed, but they are also disempowered. Expectations of a better world are not met nor as we enter the Age of Pandemics and Climate Change, can they be met! The changing or indeed end of traditional jobs due to automation is a significant factor. The World Economic Forum forecasts in its report, The Future of Jobs that five million jobs will disappear because of automation (World Economic Forum, 2016). Not just factory jobs, but office workers as well as professionals in law and accounting will be hit. Mckinsey and Co assert that 45% of "today's workplace activities could be done by robots" (Wright, 2016). The International Labour Organization predicts that as Adidas shifts shoe production moves back to Germany (robots are far more cost competitive than labour) that up to 90% of Southeast Asian workers could face unemployment due to automation. However, even robots have costs and now there is evidence that European robots are losing jobs to Asian robots as Adidas shifts manufacturing (Parson, 2020).

If current institutions continue to teach and train for jobs that no longer exist, and cannot exist, it is likely that youth will take to arms or more seriously cyber arms. As society becomes far more technologically sophisticated – the internet of things, persons, and data – cyber warfare becomes the foundational pathway for rebellion.

Litany	Demography is destiny
System	Lack of systemic change leading to rebellion and violence
Worldview	Unmet expectations-led
Myth/metaphor	The only good old person is a dead old person

The main assumption behind this future is that changes in governance are too little, too late. Demography becomes destiny. To ameliorate this future, a dramatic counternarrative is required. Currently, terrorism and other conflicts are framed within litany terms ie the evil of a particular ideology. Instead, the deeper causative factors climate change, inequity, the youth bulge - must become defining. Once the problem is reshaped and alternative causes explored then new solutions can emerge.

4.3 SCENARIO THREE -TRANSFORMED WORLD

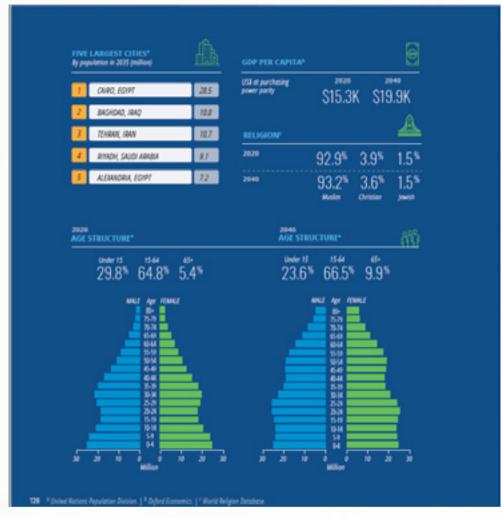
In this future, a shift in the nature of the world economy makes issues of youth and ageing far less important. As reported recently by the OECD, capitalism could end by 2060 (Mason, 2014). Whether this occurs because of new sharing technologies or by developments in 3D printing and other low cost manufacturing revolutions or through Big Data and the advent of the full transparent information society is not certain. With a strong likelihood of a regional and eventual global guaranteed income, work and income will be delinked, thus allowing youth to follow their passion, instead of conforming to the rules of the elderly. How this will develop is far from clear from the vantage point of the present. But what is clear is that in this future, the youth bulge becomes far less of an incendiary issue as jobs are far less tied to wealth. In a post-capitalist society where technology allows for survival for all, fighting over scarce resources becomes a non-issue. Finding inner meaning, engaging in politics, creating new sources of wealth and exploration become far more important. With jobs and identity and jobs and survival delinked, the real issue will become which societies can create harmony and identity.

The assumption behind this future is that technological and social change foundationally disrupt the five hundred year old world capitalist economy. Education and training is for people, planet, prosperity, and purpose. Youth in this future frame Islam as a worldview that helps create inner and external change. It provides meaning and direction in creating progressive and inclusive new futures. Youth in the Islamic world help create a post-capitalist society: they create a radical new world (Government of Malaysia, 2018).

Litany	Demography not relevant	
System	Meaning, politics, identity, exploration define	
Worldview	End of capitalism	
Myth/metaphor	A world after jobs	

However, irrespective of the causal pathway, of the scenario that develops, the youth bulge will continue to dramatically influence the future, creating a demographic dividend if the policy prescriptions are correct and a demographic bomb if they are incorrect. However, to create appropriate policy prescriptions such as those outlined above the current narrative of youth as the problem needs to be transformed to youth as an asset. This is especially so in youth bulge areas.

These three maps give us a sense of the youth structure in the future as well as purchasing capacity. They are for MENA, South Asia, and South East Asia, respectively.



Middle East and North Africa (National Intelligence Centre, 2021: 129)

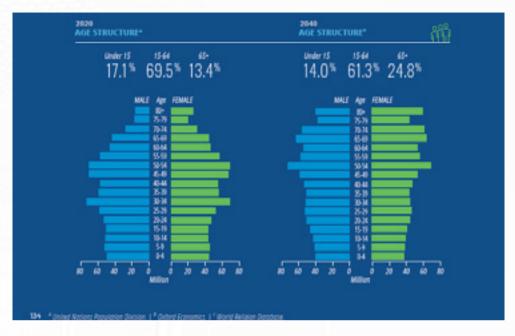


South Asia (National Intelligence Centre, 2021: 133)



Southeast Asia (National Intelligence Centre, 2021: 137)

The charts all suggest that societies in the Islamic world will begin to slowly age. Certainly, Western and East Asian societies in comparison will dramatically age, but the challenge of youth that Islamic nations face today will not be as disuptive.



