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The rise and fall of innovation in the Muslim world Going back to the past to save the future.







# The rise and fall of innovation in the Muslim world

Going back to the past to save the future.

nnovation begins with a single idea or concept. Henry Ford applied assembly-line technology based on a simple, single concept and, as a result, the automobile industry remained centered in the U.S. for much of the 20th century.

Ford was an innovator. Thomas Edison was an innovator. Microsoft's Bill Gates changed the world with the concept of an operating system, enabling anyone to employ digital, computer technology with the click of a mouse.

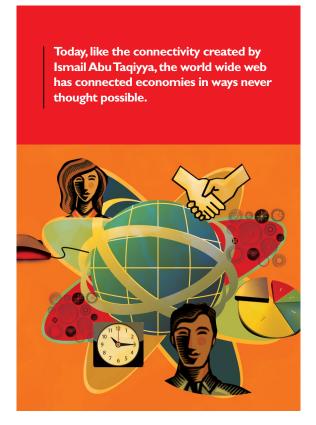
In turn, this led to numerous, other innovations – the world wide web, search engines, chat rooms, blogs, on-line commerce and social media sites like LinkedIn and Facebook.

The evolution of technology is based on a series of innovations, but notice that the above examples all took place in the United States.

Indeed, the U.S. fosters innovation. It's cultural foundation is a pioneering spirit and the willingness to take risk, characteristics of many "new societies."

Older societies tend not to innovate. Consider Japan in the modern world. It is a leader in the manufacture of automobiles and other high-tech products. However, these products began as innovations elsewhere in the world.

Japan, China, South Korea and other Asian nations have become manufacturing states. These industrialized nations improve on technology, streamlining manufacture to lower costs and increase levels of product quality. Today, there isn't a single U.S.-based television manufacturer. Virtually all electronics - from laptop computers to cell phones - were conceived in the U.S. but usurped by Asian manufacturing states.



#### What is innovation?

Innovation is the ability to envision the solution to a problem. In 1994, Yahoo introduced the first, primitive search engine and for several years, this company controlled the search engine market.

In 1998, Google became a corporation founded by two Stanford University graduates, Larry Page and Sergey Brin. The two innovators developed a more sophisticated algorithm to deliver more relevant search engine results and, in two years, overtook Yahoo as the leading search engine in the West.

Innovation continues across the manufacturing and technology spectrum, ignoring international boundaries and creating new dynamics such as digital networking, outsourcing and cultural engagement across ethnic, religious and political lines to immeasurable degrees.

However, countries in the Middle- and Near-East have been slow to adapt web-based innovation, leaving this region to fall further behind in technology advancement and, on a more practical level, to fall further behind in the growth of an entrepreneurial class. Instead, many Middle-East govemments and other cultural institutions have reacted with suspicion toward new technology, and in some cases, these in-place institutions have even limited access to emerging technologies.

VoIP, for example, is a convenient, low-cost means of data sharing yet this technology is not readily available in some Near-and Middle-East countries despite the obvious benefits of global communications at lowered cost.

Social sites, which are breeding grounds for innovative thought, are banned by certain governments in the region.

The reasons behind the Middle East's reluctance to embrace these new technologies will leave these nations behind as new layers of technology are created by entrepreneurs in countries that encourage, finance and support innovation.

This wasn't always the case. In fact, the Middle East, for many centuries, was the commercial hub of the known world. Caravans brought goods to markets. Trade routes were well-established and Muslim entrepreneurs led the rest of the world in the development of commerce.

The region was the world's marketplace and hub of innovation.



#### Ismail Abu Taqiyya

Ismail Abu Taqiyya is a seminal figure in the development of commerce in the Muslim world. An innovator and entrepreneur, Ismail Abu Taqiyya was an Egyptian merchant who created a far-flung enterprise using many of the principles we see in place today on the world wide web. Innovators require the means to turn a concept into a commercial enterprise. Ismail Abu Taqiyya operated numerous coffee houses and other commercial enterprises across a broad geography — a concept that, at the time, was, indeed, innovative.

Abu Taqiyya struck up alliances with numerous "partners" across numerous ventures. This far-sighted merchant established partnerships with geographically dispersed individuals. Each contract was distinct and, by design, intended to narrow the focus of the numerous business relationships in which Ismail Abu Taqiyya engaged.

