

# ENHANCING THE ROLE OF NETWORKED BUSINESS INCUBATORS AS A CATALYST OF PROMOTING TRADING BUSINESS AMONG OIC

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Business incubators have been proven as effective in creating jobs and accelerating the growth of new businesses. The purpose of this paper is to investigate and identify the situation and factors of business incubator as a catalyst to facilitate successful implementation such as, 1) young entrepreneur, 2) job creation, and 3) Networking business incubators and (SMEs) among OIC countries. Although the basic concept of business incubation remains until today, there have been several enhancements to the capability of business incubators to create entrepreneurs and improve economic driver. Moreover, institutional theory stated that business incubators have generated some positive results for small businesses' success. The nature of this research is mainly a mixed methods approach such as case study and qualitative (literature review). Case studies reflect a comparative analysis of entrepreneurship ecosystem between Asia and Arab world. Some data retrieved from journals, articles, and business incubator report. Findings of this paper show that the rapid expansion of business incubators in Asia and the Arab world is an important phenomenon affecting the economic growth in those countries. Moreover, much attention and great support from central and/or local government has relation on growth in incubation industry. Furthermore, partnerships and sharing among different incubators is a crucial component to make incubators more successful. The findings of this paper help governments and local authorities to shape future policies for incubation industry, entrepreneurs, and economics development among OIC.

**Keywords:** Business Incubator, Entrepreneur, and OIC.

## INTRODUCTION

The global economy has deteriorated further and growth projections have been marked down. A key issue is whether the global economy is just hitting turbulence in what was always expected to be a slow and bumpy recovery or whether the current slowdown has a more lasting component. Indicators of activity and unemployment show increasing and broad-based economic sluggishness year by year.

Young unemployed people around the world may not see their situation improve soon. As the euro area crisis continues, the impacts are spreading further, slowing down economies from East Asia to Latin America. In developed economies, youth unemployment rates are expected to increase over the coming years. The reason is not only because it has suffered from the largest increase among all regions at the beginning of the crisis, but principally because discouraged young people are withdrawing from the labor market due to low hiring activity among youngsters. Despite this decline and even though the young unemployed in advanced economies represent 13 % of the world total, the global youth unemployment rate is expected to continue to edge higher beyond next year (GEO, 2012).

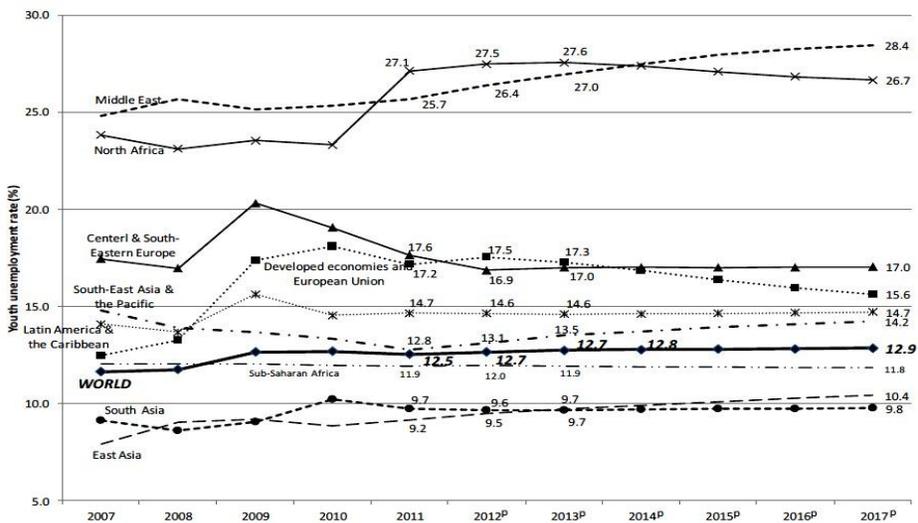


Figure 1.1 Global and Regional Youth Employment Rates (15 – 24 years)

(Source: ILO, Trends Econometrics Model, July 2012; IMF World Economic Outlook, 2012)

Open unemployment is a problematic issue to deal with in developing and developed countries especially OIC. Given the unavailability of a comprehensive and reliable social security

system, theoretically there is a very high incentive to stay employed, especially among the poor. Meanwhile, the poor who are not working, and to a certain extent the non-poor who are low educated and unemployed, tend to become discouraged workers. These are the people who are out of work but are not looking for work because they believe that they cannot find one (Kingdon and Knight, 2006; Suryadarma, Suryahadi, and Sumarto, 2005).

In the effort to reduce unemployment and promote trading business among the OIC, it is important to ensure that the types of jobs created in an economy match the skills and expectations of the skillful unemployed and among OIC. As an example, business incubator, which helps start-up businesses, all the necessary resources or support that the start-up needs to evolve and grow as a mature business. Business incubator is a broad umbrella term referring to any organization or young entrepreneur that provides physical workspace, management assistance, access to financing and technical and other supporting services to young firms and helps them survive at later stage (Yong Suk and Mooweon, 2006).