Percent of over 65 in Northeast Asia. National intelligence Council (2021: 134)



Table Percent over 65 in Europe. National intelligence Council (2021: 124)

There is, however, a fourth future. This is far less radical than the previous one. This one assumes adaptive change with youth in Islamic areas making a shift.

4.4 SCENARIO FOUR - INNOVATION AND APPS

In the first trajectory, the youth bulge becomes a demographic dividend. New technologies which are youth friendly and new social structures are created by the peer to peer sharing economy (economic democracy, cyber cooperatives) leading to youth contributing in ensuring a more equitable, peaceful, and prosperous world. Educational institutions adapt, teach and train for tomorrow's new jobs. Instead of universities, micro-certification and accreditation are normalized, as the Ministry of Education in Malaysia is already exploring. The uber university model – deep flexibility – could also become dominant.

The youth bulge leads to technological innovation as we see currently in places like southern California or silicon savanaah in Kenya (Mallonee, 2018) – the youth create the new "apps" for genomic, robot, big data and peer to peer transformed worlds. Youth mentor the elderly and the elderly mentor youth. Educational institutions from the university to the primary school create pathways for this mentoring to occur. Innovations are set into place, such as direct democracy via online referendums as in Finland (Christensen, H, 2017) so that the elderly do not dominate politics or further as in Estonia where digitalization is now linked to the nationhood (Heller, 2017 - so that the elderly do not dominate politics. The main assumption behind this prediction is that government and culture act now to create this future. Strategy and cultural change work hand in hand. Capitalism continues but in far more benign ways.

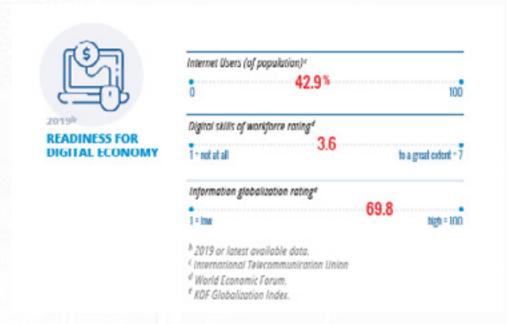
Litany	Youth bulge is the demographic dividend	
System	Economic democracy, peer-to-peer, innovation and wealth generation	
Worldview	Technology-led	
Myth/metaphor	Youth create the future	

Given the falling costs of smart phones and other personalized technologies and the flattening of the world - the possibilities of poorer regions leap-frogging the West remains possible.

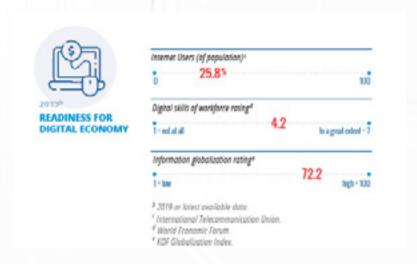
At the same time, as corporations grow larger - Amazon, Google, Facebook, Apple, Alibaba, JD.COM - as profits move toward zero, size and those who control the technology landscape differentiates. Most likely, parts of the world and the youth who inhabit there will be content and design developers. Other parts of the world will be mere consumers. Thus, far more nuance in understanding not "youth" as a singular but "youths" as plural is required.

Again, if we look at data and readiness for the digital economy in our regions, this scenario does not seem outlandish.

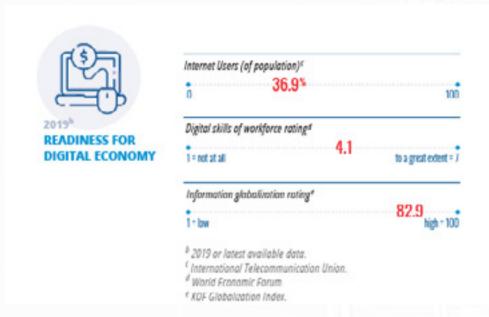




Middle East and North Africa (National Intelligence Centre, 2021: 129)



South Asia (National Intelligence Centre, 2021: 133)



Southeast Asia (National Intelligence Centre, 2021: 137)

While these scenarios articulate youth futures, suggesting that we should be ready to anticipate major changes, let us return to the National Intelligence Report which goes further and develops macro scenarios for the planet.





The authors suggest five possible futures ahead (National Intelligence Office, 2021). These are:

5.1 THE RENAISSANCE OF DEMOCRACIES

In 2040, the world is in the midst of a resurgence of open democracies. Rapid technological advancements fostered by public-private partnerships are transforming the global economy, raising incomes, and improving the quality of life for millions around the globe. The rising tide of economic growth and technological achievement enables responses to global challenges, eases societal divisions, and renews public trust in democratic institutions.

Technological health revolutions from the challenge of COVID-19 and climate change lead to innovation after innovation. Open societies win as closed societies cannot compete.

5.2 A WORLD ADRIFT

In 2040, the international system is directionless, chaotic, and volatile as international rules and institutions are largely ignored by major powers. Organization for Economic Cooperation and Development (OECD) countries are plagued by slower economic growth, widening societal divisions, and political paralysis.

In this future, the world is directionless with waves of migrants fleeing "conflict, environmental disaster, and economic decline" With fragmentation the norm, social cohesion becomes the key comparative advantage.

5.3 COMPETITIVE COEXISTENCE

In 2040, the nations have prioritized economic growth and restored a robust trading relationship, but this economic interdependence exists alongside competition over political influence, governance models, technological dominance, and strategic advantage. The risk of major war is low, and international cooperation and technological innovation make global problems manageable over the near term for advanced economies, but longer-term climate challenges remain.