So, a merchant in a distant commercial center might enter into an agreement with Abu Taqiyya to sell the merchant's goods, buying at wholesale and selling at retail according to the dictates of the contracts crafted by the Egyptian merchant.

As his commercial empire grew, Ismail Abu Taqiyya employed the principal of outsourcing, a common business practice in today's global economy. Each "partner" or "stakeholder" was connected by contract to Abu Taqiyya, who served as the conduit of capital and goods.

In the 16th century, Ismail Abu Taqiyya was an innovator, an entrepreneur, and a "corporation" – a business entity that provided for the growth of his commercial enterprises.

The commercial conglomerate created by this entrepreneur didn't survive after his death in 1625. His heirs lacked this businessperson's vision and the means to maintain a legal entity to provide resources to develop new businesses across a far-flung geography.

Today, like the connectivity created by Ismail Abu Taqiyya, the world wide web has connected economies in ways never thought possible, except by visionaries like Abu Taqiyya. However, the Middle East has not played in a significant role in the development of the global economy. In fact, quite the opposite is true.





### Islam, Innovation and **Entrepreneurs**

From the 8th century until the 1400s, the Muslim Empire spread from the Atlantic Ocean to China.

Muslim Universities were the learning centers of the world. Commerce among nations expanded. Trade routes were extended and Muslims engaged peoples from Europe and Asia in commerce and trade.

Muslim philosopher, Ibn Khaldun, created the science of economics and demographics, and the study of history. However, during the Middle Ages, the Ottoman Empire collapsed and tribalism and nationalism returned and became part of the regional culture.

Today, the region is still boundary bound. Allegiance to one's tribe is still a strong force within the region. And innovation and entrepreneurship have failed to keep pace with the technological advances seen in the West.

There are no factories, few centers of global trade, few stock markets and little encouragement for entrepreneurs to introduce their innovations to the world. This, despite the fact that Islamic law encourages innovation and business development. There are numerous contractual "templates" available to Muslim entrepreneurs in religious doctrine and cultural mores. The merchant class has an esteemed place in Muslim history, yet the growth of this class stagnates as the rest of the world moves forward at a quickening pace.

Muslim history is one of engagement with other cultures. Trading outposts extended from Europe to Asia at the

height of the Muslim Empire. This commerce was robust, expansive and based on contract - even if that contract was a simple handshake. The terms of commercial engagement with the Middle East were known beyond the empire's borders.

So, commercial enterprise is a part of Muslim history. There are numerous references to business best practices in Muslim religious writings (standard contracts and open engagement with others being some of those best practices) and Middle Eastern cultures have a long, proud tradition of commercial enterprise.

Yet, today, the region is not growing technologically as quickly as the rest of the world, and engagement with other cultures is often curtailed by government edict or religious decree. The result? The slow growth of any kind of manufacturing base in the Near and Middle East region. There are few true industrial cities in the Muslim world. There are no computer or electronics companies. There are few manufacturing plants, even in countries with close ties to the West.

So, despite the acceptance of entrepreneurship and the encouragement of innovation in Muslim religious texts and within the cultural fabric of the region, the Middle East continues to lag behind the rest of the world in technological development. As long as this trend continues, the region will only grow more reliant on revenues derived from natural resources like oil and natural gas.



#### The Means to Turn An Idea **Into Profit**

Entrepreneurs rarely have the means to turn their concepts into profitable businesses.

Steve Jobs and Steve Wosniak built the first Apple computer in their garage from parts purchased at a local Radio Shack store. The parts existed. The innovation was brought to bear through the vision of Wosniak and Jobs. Yet, it took capital to bring that vision to market.

Microsoft was nothing more than a corporate shell created by Bill Gates and Steve Ballmer until IBM – the huge, mainframe manufacturer – recognized the value of a computer operating system (OS) and agreed to finance the development and installation of Gates' OS in "personal computers" - a whole new concept just a few decades ago.

The world is full of innovative concepts and new ideas. We can see these ideas put in to practice daily on the world wide web. The idea of a personal web log (blog) didn't exist in the last century. Today, blogs are common. Anyone with something to say, and the will to say it, can claim a small piece of digital turf and become an innovator.