The concept of business incubation, which emerged during the 1970's in the US and Europe is exploding in popularity all over the world as a modern business model. According to the National Business Incubation Association (NBIA) estimates, there were approximately 15 incubators in North America as at 1980, but today 600 incubators are located in North America alone. Business incubators help entrepreneurs translate their ideas into workable and sustainable businesses by guiding them from the beginning to being able to achieve a growing and thriving business. Business incubation provides entrepreneurs with expertise, networks, and tools that they need to make their business successful. In line with the proliferation of the establishment of business incubators, numerous studies have also been conducted to assess the effectiveness incubation programs (Allen, 1985; Allen and Bazan, 1990; Bruton, 1998; Campbell, 1987; Dowling, 1997; Colombo and Delmastro, 2002; Harwit, 2002; Lalkaka, 2003; Lee, 1997; Lichtenstein, 1993; Mian, 1996; Xu, 2010; Yunos, 2002).

Nowadays, we can easily find this concept and business incubator activity in developing economies and non-western countries. In the case of Jordan as a country which develop business incubators since 2000, the basic concept of incubator is an institution that provides 7S; 1. *Space* refers to office space, 2. *Shared* office facilities which are the provision of office facilities that can be used together, like fax, telephone, photocopy, meeting rooms, computers, and secretariat. 3. *Service* refers to the guidance and management consulting, marketing, finance, production, and technology. 4. *Support* which means help to support and access the use of technology, 5. *Skill Development* related to training, preparation of business plan, management training, and so on. 6. *Seed Capital* is the fund start-up as well as efforts to gain access of capital to financial institution. 7. *Synergy* refers to creation of business networks among businesses both locally and internationally.

Despite the increasing number of business incubators, many problems in the operation and organization of those incubators have surfaced due to the lack of training of capable incubation managers and staffs, poorly structured incubator post-management and networking, and failure to adapt to the local business environments. This paper presents the condition of incubators globally, proposes factor, and find the situation that makes business incubator a catalyst for promoting trade among OIC.

**CONCEPTUAL FRAMEWORK**

A business incubator typically manages potential resources and provides a wide range of business assistance services aimed at assisting and benefiting its clients. Incubator have been considered as a remedy for the disadvantages that small and new firms encounter by providing numerous business support services, and they are useful in fostering technological innovation, entrepreneurship, commercialization and industrial renewal. For those reasons, most countries have increasingly been engaged in establishing incubators (Akcomak, 2009). In order to asses the magnitude of problem and have an idea of potential future research, the first step is to understand some facts about management system of business incubator and services as a way to strengthen the ability of the incubates to create, survive, and prosper. This framework clarifies the organizational model of business incubator:

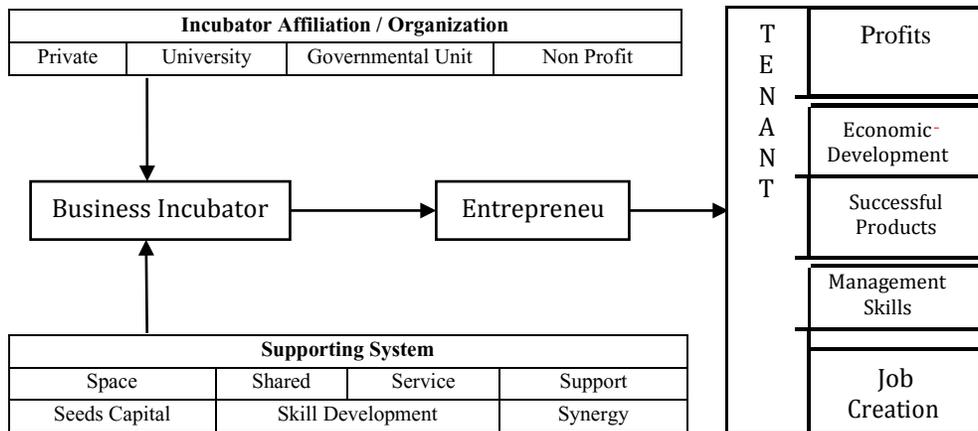


Figure 1.2 Conceptual Frameworks (Source: Smilor’s, 1987; author’s modification)

Based on the background and conceptual framework mentioned above, the objectives of this study are the following:

- a. To discuss the concept of business incubator.

- b. To investigate some factors and find out situation where business incubator can be a catalyst to create and promote entrepreneur.

## LITERATURE REVIEW

### *Business Incubator*

By definition, business incubator can be considered as an enterprise development strategy aimed at assisting and accelerating the process of formation, development, and survivability of new and existing enterprises in the community. It does this by pooling potential resources including potential businesses (clients) from the community in a business incubator facility and then providing clients with a wide range of business assistance services (Abduh *et al*, 2007; Rice and Mathews, 1995).

Business incubators are organizations that support the entrepreneurial process, helping to increase survival rates for innovative entrepreneur. Entrepreneurs with feasible projects are selected and admitted into the incubators, where they are offered a specialized menu of support resources and services. Resources and services open to an entrepreneur might include such diverse elements as:

- management coaching
- help in preparing an effective business plan
- administrative services
- technical support
- business networking
- help in finding financial resources

The concept of a business incubator can explained in Figure 1.3 below. It can be seen from the figure that the objective of the business incubator is to deliver entrepreneurs to mature growth in the competitive market. In this process, business incubator access to knowledge, expertise, technology, networks, funds, and markets.