This is not a long cold war but more of a world of frenemies. There are rival worlds of competing values. Both sides agree that prosperity is best for all. In this future, argue the writers:

Rising commodity prices and demand for foreign workers stimulated an economic recovery that improved prospects for growing middle classes in some developing countries. Several advanced economies with aging populations set up guest worker programs, filling important service jobs while reducing uncontrolled migration using biometric tracking programs

Advances in renewable energy generation and storage and in carbon capture technologies dampened the growth of emissions but not fast enough to prevent some catastrophic impacts. Wealthy countries were able to invest in adaptation measures at home to protect at risk populations, but developing countries lagged behind and suffered the most from increased disasters, presenting second-order security challenges.

5.4 SEPARATE SILOS

In 2040, the world is fragmented into several economic and security blocs of varying size and strength and focused on self-sufficiency, resiliency, and defence. Information flows within separate cyber-sovereign enclaves, supply chains are reoriented, and international trade is disrupted. Vulnerable developing countries are caught in the middle with some on the verge of becoming failed states. Global problems, notably climate change, are spottily addressed, if at all.

What are the implications for the Islamic world? First, if the Islamic world innovates it could become its own silo, its own regional power. This would be increased trade between nations and reduce vulnerability. Second, it would allow for new Muslim-centred products in new technologies particularly in artificial intelligence, bio-technologies, climate adaptation, to begin with. While the National Intelligence Council does not anticipate a new regional association clearly when there is a breakdown no politics are possible.

The final scenario begins with tragedy and concludes with transformation

5.5 TRAGEDY AND MOBILIZATION

In 2040, a global coalition, is implementing far-reaching changes designed to address climate change, resource depletion, and poverty following a global food catastrophe caused by climate events and environmental degradation. Richer countries shift to help poorer ones manage the crisis and then transition to low carbon economies through broad aid programs and transfers of advanced energy technologies, recognizing how rapidly these global challenges spread across borders.

For non-oil exporting nations in the Islamic world, this is a considerable boon. Sea level rise and other climate challenges are likely to be mitigated. New technologies focused on climate change allow a leapfrog over nations.

This becomes a hopeful future for the Ummah, becoming part or the solution, leading in creating global advances. This was the key ingredient in the work of the macrohistorian Ibn Khaldun (1967). Seeing him as a futurist, we can argue that it is asabiya or unity created from being outside of (energy) power that creates the difference, that creates the new dynasty (system) (Inayatullah, 1996a).

While these are scenarios in response to global futures, what if we took the Islamic world in itself as a category, what are the possible futures then? We use the current COVID-19 crisis as a point of departure.





6. INSIDE OUT: ISLAMIC FUTURES FROM WITHIN THE UMMAH

For the Islamic world, research conducted with Khadija El Alaoui and Muamar Salameh suggests four scenarios (Alaoui, Inayatullah and Salameh, 2020). They are recently derived, within the context of the COVID-19 pandemic. They are: (1) The changing of the guard; (2) the revolution of the youth; (3) Hold the line; and (4) The new planetary Ummah. I quote extensively from this research work.

6.1 THE CHANGING OF THE GUARD: A GEO-POLITICAL PERSPECTIVE

Poverty is a critical factor here. Consider the case of Egypt. Egypt's statistical agency, the Central Agency for Public Mobilization and Statistics (capmas.gov.eg., N.D.), reported that 32.5 percent of the total population falls below the poverty line (estimated at approximately \$46.6, monthly) in 2017-18. As Samira Outt, a street vendor, was quoted as saying: "If I catch the virus, I will die. And if I don't work me and my children will die also, but out of hunger. So it is the same." (Middle East Eye, 2020)

6.2 THE REVOLUTION OF THE YOUTH: A DEMOGRAPHIC PERSPECTIVES

The pandemic – in addition to crises caused by climate change in the decade ahead - results in great decimation. No vaccine or cure is found, and the virus continues to mutates. Poverty and ill-equipped health services with a lack of preventive action eventually lead to millions of deaths in the Islamic world. Acceptance instead of a transformative strategy becomes the norm. As one security guard commented: "What can we do about the Coronavirus? One can die of a heart attack. Death is inevitable and it could come at any time." (DW Academie, 2020).

The youth point out: "While the emergence of the virus was not in human control, the management of the pandemic certainly is.

Even as many move toward surrender, we can anticipate the youth revolt. As the old die, the power of youth becomes defining. They lead. Tving their camel through both the use of new technologies and development of solidarity with other oppressed groups, they lead the way.

6.3 HOLD THE LINE: THE CRITICAL VIEW OF TRADITIONAL DYNASTIC POLITICS

Powerful nations in the Islamic world safeguard as much as they can of their power and influence, given the instability in the world economic system. They do their best to continue the status quo.

6.4 THE NEW PLANETARY UMMAH, SCIENCE AND SPIRIT: THE VISIONARY PERSPECTIVE

Research in the late 1990s revealed a shift in the Islamic world: the Ummah with capital U has shown signs of moving toward a syncretic Islam.

The Islamic renaissance of science and spirit leads the way in a post-pandemic and post-depression world. Instead of corporativist frameworks, platform cooperativism become the primary business structure. Peer to peer anticipatory governance processes support the new economy (Schroeter, 2020). An integrative worldview takes hold which is neither overly materialistic nor overly idealistic. It seeks to dynamically balance both, "soul" with new technologies. By integrating humanities with the sciences, it future proofs civilization.