So, why does the Middle East lag behind other countries in the development of commerce, both brick-and-mortar and web-based enterprise. Through the ages, Islam has been at the epicenter of entrepreneurship, providing:

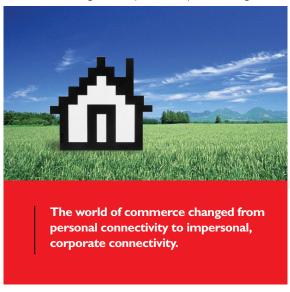
- The ability to pool capital resources through institutions like banks and private lenders (the first venture capitalists)
- The ability to provide an educated work force from the ranks of numerous, respected centers of learning in the Near and Middle East a long history of engagement across borders
- The cultural and religious values to create long-lasting commercial relationships based on Islamic laws and traditions
- The ability to adapt to a variety of cultures through commercial engagement
- The business acumen to maintain commercial viability and generate profits
- The desire to engage other cultures for mutual benefit based on strict Islamic laws

# Islamic Institutions and the Global Economy

As a member of the Department of Economics at prestigious Duke University in North Carolina, U.S., Timur Kuran published an insightful analysis of the current state of commerce in the Middle East in a treatise called The Scale of Entrepreneurship in Middle Eastern History: Inhibitive Roles of Islamic Institutions.

In this academic analysis, Kuran carefully details the wide acceptance and practice of commerce for centuries until the Middle Ages when the Muslim Empire collapsed and the region returned to nation states ruled by tribal leaders, a form of government that has lasted until modern times.

The question Timur Kuran attempts to answer in identifying "Inhibitive Roles of Islamic Institutions" is complex: Why has a culture that has sought engagement with others throughout its history, and why has a culture that has valued and encouraged entrepreneurship, now falling further



behind as the rest of the world advances through the use of increasingly sophisticated technology?

Kumar identifies the source of the problem. The world of commerce changed from personal connectivity to impersonal, corporate connectivity. Let's examine more closely the success of Ismail Abu Taqiyya.

Abu Taqiyya maintained personal relationships with the "franchise" owners with whom he created mutually-

beneficial partnerships. Again, Islamic law provides numerous examples of business "best practices" including honesty, integrity and transparency. Abu Taqiyya employed these principles as he grew his commercial empire spanning a broad geography.

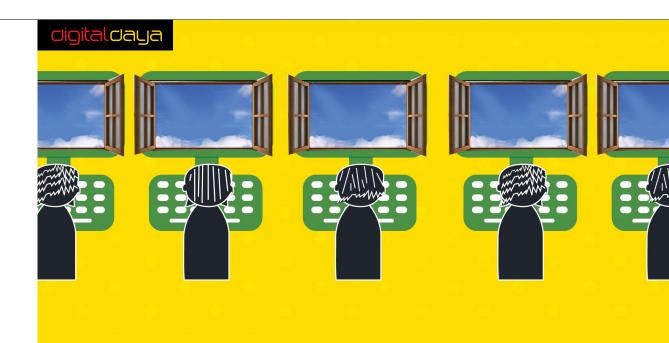
In addition, Ismail Abu Taqiyya provides the means to collect capital that can be used to launch and grow other commercial enterprises. So, this innovative merchant from Egypt engages others across boundary lines and provides the financial means for business development and growth.

Kuran, in his thesis, makes a compelling case that Islamic law, while encouraging entrepreneurs to "[When the prayers are ended]...disperse and go in quest of Allah's bounty" according to Quaranic doctrine, Islamic law fails to provide the means to collect the resources required to turn innovation into entrepreneurship that, ultimately, generates a profit and grows a culture.

The Prophet Muhammad preached that "On Judgment Day, faithful and trustworthy merchants will sit with prophets and martyrs," yet the merchant class in the Middle East remains small and the drive and ambition to create and innovate, to turn ideas into businesses that improve the lives of others, runs counter to the Islamic principles of fatalism and bid'a — the rejection of innovations from "outsiders." Fatalism is a fundamental tenet of Islam. It might be translated as "What will be will be" in Western terms. This belief that a life is pre-destined and "what will be will be" diminishes the value of taking the risks required to innovate. Indeed, entrepreneurs do encounter risks throughout the development of concept to business.

Tukar also points to the Islamic principle of bid'a – the reflexive rejection of innovation from the non-Muslim world that inhibits the expansion of a commercial class throughout the Middle East.

Despite the obvious commercial benefits of engagement within what has become a global economy, the concepts of fatalism and bid'a have contributed to nations in the Near and Middle East in not keeping pace on a commercial level with countries like China, Japan, Mexico, Brazil and other nations that have experienced phenomenal commercial growth in just a few decades.