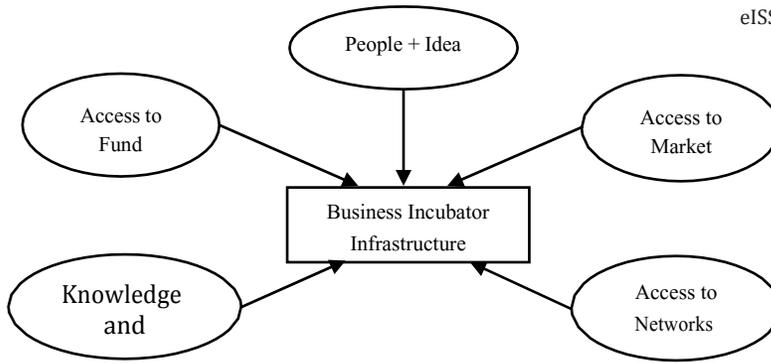


Figure 1.3 Concept of Business Incubator (Source: Sahay, 2005)

Hannon (2003) considers that the business incubation process supports the identification and exploitation of a successful opportunity for the creation of a new business undertaking. According to Hannon (2003), the business incubation process should be firstly, as the environment where new business ideas and undertakings can be developed according to a set of business support resources. The role performed by business incubators, by underpinning the generation of new competitive firms, or by training future entrepreneurs, is of crucial importance.

There are three stages of incubation (see figure 1.4):

1. Start-up creation (Pre-incubation) relates to the overall activities needed to support the potential entrepreneur in developing his business idea, business model, and business plans, and to boost the chances to arrive to an effective start-up creation.
2. Early stage (incubation) is concerned with the support given to the entrepreneur from the start-up to the expansion phase. Typically this is a mid-term process, lasting usually for the first three years of activity of the newly established company, which are the years in which it is safe to say whether the new venture is successful and has a good chance to develop into a fully matured company. The actions activated generally are access to finance, direct coaching and mentoring services, as well as hosting services and specific training. Therefore, physical incubation, although a very important service, is a subset of the overall incubation process.
3. Expansion (Post-incubation) relates to the activities to be carried out when the company has reached the maturity phase, and therefore is ready to walk on its own. The company will leave the incubator, if it has been physically incubated. Innovation – based incubators work in the intersection between the sets of innovation and entrepreneurship supporting entrepreneurs to profit from the added value of innovative ideas.

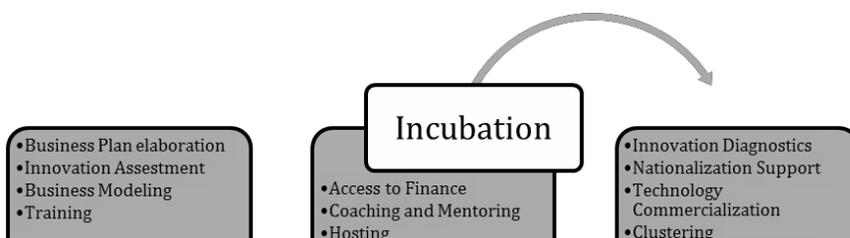


Figure 1.4 Stages of Incubation Process (Source: Al-Mubarak and Busler, 2008)

Hackett and Dilts (2004a) define incubators as a powerful concept because the incubator is a tool to gather and orchestrate existing forces to facilitate company creation. Business incubators also add value to companies and entrepreneurs who undertake a comprehensive and detailed review of the incubation program in which they are interested in .

## **RESEARCH METHODOLOGY**

The research methodology used in this research study comprised of literature review. This paper is a product of a study carried out on the literature concerning the development of business incubators from the published materials, text books, conference presentation, articles, and journals. Extensive desk research was conducted to review and assess existing studies relevant to business incubator and the phenomena about the issue.

While searching for published material on business incubator, articles were selected using the following search terms: incubator impact; incubator assessment; incubator effectiveness; incubator efficiency, and model. To avoid comparing research results aimed for different phenomena, Bergek and Norman's (2008) overview of incubator services was adopted for paper selection. Further articles were identified on the basis of the literature lists.

## **DISCUSSION AND FINDINGS**

### *Concept and Role of Business Incubator Nowadays*

Incubators are commonly linked business support networks and technological innovation programs. Scholars of the concept have agreed that small business incubation is a dynamic

process where young firms are nurtured to help them to survive and grow during periods of uncertainty, particularly during the start-up phase. Incubators are designed to address inherent market failures such as an inequitable access to information and capital as well as a lack of focused business advice for new small businesses (Campbell, 1989). A business incubator is generally described as a facility providing favorable controlled conditions to aid in the growth of new ventures (Petree *et al.*, 1997). They are also referred to as innovation centers, enterprise centers, and business enterprise centers or technology centers (Petree *et al.*, 1997).