This is the most idealistic scenario. The metaphor is: Call me by my true names.



A DAY IN THE LIFE IN THE NEW PLANETARY UMMAH

Malika Nas, a thirty-two -year old researcher in biochemistry and professor of creative methodologies in lbn-Arabi pluriversity in Fes, is getting ready to pay a visit to her mother, Asma. Malika looks forward to the conversation with her mother, the gathering at the rooftop, the ritual tea after 'Asr prayers and the Qarawiyyin view.

At home, Asma is excited about her daughter's visit. While washing spearmint and sage leaves, she thinks back to the time when she felt misunderstood. Her parents used to feel suspicious of digital technology, while she grew up considering it an integral part of life. Asma remembers her vow to do her best to bridge the gap between her and her children when generational differences make communication difficult. Yet, what Malika and her generation have come up with is something that goes against human nature and probably even against Islamic creed. Malika, for instance, speaks of all species making up the larger biosphere as umam (communities; plural of ummah) whose general well-being should be promoted. When Asma pointed out that the term community for non-human species was misplaced, her daughter quoted Chapter 6, Verse 38 from the Qur'an. Asma realizes that she ignores many important aspects of her religion, yet, she still worries about her daughter's worldview that smells of an identity-crisis. Asma decides to tackle again this topic over tea, smiling over the irony of having been accused of the same transgression by her parents. Ah, water has been simmering for a while.

After catching up on the latest news with her daughter, Asma spoke her mind: "You know, Malika, before you were born, the Internet revolution enabled the human race to be connected. We were exchanging information and learning from each other but we were also fighting and sometimes even hating each other! The fighting was inevitable because we insisted on being who we are. We had to resist being kneaded into something wholly alien to where we come from. Such is, anyway, human nature: people crave power and impose their norms on those deemed powerless. I feel that your generation's talks about the planetary Ummah is a major abdication of who you are."

Malika nods and says "Your generation started the important work of putting in place the infrastructure for planetary connection. Yet, your understanding of identity and power as well as privileging the human species led to impoverished politics and impoverished economics and ethics! All what my generation is doing is to extend our identity, reimagine power and engage deep communication with the common biosphere. The results have changed our consciousness. Probably the pandemic outbreak during your time opened our eyes and hearts to the moral debt we owe to each other and to all the creatures with whom we share our planet. Already at the turn of the millennium, neuroscience questioned the understanding of human nature as driven by self-interest and selfishness. Today, we know that terms, such as "interbeing," coined by the Vietnamese poet Thich Nhat Hanh, I think in 1960s, is not just a flight of fancy but a scientific fact. It is funny, during his time people found Thich Nhat Hanh's ideas esoteric, today when I read "Call me by my true names," where the poet is the bud on a spring branch, the tiny bird, the vulnerable and the powerful, that's me.

Asma sighed: "Were we that wrong?"

Malika: "And if so, then the wound is the place where the light enters you, as Maulana Rumi says. So you gave us the infrastructure, knowledge and the wound that allowed light in. We can't thank you enough."

To create this final future, the transformative one, next steps include:

A shift in perception: The past does not define us, as both the past and the future are equally important. As William Wordsworth poetically put it: "Past and Future are the wings/On whose support, harmoniously conjoined/Moves the great spirit of human knowledge."

Educational institutions teach futures literacy

Confidence in the Islamic world translates into liberation from resorting to the past for defensive purposes and the conviction to use the future to create

Massive investment in science and technology

A shift toward platform cooperatives

Leaders who put the Ummah first, and the nation second. Incentives to do this are created. These could be in the form of awards bestowed on leaders who serve their Ummah

What is clear from these scenarios is that COVID-19 is seen as a foundationally disruptive event.

However, the other three scenarios suggest change either geo-political change as in "the changing of the guard," demographic change as in "The revolution of the youth, " or in the dramatic, "The New Planetary Ummah: Science and Spirit." At this stage, we cannot say which scenario is more likely, however, with an easily available vaccine then youth revolution is unlikely, and we will return to "Hold the Line." Nonetheless, the seeds of the New Planetary Ummah are there.

However, as the writer Arundhati Roy argues, COVID-19 does not have to be a war, it can be a portal into a better world. Can the Ummah enter through this portal and transform itself and the world into a place where pandemics provide a historical opportunity for soul rejuvenation and planetary justice? If the Ummah does, then a new dawn of science and spirit rising is possible.



While these are scenarios for the Islamic world, we now focus on two nations in particular, the Islamic Republic of Pakistan and Egypt. We do not present all scenarios in detail instead focusing on those that are most salient to this report.

7.1 EGYPT

We see the possibility of a shift in Egypt as well. During a high-level participatory futures exercise four futures for manufacturing were developed in Egypt (Inayatullah, Jacobs, Rizk, 2020, UNIDO, 2020). They were articulated by understanding the nature of external changes and determining what institutional changes were possible.

The changes were going toward 2030 and beyond (UNIDO, 2020: 6):



Four areas of change are identified. First, changes in technology, for example, advanced in nanotechnology and digitalized governance. Second, greening and sustainability, for example, a shift to the green and circular economy. Third, peer to peer and the sharing economy, for example, use of the block chain to ensure transparency. And fourth, the impacts of COVID-19, for example, the localization of industries.