The use of computer technology should be made a part of school curricula from the earliest grades through the university level.

## The Spread of Islamic Secularism and The Lack Of Commercial Growth in the Middle East

Tukar points out one of the problems facing Middle Eastern citizens who carry with them the entrepreneurial spirit. "Resistance from secularists of various shades fuels political instability. As the experiences of Sudan, Algeria, and Iraq demonstrate, people with skills and initiative move out of politically volatile areas, carrying with them their entrepreneurial talents.

Although relatively pragmatic forms of Islamism are associated with upward mobility, its militant forms are manifestly harmful to entrepreneurial performance."

Political volatility is not the sole factor that motivates migration; commercial instability along with hardened cultural norms discourage entrepreneurs. Over the past decade the Middle East has suffered from poorly regulated equity markets and limited transparency with IPO transaction. While the corporate workplace is still maturing with cultural tribalism creeping into office politics not to mention many business ethics and human resource policies taken for granted in the West are only now beginning to materialize.

Not only does Tukar's conclusion make logical sense, we have empirical evidence to demonstrate that, indeed, those potential innovators and entrepreneurs are more apt to abandon a region of political and commercial instability for destinations that provide an environment more conducive to business and entreprenuerial development.

### **Solutions to Encourage** Commercial Growth in The Middle East

The proud, Muslim history is one in which commerce and engagement with other cultures were part of the Muslim Empire culture – a part of the fabric of everyday life. There was a strong merchant class that encouraged entrepreneurship.

The institutions that once created an empire that spread from Spain to the borders of China have, over time, become dysfunctional. The reason for this is that commerce changed from personal to impersonal exchange. No Ionger were life-long business agreements made on a handshake as they were in the time of Ismail Abu Taqiyya.

> The ability of new businesses to grow through outsourced service providers will only leave the Middle and Near East further behind the technology curve.

Today, in a global economy, business is impersonal, further inhibiting commercial growth in the region.

Islamic law, while promoting the spirit of entrepreneurship, fails to develop the means to pool resources on a large scale. Entrepreneurs and innovators require financial support, which in turn, puts Muslim venture capital at risk. Islamic law does not adequately address the creation of a "corporate" mentality. In fact, just the opposite is true.

The Islamic concepts of fatalism and bid'a have become encultured over the past centuries, diminishing the ambitions of potential entrepreneurs of Muslim faith. This is not the age of bid'a. If the nations of the Middle and Near East reject innovation, they will fall further and further behind, finding it increasingly difficult to compete in a technologically advanced, world-wide marketplace.

This requires a fundamental change in Islamic teaching, placing more emphasis on religious teachings that encourage entrepreneurship and, yes, risk taking.

Governments, religious institutions, educational systems,

media and other driving forces must take a more proactive stance in (1) stabilizing political environments to encourage internal commercial growth and investment capital from global partners and (2) providing an effective means of pooling fiscal resources to enable a concept to become a company.

With the advent of the world wide web, the impersonal, "corporate" mentality toward innovation is under strong pressure to change. Today, through the use of digital technology, virtual companies exist only on the world wide web (W3). These companies employ technology to facilitate such common activities as:

- On-line conferencing
- Distance learning
- Real-time collaboration across numerous time zones
- Order capture and order fulfillment (Client Relations Management, or CRM)
- Technical support
- Outsourcing to significantly lower operating
- The use of talent and expertise on an "asneeded" basis
- The free exchange of concepts, theories and ideas through open forums
- The development of profitable, on-line businesses such as Amazon.com and Google.com

Indeed, if the commercial decline of the Islamic culture is based on a failure to provide for the pooling of capital and human resources on a global scale, this decline will only hasten in the years ahead. The ability of new businesses to grow through outsourced service providers will only leave the Middle and Near East further behind the technology curve.

Now is not the time to debate the place of bid'a in Islamic culture. Today is not the day to discuss the impact of fatalism on Middle Eastern commerce. These effects can be seen clearly and provide the solid, empirical evidence needed for institutions to recognize the need to join this advance in technology and to embrace the potential it delivers to the region.



#### How can Government come to the aid of the would-be business owner, or to the person whose vision requires capital to change the world?