As an introduction, the first incubator, a privately owned for-profit center, was founded in 1959 in Batavia, New York (Brown *et al.*, 2000). The incubator concept spread internationally afterwards. One of the first incubators in Europe was established at Cambridge Science Park and Sophia Antipolis in France in the late 1960s (Storey and Tether, 1998). The consensus, reached by researcher, was that the major contribution of incubators was in their ability to increase the survival rates of new businesses. That is, the author of these studies suggested that business incubations was (and is) an effective business development tool. The framework mentioned below (Figure 1.5) summarized that the key elements in the success of a new entrepreneur appear to be the sponsoring institution, the incubator services, and the entrepreneur.

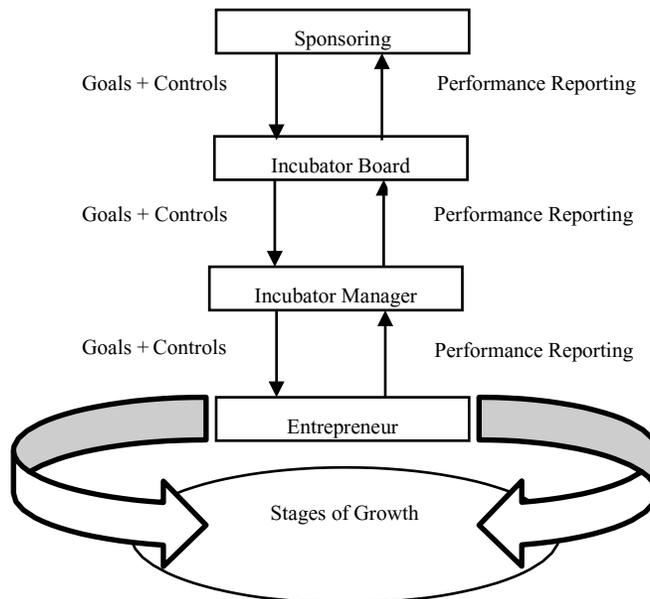


Figure 1.5 Growth Frameworks in Business Incubator

(Source: Remedios and Cornelius, 2003)

Business incubators accelerate the successful development of entrepreneurial companies through an array of business support resources and services, developed or orchestrated by

incubator management, and offered both in the incubator and through its networks of contacts. Among the first generation of incubators, the majority focused on relatively low technological businesses, typically in the service and manufacturing sectors. Gradually, the incubation industry expanded in size and sophistication of businesses represented among client companies.

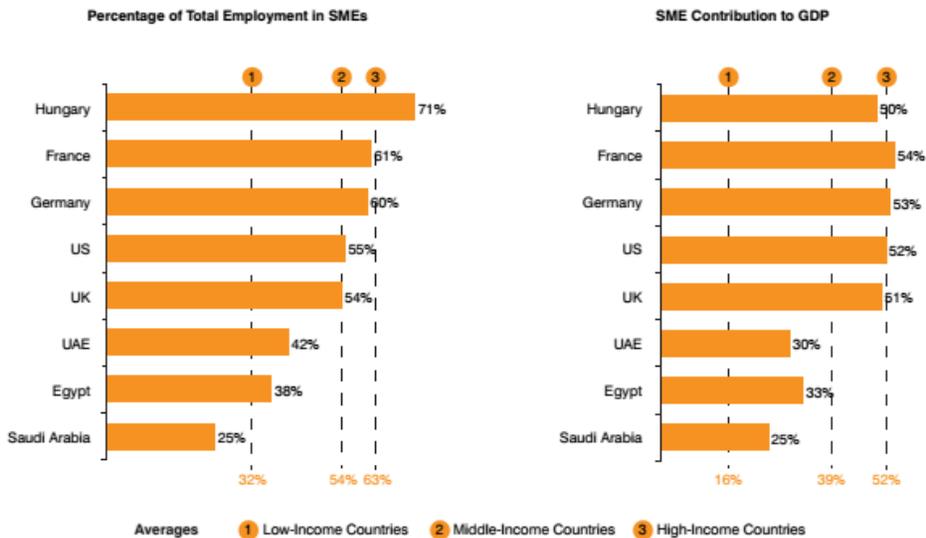
Entrepreneurial activity is not the same in all countries, regions, and cities. Entrepreneurship is conditioned by various factors settled in the behavior, motivation, and knowledge of individual. However, it is dependent on opportunities and available resources and on the conditions of the surrounding environment (Stathopoulous, Psaltopoulus, Skuras, 2004). As seen above, countless business incubation models were developed and used extensively in business incubation centers, university business incubators, independent private incubators, corporate private incubators, high-technology business incubators, and technology parks. Clearly, the ideal environment for entrepreneurship is where firms can take advantage of the agglomeration and proximity of sources of information, qualified labor, technology, and capital. Classical incubation models thrive in those environments. According to Moreira and Marta (2009), this type of business idea incubator is very innovative as it provides a hands-on approach to training prospective entrepreneurs. This action oriented methodology supports prospective entrepreneurs before the actual creation of the new business.

#### *Business Incubator Factors and Performances:*

The Middle East and North Africa (MENA) region, with more than one-half of its population under the age of 25, have one of the world's youngest workforces. This poses both enormous opportunities and enormous challenges. A large, motivated generation of young working people can propel growth and prosperity for entire countries – as occurred in the West following World War II and is occurring now in China and some other emerging economies.