From these four scenarios were created. In the first, COVID-19 lead to the gap between rich and poor, women and men increasing. In the second, 100 million to a billion, as globalization recedes, near shoring develops. Instead of a focus on far away, Egypt turns toward Africa. It grows its customers in the continent. Regionalization leads the way. While these are relevant for the futures of the Islamic world, the last two scenarios could be easily adopted and would lead to transformative change if implemented (Inayatullah, Jacobs, Rizk, 2020).

In this adaptive change future, all the vulnerable - the public and the informal sector - are protected and new industries grown. This future is essentially about closing the gap between modernized technology-led manufacturing and traditional labor-intensive manufacturing.

The gap is closed by technical and vocational education, Given COVID-19. online options are especially attractive. There are significant productivity improvements in sectors with application of new technology and skilled workforce.

The gap is also closed by becoming industry 4.0 ready and through technology driven productivity enhancement in all major sectors of manufacturing. This means an investment in not just educational but in internet and backbone soft infrastructure.

To prepare for uncertainty in global supply chains, localizing industries and the use of 3D printer technologies would be next steps.

Increased competitiveness and global market share in selected industries, especially with near shoring potential to Europe, Enhanced sustainable and green production certification along different sectors.



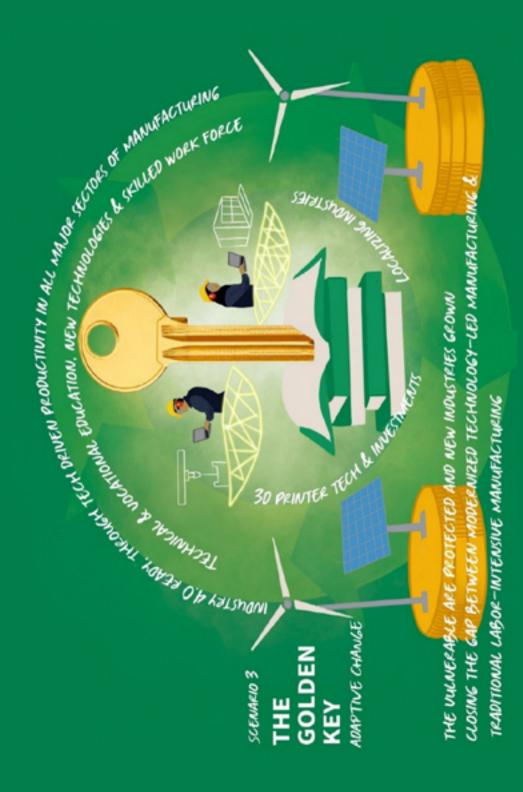


Image by Charmaine Sevil. Charmaine@sevilco.com.au

To create this future, national leaders suggested the following. Again, these could be easily adopted by other Islamic nations.

The key recommended policy steps include (UNIDO, 2020: 12):

Develop an Industry 4.0 strategy for Egypt and key sectors

Apply a mission-oriented innovation policy approach targeted at creating new markets, diversifying into new products and improving industrial productivity in selected sectors.

Revamp technical and vocational education to suit industry 4.0 needs and emerging opportunities.

Accelerated investments in backbone technology infrastructure.

Incentivize resource efficient and cleaner production practices through a circular economy approach and strategy for the country.

Adopt targeted investment promotion policies to attract investments to harness targeted nearshoring opportunities to Europe.

Enhance social protection schemes and skill training programs to support workers in transition from one sector to another.

While this scenario is focused on the next decade, the last scenario in this project is crucial to help ordinary citizens survive COVID-19 and thrive afterwards. This is because, as Madhi Elmandira writes above, the future is democratized, the informal sector leads.

In this future, the latent business potential of informal sector, smaller formal sector firms and youth bulge - are unleashed through the linking of two areas: the informal sector (including micro-small formal enterprises) and digital platform technologies. The informal and education sector lead in the transformation of manufacturing. The informal sector, youth, and digitalization harness vision, creativity and technology to create breakthrough after breakthrough. Current smaller-formal and informal businesses transition into medium size firms that compete on global level, whereby strengthening the 'missing middle' of Egypt's manufacturing. These highly productive medium sized firms connected to global value chains play an important role in this future. Regulations that are barriers for the informal sector are removed. Harness platform technologies to connect and integrate informal sector to domestic and global demand.



Image by Charmaine Sevil. Charmaine@sevilco.com.au To realize this future (UNIDO, 2020: 10):

A new legal framework that creates a safe regulatory space in which the informal sector would operate and grow with a high degree of trust in secure transactions and protection of property.

A virtual platform that helps connect informal and small enterprise collectives with value chains of larger enterprises and international markets.

A comprehensive review of 'doing business environment' to ensure that informal sector manufacturing firms are encouraged to formalize and enhance their scale of operation to become productive medium sized firms. The first phase would be digitally register those in the informal sector and then promote the transition to formalization building on support efforts during Covid-19 response measures.

The education system is transformed to integrate digital literacy, skills to use emerging technologies and entrepreneurship training targeting the youth.

Create digital friendly regulation that would incentivize the informal and MSME sector to modernize and adapt cutting-edge technologies.

Put in place a regulatory environment that enables financing markets to offer finance product schemes to support the informal and micro-small and medium enterprises sector in digitizing and adopting eCommerce and e-payment.



While these recommendations are practical and feasible – they can be created by leaders and their Ministries - there are deeper issues in the Islamic world suggests futurist Sardar. He argues we must go beyond policy recommendations and engage in a paradigm shift. To create alternative futures to 2050, three major shifts must occur.

