

THE CREATION OF BUSINESS INCUBATORS IN SUPPORTING ECONOMIC DEVELOPMENTS

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Abstract

This paper reports, explores and investigates on the initiatives whereby incubators were used to stimulate the economy. Initially the study pursued the role of business incubator organisations and their impacts on the economic developments in the United States of America and the benefits in the Gulf Cooperation Council (GCC) member states. Incubation programs support diversify economies, commercialise technologies, create jobs and build wealth. According to the National Business Incubation Association (NBIA), 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 ventures successful. This paper provides evidence which based on current literature concerning business incubators as an effective and innovative tool of economic developments. The research methodologies adopted in this research study are desk-research and case study of 5 incubator organisations in the GCC member states. However, the paper provides guidance, suggestions and recommendations to change the adoption of such programmes in order to stimulate the economic development cycles in the GCC member states.

Keywords: Business Incubators, Sustainable Entrepreneurs, Economic Development, Gulf Cooperation Council States.

1 INTRODUCTION

For the last twenty-five years, business incubation has been the subject of many research studies in different countries that attracts researchers, practitioners and policy makers.

Business incubation is a term describing a business development process that is used to grow successful, and to create sustainable entrepreneurial ventures that will contribute to the economic developments of a healthy economy. Successful incubation process is about supportive environment in which new ventures can develop and fulfil their potential growths as well as giving them access to

Hanadi Mubarak Almbartaki, Wafi. Al-Karaghoul, and Michael Busler

a wide range of business development resources and tailored services. Business incubators play significant roles in seeding and developing new ventures and technology transfer with potential growth in most areas and sectors of the economy.

Pappas (2003) defines an incubation program as a dynamic process of developing and supporting emerging commercial business or individuals. Incubators nurture young firms, helping them to survive and grow during the startup period when they are most vulnerable to failure. Incubators provide hands-on management practice, access to financial resources, and orchestrated exposure to critical business thinking or technical support services. In addition, the incubator programmes can offer entrepreneurial firms the facility to share office services, access to equipment and expandable space.

Hackett and Dilts (2004), conducted a fieldwork in Asia and North America. They stated that, a business incubator is a shared office space facility that provides a strategy, e.g. ‘‘portfolio’’ or ‘‘client’’ or ‘‘tenant companies’’, value-adding intervention system (i.e. business incubation) of monitoring and business assistance. The incubator can control and link resources that could assist in the development of its clients’ new ventures, by simultaneously help containing the cost of their potential failures.

Incubators could be established for many reasons, depending on the different set of objectives they can be designed to reflect their own particular operating environments and to represent the stakeholders. Each incubator will drive one or more objectives, e.g. an economic development, technology transfer, innovation and commercial viable venture. Also, it leads to the creation of new and sustainable jobs, acceleration of business growth, development of fast-track companies, reduction in the rate of failure of new enterprises, empowerment, opportunities for specific groups of entrepreneurs, and developing a role model for an entrepreneurial culture (DiCarlo, 2001; Lalkaka, 1997a, 1997b, 2000 & 2002).

Business incubators which especially operate by governments, are frequently used as tools to promote the economic development of a community, a region and a country. In particular, this is evident in the United States of America (USA), due to the wide spread use of technology-based business incubators which aims to support local and state-level economic development strategies. The growth of business incubators has been justified by the well established theoretical arguments in the previous and the existing empirical evidence, that innovation promotes economic growth (Wagner, 2006).

2 RELATED LITERATURE REVIEW OF BUSINESS INCUBATION

The National Business incubator Association (NBIA) is the world’s leading organisation that promotes business incubation, entrepreneurship and supports them, in order that incubators can play a big role in the economic development programme. It provides thousands of professionals with the information, education advocacy and networking resources to bring excellence to the process of assisting early–state-start-up companies (NBIA, 2000; Adkins, 2001a, 2001b, 2002a & 2002b). Business incubation has been seen as an effective and innovative economic development tool in many countries including the USA.

Hanadi Mubarak Almubartaki, Wafi. Al-Karaghoul, and Michael Busler

Also, it is worthwhile mentioning that, the development of the business incubator is a tool to ensure the success of new entrepreneurs through the provision of resources, networking and capital. In addition, incubators were originated for different reasons including putting back into the community. In 1959, Charles Mancuso Son, Inc. (Batavia, NY), purchased a huge multistory building of 850,000 sq foot which included 30 acres of land. The building was previously owned by Johnston Harvester (the manufacturer of combine harvesters) and later on by Massey Ferguson. Although the family owns a number of various local businesses, some family members wondered if this latest acquisition was a wise investment. They paid \$180,000 for the building which has been vacant for many years. At the time, it was evident that the building would require a considerable amount of renovation, especially with the massive roof that needs complete replacement. The family knew that they would need to invest more money to restore the facilities before it could be utilised. They employed Joseph Maneugo (Burger, 1999) as an advisor to assist them in their choice of options concerning what to do with the next facility and to figure out how much they make profit of their purchase.

Mancuso came up with what is considered today to be a revolutionary idea. He rented out the building to tenants, allowing each tenant to occupy as much space as she or he needs. By letting-out the building, he was hoping to find enough tenants to guarantee that the facility would reach an occupancy rate that would generate a profit for the family's investment. The first tenant in the building (Batavia, NY) was a sign painter that took up only 2,000 square feet of the available 850,000 square feet. In the first year of the building's operation, Mancuso only managed to secure 20 to 30 tenants who utilises approximately 90,000 square feet. The building was always reportedly on the verge of financial trouble, though it leased some of its available space as a warehouse and other space for services providers and a number of other types of business (Burger, 1999; Adkins et al., 2001; Lourenco, 2004; Michelle, 2003).