However, for society to benefit fully, the working population needs plenty of jobs and opportunities. The challenge for the MENA region will be in generating these jobs fast and opportunities in sufficient numbers. Unemployment is already a stumbling block to the region's development, with unemployment rates in the high double digits in most MENA countries, including a staggering 35% in Yemen. Most of the region's unemployment figures are believed to be conservative. According to the World Economic Forum, the region needs to create 75 million jobs by 2020 – a jump of more than 40% over the number of jobs in 2011 – just to keep employment close to current levels. The consequences of not doing so could be more severe than a missed opportunity and slow growth; the region may lose its most promising youths to emigration, and social unrest is always a danger when large numbers of young people lack opportunities (World Economic Forum Report, 2011).

A key to accelerating job creation in the MENA region is fostering an entrepreneurial environment. Not only do start-ups employ their owners, but the spillover benefits for the larger economy can be significant: multiple sources of innovation; increased competition; efficiency and productivity; economic flexibility and adaptation; job creation; supply chain development; seedbeds for future growth; and the inclusion of more elements of society. Indeed, once start-ups mature into small and medium-sized enterprises (SMEs), they become significant contributors to employment and gross domestic product (GDP) see (figure 1.6).



Note: Selected Countries (2008)

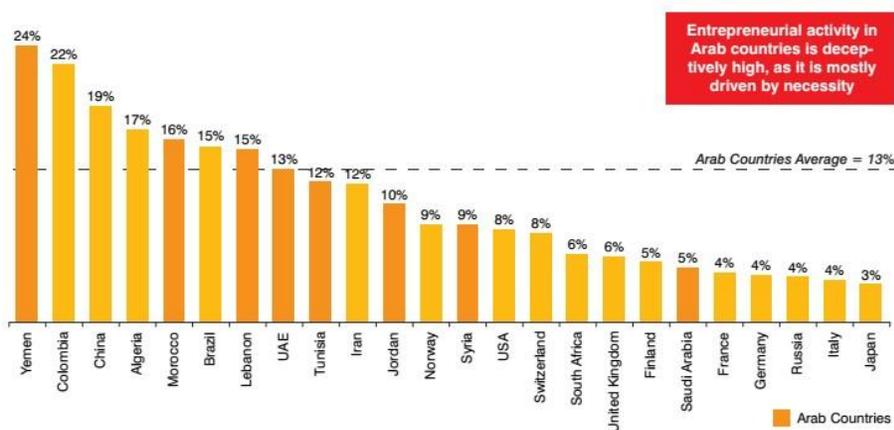
Source: European Commission SME Performance Review; US Department of Statistics; OECD; UNECE; World Bank; Zawya; Booz & Company

Figure 1.6 SME Contribution to Economies (Source: World Economic Forum Report, 2011)

1. The MENA region includes Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, the Palestinian Territories, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates and Yemen.

### 2.1) The MENA Region's Entrepreneurial Activity Today:

At first glance, the MENA region's entrepreneurial activity today seems robust. Activity differs from country to country, but, overall, about 13% of the region's working population is engaged in entrepreneurial activity, far more than in the US, Germany or Japan (see figure 1.7)



Note: The percentage of the population performing early-stage entrepreneurial activity are those people who are involved in setting up a business or owners-managers of new businesses (less than 42 months).

Figure 1.7 Early-stage Entrepreneurial Activity for % of Adult Population, (Source: Global Entrepreneurship Monitor, 2009)

However, this apparent entrepreneurial vigor is deceptive. The high level of entrepreneurship is mainly driven by necessity – shop owners, farmers and cart sellers trying to satisfy their basic needs of food, shelter and security (see Figure 1.8). This type of entrepreneur constitutes the largest group and deserves government support. But since they employ only themselves, lack other opportunities and usually do not aspire to grow the business beyond their own subsistence needs, regional leaders need to give greater attention to entrepreneurs who are truly innovative (creating new markets by combining know-how and capital) or who recognize a demand or supply gap in the market and seize the opportunity. These kinds of entrepreneurial activities have positive spillover effects on job growth and the development of the economy. They are well worth encouraging and some governments are attempting to cultivate entrepreneurial activity with targeted initiatives, such as Qatar’s Science and Technology Park, Oman’s SANAD program and Tunisia’s Centre des Jeunes Dirigeants d’Enterprise. (World Economic Forum Report,2011)