First is the changing nature of truth. As Sardar writes (2019:330):

This construction of Truth has generated untold war and strife in Muslim history and has generated sectarianism, terrorism and bloodshed in our own time. It is thus imperative that Muslims move forward from the old recipe that 'Islam is supremely important, and therefore all men/women must have one true Islam' to the new formula that 'Islam is supremely important, and therefore every man/woman must be allowed to live by the Islam which seems true to him her or reject what does not seem true to him/her'.

Second is need for an anchor as the world continues to change dramatically and new ethical issues challenge us; for example, how will the Ummah, Muslim nations, and individual nations address issues of the legal rights of robots, ownership of space, human and robot marriage, to begin with (Inayatullah and Na, 2018).



Given that we understand and engage with the world through discourse, it suggests that Islamic discourse must be capable of addressing the problems of the world as it is and facilitate change for the better in the future. A language is not just a tool of communication; it is also a tool through which social and cultural needs required to survive are negotiated. There is thus an urgent need to infuse Islamic discourse its assumptions, statements, ideas, and framework of social and cultural knowledge - with future consciousness and develop a language that motivates us to look forward rather than backwards. We direly need metaphors and images of Islamic futures that create new meaning

This leads to the macro issue, with dramatic changes ahead, can Muslims, Muslim majority nations, and the Ummah not just adapt but co-create and invent in this new world, can they create the fifth industrial revolution?

In a debate amongst Malaysian leaders on the Industrial Revolution 4.0, they suggested that Islamic nations should focus on the soul of the future, while East Asia and the West innovate in Artificial Intelligence, the City Brain, the Internet of Everything, the Anticipatory City, the new Peer to Peer Commons, the Green energy revolution. While this is laudatory it means that wealth will stay with East Asia, Europe, and the USA, and as the National intelligence Report suggests, the Islamic world will be left far behind economically. The youth in the Islamic world, we have argued, will not have any of this. They will want and insist on an exit strategy that is both spiritual and scientific, inner and outer, balanced with a unity of knowledge.

For us, this means the key points of the final scenarios of the Egypt project along with Sardar's three recommendations become the critical exit scenario.



Summing up the argument in the previous pages. For reasons that have been well published elsewhere (external and internal colonization), the Islamic world and its inhabitants tend to be past focused. They imagine the future as a variation of the past. Given the rapidity of change - COVID-19, climate change, robotics, artificial intelligence, the youth bulge - this strategy will lead to poverty and a strengthening of the factors that create social rigidity. What is required instead is:

First, a futures orientation, futures literacy. Using the future to anticipate changes, map alternative futures, and create new visions of society.

Second, given the youth bulge in Muslim nations, young people need to lead in creating this vision. Paradigms shifts take generations to occur and we should not expect a transformation for decades ahead (Kuhn, 1962).

Third, visions must be linked to the real world, to real social conditions. Given the possibility of a long-term recession from COVID-19, every attempt to formalize a universal basic income or asset needs to be implemented.



Fourth, however, it is not just a support system that is needed, a safety net, but a trampoline, a way for the excluded and the middle class to rise. For this every attempt must be made to ensure an access to real time digital, holographic, and other technologies that are part of what has been called the fourth industrial revolution – that is, artificial intelligence with peer to peer; technology and community increasing efficiencies and enhance efficacy. However, this cannot be done within a traditional corporatist structure, more advanced peer to peer cooperative structures are recommended in that efficiency and equity is likely to be enhanced (Zhu and Marianovic. 2021).

Fifth, all change occurs not just at the individual level but at the collective level. As the world continues to shift, economies of scale as we are seeing in the digital world, will be crucial. Creating regional geographic or regional identity association will be critical to be able to create efficiencies. Otherwise, if there is internal equity within Muslim nations, they will still lag other global regions, Europe or East Asia, for example.

Sixth, investment in novel education through new technologies should be seen as not just an add-on but as a foundational competitive strategy. Education linked to new technologies can help shift the Ummah from an economic focus solely on GDP to a focus on Wellbeing, - that is a multiple bottom line measurements more fitting to Muslims values - on individual, national, and collective inner and outer health.

COVID-19 thus can become an asset, a crisis that creates a new paradigm for the Islamic world.





REFERENCES

- Adeney-Risakotta, B. (2017, October 2). Indonesia and the future of Islamic. Strategic Review. Retrieved from http://sr.sgpp.ac.id/post/indonesia-and-the-future-of-islam.
- Ahmed, I. (2010). Sufis and Sufism. Singapore: Middle East Institute. Retrieved from https://mei.nus.edu.sg/wp-content/uploads/2018/01/MEI-Insights-007.pdf.
- Alaoui, K., Inayatullah, S., and Salameh, M., (2020, June 23).
 The Islamic World and COVID-19: Geo-Political Changes,
 Demographic shifts, and the Possibility of Renaissance.
 Journal of Futures Studies. Retrieved from https://jfsdigital.org/2020/06/23/the-islamic-world-and-covid-19-geo-political-changes-demographic-shifts-and-the-possibility-of-a-renaissance/.
- Chen, K. (2020). Visioning the Future: Evaluating Learning Outcomes and Impacts of Futures-Oriented Education. Journal of Futures Studies. 24(4): 103-116.
- Christensen, H., et a.I (2017). The Finnish Citizens' Initiative: Toward Inclusive Agenda Setting. Scandinavia Political Studies. 40(4): 411-433.
- Cincotta, R. (2018). Age-structure and Intra-state Conflict:
 More or less than We imagined. New Security Beat. 19
 April. Retreived from https://www.newsecuritybeat.org/2018/04/age-structure-intra-state-conflict-imagined/.
- DW Akademi (2020). Coronavirus: Is Pakistan taking COVID-19 too lightly? Retrieved from https://www.dw.com/en/coronavirus-is-pakistan-taking-covid-19-too-lightly/a-52824403.
- Elmandjra, M. (1990, May 4). Futures of the Islamic World. Retrieved from http://www.archipress.org/batin/futures. htm.
- Financial Times. (2020, February 10). Middle East's Demographic Earthquake: the Generation Fuelling Protests. Retrieved from https://www.ft.com/content/03274532-21ce-11ea-b8a1-584213ee7b2b.
- Foucault, M. (1973). The Order of Things: An Archaeology of the Human Sciences. New York: Vintage Books.
- Gaub, F. (2015). Arab Futures: Three Scenarios for 2025. Confluences Mediteranee. 2(93):169-180.