- Provide a strong education in technology. The nation of India writes more lines of computer code than any country in the world. It has also become the outsourcing choice for technical support for numerous companies located throughout Europe and North America. In fact, the region in India around the city of Bangalore is known as the Technology Crescent.
- 2. Encourage political stability to support entrepreneurs. Government support of commerce will, ultimately, benefit the government and the people represented by the government.
- 3. Educate the younger generation in the use of digital technology. This is the clear future of commerce, even though the W3 is still in its infancy. The use of computer technology should be made a part of school curricula from the earliest grades through the university level.
- 4. Create agencies to provide capital and business support to new businesses.
- 5. Encourage global engagement. The Muslim world can no longer afford to reject outside innovation. It's a reality and, through acceptance of global engagement, the region more quickly becomes an important and influential part of the world economy.
- 6. Provide unfettered access to the W3 and the commercial benefits derived from this access.
- 7. Change perceptions. The "us" against "them" mentality that creates secularism is not conducive to the engagement required to bring a concept to commercial reality.
- 8. Develop the requisite digital infrastructure to keep pace or even outpace others in global commerce

- **9.** Create more open and transparent Government to inspire and encourage the innate innovation and entrepreneurship of its citizens.
- **10.** Embrace the new online outsourcing models being established on the Web by identifying and focusing capital to create specific strategic sectors to cater to this new demand.

Are these easy tasks? Indeed, not. Changing deeply encultured beliefs is never easy, but we've seen it take place in China, Viet Nam, Japan and other cultures that rejected "outsider" technology. We know that attitudes can be changed.

The best hope for change lies with the younger people in Middle Eastern societies – those willing to embrace modern technology and improve on it, those willing to engage businesses across boundaries. The word wide web has eliminated national boundaries.

If the Middle and Near East wish to engage the world, it will occur through the use of technology. It will occur through the development of web-based businesses - entrepreneurial endeavors that create a solid merchant or middle class. This is the glue that holds any society together.

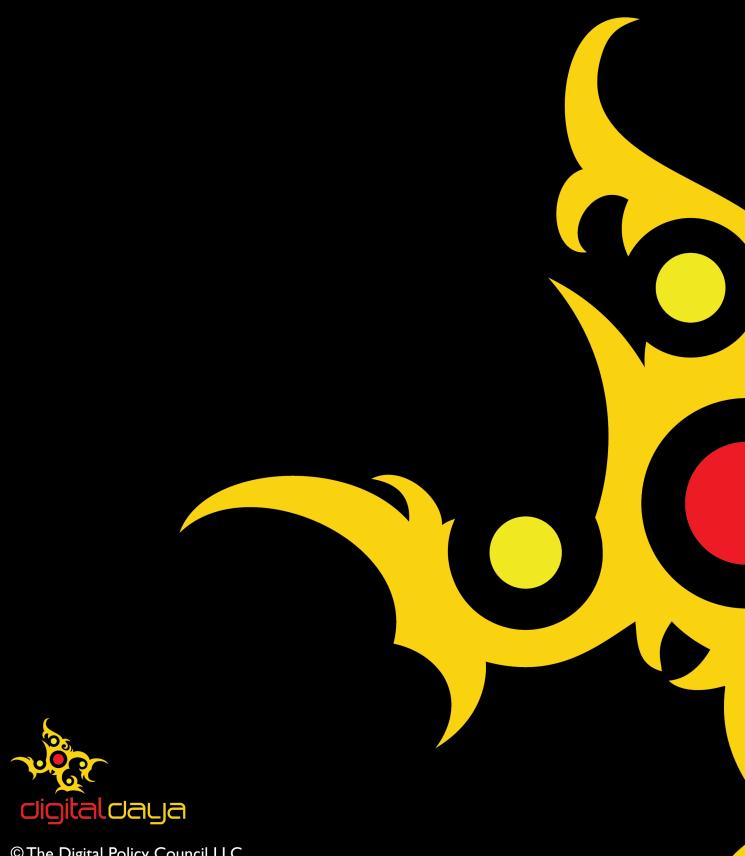
The longer the countries of the region wait, the more difficult it becomes to catch up. Thus, there is urgency in implementing changes in the accessibility of technology.

If the Middle East wants to maintain its standing in the world community, now is the time to take the steps required to move nations into the new millennium. The word wide web is here to stay. And like the trade

caravans that crisscrossed the region centuries ago, digital, web-based technologies are the trade routes of today.

It's time we engaged the world through technological means. It is the future of Middle East commercial development and growth.

It is the future of our young people who will write a new and better future for themselves and for the world.



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