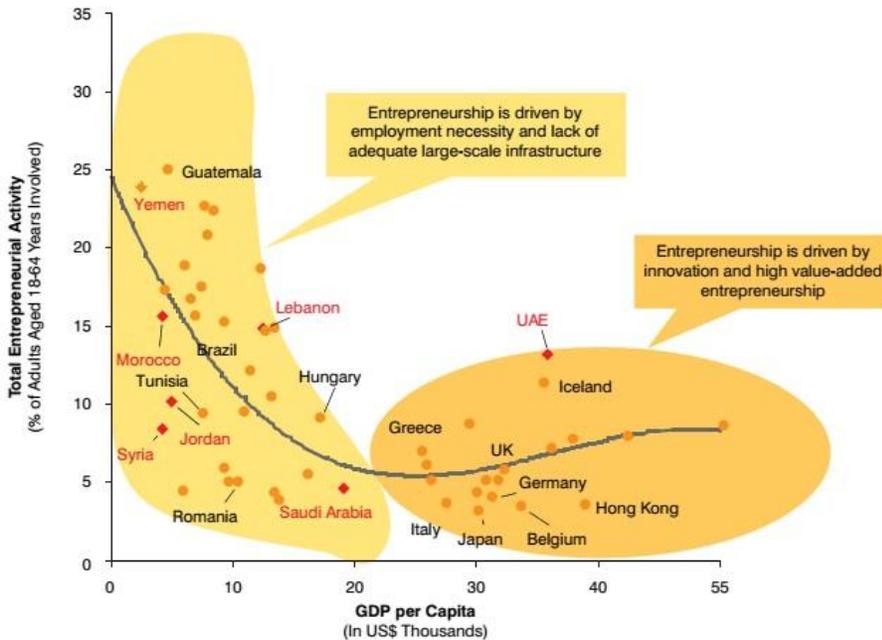


Figure 1.8 Total Entrepreneurial Activity vs. GDP per Capita, (Source: GEM Executive Summary report; GPD Team analysis; Booz & Company, 2009)

More than 80% of entrepreneurs in the MENA region have very small-scale operations, with enterprise value of less than US\$ 15,000. (World Economic Forum Report, 2011) These are the organizations that are most vulnerable to external shocks and most likely to wither away because of lack of support. Many microenterprises do not survive the journey towards growth into sustainable small businesses. As such, they represent a large, and ultimately tragic, waste of hope, talent and potential.

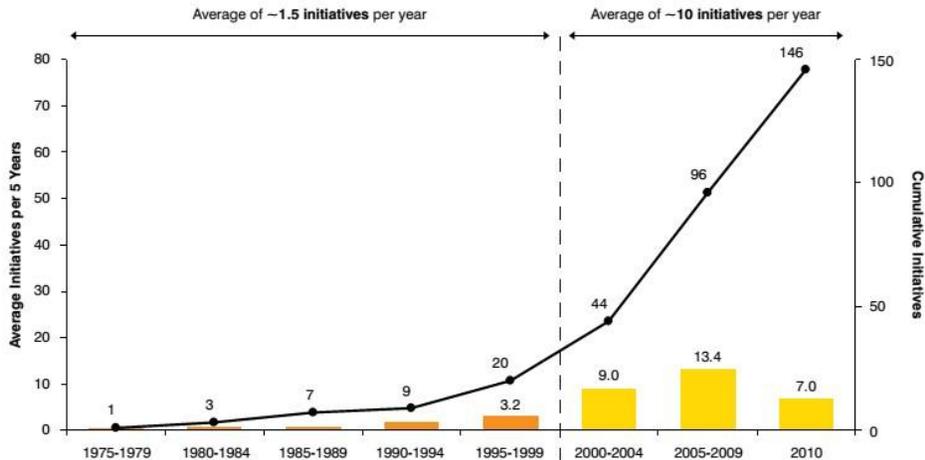
Yet, despite their size, these businesses should not be dismissed as irrelevant to job creation. Indeed, in many countries these ultra-small companies already employ a large percentage of the workforce and could do much more. In Morocco, microenterprises employ 65% of all people in the private sector; in Saudi Arabia, microenterprises generate 40% of total private sector employment. (World Economic Forum Report, 2011)

This impressive job generation has occurred with little formal help from governments, NGOs, companies and established entrepreneurs. But these powerful stakeholders can do a lot. With the right access to financing, business development services and markets, some of these tiny companies could grow into true employment engines. Stakeholders could establish pipelines of development for these microenterprises, offering seamless financial and non-financial support to help them steadily grow from micro or small to medium-sized businesses. Few such

programs exist in the MENA region; yet, they could bestow significant employment benefits, especially if stakeholders focus on more labor-intensive small businesses, since these will logically employ greater number of people.

### 2.3) Understanding the Entrepreneurial Ecosystem:

Currently there are about 150 existing initiatives that encourage entrepreneurial activity in the MENA region. These initiatives include technology incubators, non-governmental organizations (NGOs) aimed at developing entrepreneurship, networking associations for aspiring entrepreneurs and university programs dedicated to entrepreneurship, to name a few. The pace at which new initiatives have been launched has sharply accelerated since 2000, from approximately 1.5 per year to about 10 per year, as MENA governments have come to understand the value of entrepreneurship and its importance in growing economies (see figure 1.9). Most of these initiatives have come from NGOs (62%), with the government contributing just 25% – a relatively low contribution compared to other regions with more robust entrepreneurial activity. (World Economic Forum Report, 2011)



<sup>1</sup> Initiatives aimed at promoting entrepreneurship in the MENA region, including the creation of NGOs, conferences, and networking associations  
 Note: The number for each year represents the total number of existing initiatives during that year.