- Gaub, F., and Boswinkel, L. (2020). How COVID-19 Changed the future: Geopolitical Implications for Europe. Chaillot Paper 162. Retrieved from https://www.iss.europa. eu/sites/default/files/EUISSFiles/CP_162_0.pdf.
- · Gidley, J., and Inayatullah, S. (2002). Youth Futures: Comparative Research and Transformative Visions. Wesport, Ct., Praeger.
- Government of Malaysia (2018). Education 4.0: Future- Proof Talents. Putrajaya: Ministry of Higher Education.
- Heller, H. (2017, December 11). Estonia, the Digital Republic. The New Yorker. Retrieved from https://www.newyorker.com/magazine/2017/12/18/estonia-thedigital-republic.
- Imtiaz, A. (2020, April 1). The Law of Generosity Combatting Coronavirus in Pakistan. Retrieved from http://www.bbc.com/travel/story/20200331-the-law-ofgenerosity-combatting-coronavirus-in-pakistan?fbclid=IwAR3VNO08bIU5VjLfF GO-T0nNeWf75epNWquJlqj-BpDz11338TQjzcj-74o.
- Inavatullah, S. (1996) Leaders Envision the Future of the Islamic Ummah, World Futures Studies Federation Bulletin. 22(2): 1, 7.
- Inayatullah, S. (1996a) "Ibn Khaldun: The Strengthening and Weakening of Asabiya," Periodica Islamica 6 (3): 3-11.
- Inavatullah, S. (1996b). Islamic Responses to Emerging Scientific, Technological, and Epistemological Transformations, Social Epistemology, 10(3): 331-349.
- Inayatullah, S. (2002). Questioning the Future: Futures Studies, Action Learning and Organizational Transformation. Tamsui: Tamkang University.
- Inayatullah, S. (2005). Alternative Futures for Muslims: Challenges to Linear and Cyclical Macrohistory. Futures 37: 1195-1200.
- Inavatullah, S. (2011). Islamic Civilization in Transition: Creating a Post-Western Civilization. Global and Strategis. 5(2): 103-117.
- Inayatullah, S. (2011a). The Arab Spring: What's Next? World Affairs. 15(3): 36-46.
- Inayatullah, S. (2015). What Works: Case Studies in the Practice of Foresight. Tamsui: Tamkang University.
- Inayatullah, S. (2016). Youth Bulge: Demographic Dividend, Time Bomb, and other futures. Journal of Futures Studies. 21(2): 21-34.
- Inayatullah, S. (2020). Scenarios for Teaching and Training: From Being 'Kodaked' to Futures Literacy and Futures-Proofing. CSPS Strategy and Policy Journal. (8): 31-48.
- Inayatullah, S., and Boxwell, G. (Eds.) (2003). Islam, Postmodernism and other Futures: A Ziauddin Sardar Reader. London: Pluto.

- Inayatullah, S., and Na, L. (2018). Asia 2038: Ten Disruptions that Change Everything. Tamsui: Tamkang University.
- Inayatullah, S., Chaudhary, P., Raza, S., and Sheraz, U. (2020, April 29). COVID-19 and the Futures of Pakistan: Inclusive Foresight and Innovation. Journal of Futures Studies. Retrieved from https://jfsdigital.org/2020/04/29/covid-19-and-the-futures-of-pakistan-inclusive-foresight-and-innovation/.
- Inayatullah, S., Jacobs, A., Rizk, R. (2020, November 3). Alibaba and the Golden Key: Scenarios of Manufacturing Futures in Egypt. Journal of Futures Studies. Retrieved from https://jfsdigital.org/2020/11/03/alibaba-and-the-golden-key/.
- Jungk, R. (1971) Three Modes of Future Thinking," Chaplin, G. and Paige, G. (Eds.), Hawaii 2000. Honolulu: University of Hawaii Press.
- Khaldun, Ibn (1967). The Muqaddimah: An Introduction to History. Trans. Franz Rosenthal. Princeton: Princeton University Press.
- Kuhn, T. (1962). The Structure of Scientific Revolutions. Chicago: University of Chicago Press.
- King, A., Huseynli, G., and MacGibbon, N. (2018) Wellbeing Frameworks for the Treasury. Te Tai Ōhanga, The Treasury, The Government of New Zealand. Retrieved rom https://www.treasury.govt.nz/publications/dp/wellbeing-frameworks-treasury-dp-18-01.
- Mallonee, L. (2018, December 8). The Techies Turning Kenya into a Silicon Savannah.
 Wired. Retrieved from https://www.wired.com/story/kenya-silicon-savannah-photo-gallery/.
- Mason, P. (2014, July 8). The Best of Capitalism is Over for Rich Countries and for the Poor Ones it will be Over by 2060. Retrieved from https://www.theguardian.com/commentisfree/2014/jul/07/capitalism-rich-poor-2060-populations-technology-human-rights-inequality.
- McCrindle, M., and Fell, A. (2021). Generation Alpha. Sydney: Hachette Australia.
- Middle East Eye (2020). Staying Home is for the Rich: Social distancing is a Luxury Egypt's Poor Can't Afford. Retrieved from https://www.middleeasteye.net/news/coronavirus-egypt-social-distancing-poor-cannot-afford.
- Miller, R. (Ed.) (2018). Transforming the Future. London: Routledge and UNESCO.
- Milojevic, I., and Inayatullah, S. (2020). Narrative Foresight and COVID-19; Successes and Failures in Managing the Pandemic. Journal of Futures Studies. 25(3): 79-84.
- Muzykina, Y. (2020, August 20). Looking for Alternatives Under COVID-19 Conditions: Islamic Religious Education in Kazakhstan. Journal of Futures Studies. Retrieved from https://jfsdigital.org/2020/08/20/looking-for-alternatives-under-covid-19-conditions-islamic-religious-education-in-kazakhstan/
- National Intelligence Council. (2021). Global Trends 2040: A More Contested World. Retrieved from https://www.dni.gov/files/ODNI/documents/assessments/GlobalTrends 2040.pdf.
- Organization of Islamic Cooperation. (2021). Member States (COVID-19). Statistics and News. Retrieved from https://www.oic-oci.org/covid-19/?lan=en.