Figure 1.9 Cumulative Number of Entrepreneurial Initiatives in MENA by Governments, NGOs and the Private Sector (1974-2010), (Source: World Economic Forum Report, 2011)

Ultimately, it is not the number of initiatives that matters but their effectiveness. To understand how governments, NGOs and the private sector can target, design and implement entrepreneurial initiatives to greatest effect, it is necessary to study the entrepreneurial “ecosystem”, which encompasses all the elements that entrepreneurs need to thrive. This ecosystem has four elements: personal enablers, financial enablers, business enablers and environmental enablers see (Figure 2.0)

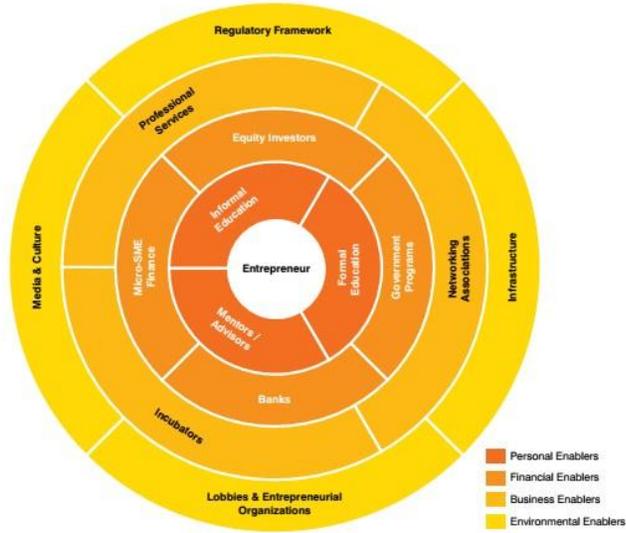


Figure 2.0 The Entrepreneurship Ecosystem. (Source: World Economic Forum Report, 2011)

When studying the MENA region’s entrepreneurial ecosystem, it quickly becomes obvious that some elements of the ecosystem are undeveloped (such as the regulatory framework and equity investors) while other elements (such as advisory) have benefited from various initiatives. The result is an out-of-balance ecosystem. See (Figure 2.1)

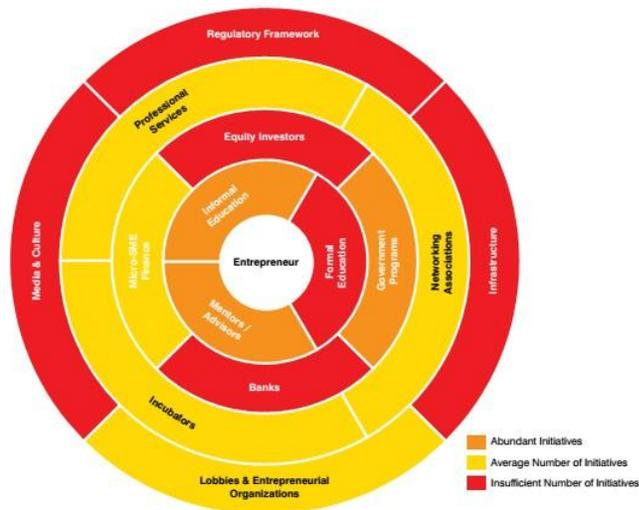


Figure 2.1 The Entrepreneurship Ecosystem in the MENA Region. (Source: World Economic Forum Report, 2011)

*Business Incubator Factors and Performances:*

In the following section, the main goal of incubation systems in Asia was to promote

continuous regional and national industrial, economic growth through increasing employment, general business development, and to stimulate specific economic objectives such as industrial restructuring as well as wealth generation and utilization of national resources. China, Japan, India, Korea, Indonesia, Malaysia and other member of the Asia and Pacific region embraced business incubation. Asia leads in establishment of business incubator. Mostly, the status of the managing incubators is mixed, which include the universities or academic institutions, the government, the non-government organizations, and the private sectors.

There are over 1.500 incubators in operation in Asia alone. China alone has over 600 incubators compared to just over 50 incubators in India (16 of which are technology business incubators) and 100 incubators in the planning stage by the government of India. Japan, Taiwan, South Korea, and Indonesia are also following countries which have large number of incubators (Cho and Eunsuk, 2009). Incubator has become an important carrier to build an innovation-oriented country and the cradle to cultivate technology enterprises and entrepreneurs. The trend in Asia is more companies are getting incubated as more incubators are established and total number of employees increasing.

Table 2.2 shows country names with the main objective of incubator programs and the number of incubators in each country with services provided by them.

No	Country	Number of Business Incubator in each country	Goals	Services
1	Australia	23	1. Job Creation	1. Management that develops and orchestrates business, marketing, and management resources and relationships tailored to the needs of the business clients. 2. Shared office services, training, technology, support, and equipment. 3. Selection of clients and an acceleration process. 4. Assistance in obtaining the financing necessary for business growth.
2	Bangladesh	15	2. Profitable Enterprises	
3	China	600	3. Research	
4	India	57	Commercialization	
5	Indonesia	84	4. Entrepreneurship	
6	Japan	136	Awareness	
7	Malaysia	40	5. Export Revenues	
8	Mongolia	9	6. Policy Impact	
9	Pakistan	22	7. Income Generation	
10	Singapore	61		
11	Taiwan	18		
12	Thailand	29		
13	Vietnam	17		

Table 2.2 Analysis of Business Incubator in Asia Countries (Source: Al-Mubarak and Busler, 2011).