- Parson, J. (2020. June 19). European robots losing jobs to Asian robots as Adidas shifts manufacturing. Metro News. Retrieved from https://metro. co.uk/2019/11/12/european-robots-losing-jobs-asian-robots-adidas-shiftsmanufacturing-11084026/.
- Polak, F. (1973) The Image of the Future. London: Elsevier.
- Politact. (2020, March 29). The War Against Extremism and the Return of the New Great Game. Retrieved from https://politact.com/the-war-against-extremismand-the-return-of-new-great-game/.
- · Sardar, Z. (1993). Asia Cultures: Between Programmed and Desired Futures in Masini, E., and Atal, Y., The Futures of Asian Cultures. Bangkok: UNESCO.
- Sardar, Z. (2019). Islamic Futures in Postnormal Times in Sardar, Z. (Ed.) The Postnormal Times Reader. International Institute of Islamic Thought. Retrieved from https://www.jstor.org/stable/pdf/j.ctv10kmcqv.20.pdf.
- Sardar, Z. (2020). The Smooth of Ignorance. Futures (120): 102554. Retrieved from https://ziauddinsardar.com/articles/smoq-ignorance-knowledge-and-wisdompostnormal-times.
- Schroeter, J. (Ed.). After Shock. Bainbridge Island, Washington: John August Media.
- Schwab, K. (2018). The Fourth Industrial Revolution. New York; Penguin.
- · Shapiro, M. (1992). Reading the Postmodern Polity: Political Theory as Textual Practice. Minneapolis, MN: University of Minnesota Press.
- Sheraz, U, Inayatullah, S, and Shah, A. (2013). E-Health Futures in Bangladesh, Foresight, 15 (3): 177-189.
- Strauss, W. and Howe, N. (1991). Generations: The History of America's Future: 1584-2069. New York: William Morrow and Company.
- The Conversation (2020, April 2), How Coronavirus Challenges Muslims's Faith and Changes their Lives. Retrieved from https://theconversation.com/howcoronavirus-challenges-muslims-faith-and-changes-their-lives-133925.
- The Guardian (2016, July 16). Robot Factories Could Threaten Jobs of Millions of Garment Workers. Retrieved from https://www.theguardian.com/sustainablebusiness/2016/jul/16/robot-factories-threaten-jobs-millions-garment-workerssouth-east-asia-women.
- Toffler, A. (1970). Future Shock. London: Bodley Head.
- UNIDO. (2020). Futures in the time of COVID-19: Results of a Strategic Foresight Exercise on the Manufacturing Sector in Egypt. Retrieved from https://egypt. un.org/index.php/en/110152-futures-time-covid-19-results-strategic-foresightexercise-manufacturing-sector-egypt.
- Westphal, D. (N.D). How Anticipatory Democracy Clears a Path Forward. Retrived from https://deborahwestphal.com/how-anticipatory-democracy-clears-a-path-forward/.
- World Bank. (2021). Updated estimates of the Impact of COVID-19 on Global Poverty. https://blogs.worldbank.org/opendata/updated-estimatesimpact-covid-19-global-poverty-looking-back-2020-and-outlook-2021.

- World Economic Forum. (2016, April 2). The Future of Jobs. Retrieved from http://reports.weforum.org/future-of-jobs-2016/.
- Wright, B. (2016, March 30). Terminated: Beware of Job-killing Robots, Syndey Morning-Herald. Retrieved from http://www.smh.com.au/business/workplace-relations/terminated-beware-of-jobkilling-robots-20160330-gnu7t0.html.
- Zakaria, W. (2013). Madhi Elmandjra and the Future of the Muslim World. International Journal of Islamic Thought. (3): pp: 100-105.
- Zhu, J., and Marjanovic, O. (2021). A Different Kind of Sharing Economy: A Literature Review of Platform Cooperatives. Honolulu: Proceedings of the 54th International Conference on System Sciences.