The experiences and characteristics of incubation industry in Asia show that; much attention and great support from central government, to incubation industry. Good policies on small and medium businesses by the government can give significant impact to develop national innovation systems. Government policies and cooperation of each country in Asia to support the establishment and development of business incubator is an important step to realize the business incubator as a catalyst to create young entrepreneur. As an example in Korea, 95 % of the incubators are located in universities or research centers, and 71.1% of the start-ups are mainly in engineering or science field.

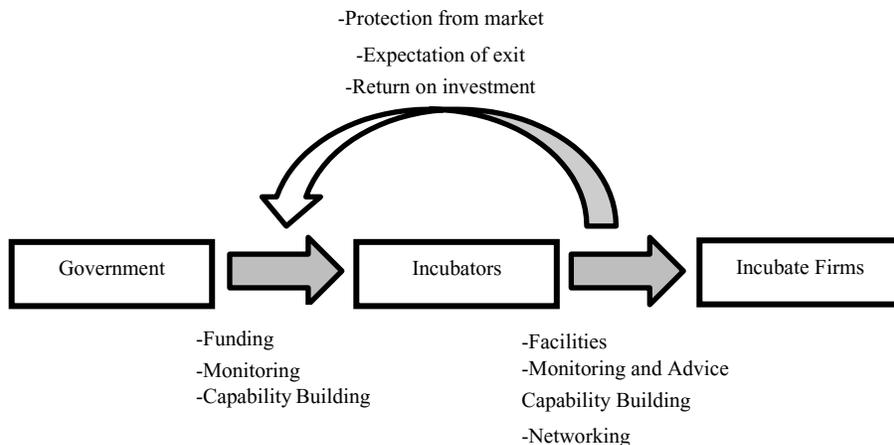


Figure 2.3 Asia and Policy Model – Incubating Incubator (Source: Lane, 2009)

Business incubators, nowadays, are becoming more and more popular amongst entrepreneurs in the array of benefits and services offered by incubators manager for start-up companies all over the world. In addition, business incubator offers a range of potential economic development benefits. Their actual impacts on economic development have generally been measured in terms of number of jobs created, firm graduation rates, and tax receipts (Lourenco, 2004). Established incubators in the region continue to be challenged with internationalizing their successful domestic companies, addressing early stage finance gaps, and developing favorable technology enterprise. Incubators in Asia, mostly, have been publicly-funded to “enhance the success of early-stage entrepreneurial companies and speed the establishment of self-sustaining companies”, which aligns with Nolan’s (2003) assertion that “productive entrepreneurship is central to economic growth, employment creation, and innovation”.

Looking at the role of incubators in the entrepreneurial process, Wiggins and Gibson (2003) argued that incubators must do five things well in order to succeed: 1. Establish clear metrics

for success; 2. Provide entrepreneurial leadership; 3. Develop and deliver value-added services to member companies; 4. Develop a rational new company selection process; 5. Ensure the member companies gain access to necessary human and financial resources.

By establishing business incubators and linking them to cluster initiatives, it will stimulate networking among firms, especially with firms located close to each other. It will also enhance business incubator and affiliation (firms) to collaborate in terms knowledge and technology. Therefore, promotion of incubation as the essential tool in cluster development makes sense, as cluster development strategies can consider the adequacy of available facilities for the development of identified clusters. The availability of work premises and business support services for potential entrepreneurs and expansion of existing businesses is an important component of maintaining the long-term success of a cluster.

In another study, the ability to facilitate networking emerges as a key differentiating factor (Hansen, Chesbrough, Nohria and Sull, 2000; Hanses, Nohria and Berger, 2000). Hansen and the colleagues argue that one type of incubator, called a networked incubator, represents a new organizational model successfully suited to growing high-tech businesses. It shares common features with other incubators in the sense that it provides incubates with physical, workspace, equipment, and administrative and managerial support. However, its key distinguishable feature is its ability to encourage networking among incubates and helps start-ups to meet with potential business allies. Networking among start-ups includes a wide variety of activities from informal interaction such as having daily casual conversations and idea sharing to more formal activities such as forming technology partnership and sharing interlocking directories. Hansen et al., stress that partnerships and sharing among incubates is a crucial component to make incubators more successful. The author agree that encouraging networking among incubates is an important success factor for incubators. Hence, business incubators can contribute to stimulating more entrepreneurs to pursue their dreams of creating their own company.

## **RESEARCH LIMITATION**

This study is an attempt to identify some factors and situation underlying the development of business incubator with case studies from countries in the Arab world and Asia. It should be pointed out that this paper and findings are still relatively descriptive and not specific to find some factors related to business incubator. Due the limited research resources especially in the Arab world, In-depth explanation or description of the factors both within and outside

incubator cannot be reached.

## CONCLUSION

In order to develop comprehensive performance of business incubator as a catalyst, performance of incubators and graduates individuals from incubators must be tracked. Specifically, we find that incubators become more productive when they provide incubates with a wide variety of technical, managerial, and administrative support for better quality. In addition, it is believed that better networked incubators perform better. Especially in emergent markets like Arab countries and Southeast Asia. Moreover, an active internal and external networking is one of a key source of successful incubation programs. Successful incubators should be able to promote internal networking among incubates and develop external networking with various actors such as graduates, venture capitals, local governments, and research institutions from different countries among OIC.

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