Thus, the first business incubator was born out of economic necessity, as it allowed tenants of the building to share the expense of various office services. The idea soon caught up on as more people become a ware of Mancuso's development strategy and its potential impact on economic development and its success in job creations in their own communities. The implementing and the success of such program provide a recognition of John Mancuso being the father of business incubators, and he is credited with inventing the term "incubator".

Today, the same incubator is called the Patavia Industrial Center which boasts about 110 tenants with 1,000 people work in the building and run by John Mancuso's three sons. Today's incubators do not function like what was evolved then as a traditional incubator program. The center continues to encourage entrepreneurs and start-up companies, as anyone can lease space in the Patavia Industrial Center, due to its decentralisation nature. Furthermore, they can stay as long as they want, for there is no graduation or exit policy. For this reason, some businesses have been in the incubator programmes for more than 30 years. The first formal incubator to host an incubation program as we know them now, was established around 1980 at the Rensselaer Polytechnic Institute, which is an initiative of George Low who became the future president of Rensselaer. The Rensselaer program was revolutionary in its endeavour to introduce students to entrepreneurship in a laboratory setting. This has been done by role-playing process. Also, by bringing in guest speakers to talk about how to start a business. The latter process leads to pairing students with local businesses in apprenticeship positions, and by linking student and faculty entrepreneurs to potential investors. Armed with such Hanadi Mubarak Almubartaki, Wafi. Al-Karaghoul, and Michael Busler

supporting resources, companies began to be launched by both students and faculty alike. Originally, the Renssealer Polytechnic Institute was housed in a space available on the Renssealer Campus. The school now occupies two incubator facilities that offer 40,000 square feet of space. The Renssealer, incubator continues to successfully produce companies for students, faculty, and community residents who desire to start their own business enterprises (Burger, 1999; Alien, 1985; Alien and Eugene, 1989).

With the industry experiencing unprecedented growth today, there are more than 1,000 business incubators in North America, comparing to only 12 such organisations at the time back in 1980 (NCEO, 2000). According to Clark & Minor (2000), incubators originally appeared during the recession which occurred during the early 1980s when large corporations shut down, leaving behind empty plants and thousands of jobless people. Further, they explain, “As a business incubators popped up, people began to see them as a means to alleviate economic distress by renovation and utilisation of idle manufacturing buildings, generating income for investing parties and creating job opportunities“ (Clark & Minor, 2000). These days, in the USA one new incubator created every week and the number is growing over time (NBIA, 2000). Like their numbers, incubators’ budgets have steadily increased to include the number of client companies and 8,000 graduates (small start-up firms) currently reside in incubators, and more than 4,500 existing business have resulted (graduated) from these programs. Incubators organisation are offering more services to clients as well as more specialised ones.

According to the NECO (2000), the Business Incubation Industry conducted a study of incubators in North America which showed that 19,000 companies and more than 245,000 jobs have contributed to the economy (NCEO, 2000; Aernoudt, 2004; Wagner, 2006).

3 RESEARCH METHODOLOGY

The research methodology that has been used in this research study is compromised of desk-research, interviews and case study of 5 incubator organisations in the Gulf Cooperation Council (GCC) member states.

3.1 Desk-Research: Different Types of Business Incubators

From the current literature, it is evident (see section 2 above) that the number of business incubators is growing rapidly. At the beginning of 1980, the number was 200, today the number has grown to approximately 7,000 (NCEO, 2000). The Business incubators are becoming more and more popular amongst entrepreneurs and those who are aware about the wide array of benefits such organisations can offer with regard to the resources that fledgling companies need in order to succeed in the long-term. The different types of incubators reflect the history of the concept. The initial definition is revitalising the decline in the manufacturing area. They serve as tools for reconversion. National Business Incubation Association classifies the incubator programmes in various ways, with primary distinction between non-profit and for-profit organisations.

Non-profit incubators represent about 85% of U.S. incubator population, i.e. around 950 incubators (Decarlo, 2001). Fall under one of three general categories of organisational structure, is the stand-alone incubators. These incubators are programs or departments of large tax-exempt entities and operate within their tax status. For example, a university or a government can run incubators or incubators which can work closely with other organisations, whether for-profit or not for-profit in order to achieve their missions. The NBIA recognises three major types for-profit incubators depending on how investors anticipate to obtain a return on their investments (Temali and Campbell, 1984). The first type, anticipates return on investment from rents and services fees. These incubators add to the company development of office services and flexible real estate. The second is a profit programme treats the incubator as a portfolio of investment and seeks return on equity holding in start-up companies. The third is with regard to corporate incubators to seek benefits primarily from spinning out technologies or spinning or medical innovations with strategies.

3.2 Business Incubation and Economic Development

Business incubators contribute to the economy and also they play active roles in the local, the regional and the national economic developments. Business incubators, however can not transform an economy and should be integrated into a broader economic policy reform, infrastructure investment and financing. When approaching a new project of incubators, the development team should fully understand and formulate the economic purpose or mission of an incubator to achieve the required return on the resources invested in the program. Business incubators can be used for one or more of the following three economic development purposes:

- **New business formation:** New business formation is the most common economic development focus of business incubator around the world. These programs focus on supporting entrepreneurs from practical business concept development to launching a product. The purpose is to nurture businesses until a business becomes stable enough to operate without the day-to-day support of an incubator (Almubarak, 2008).
- **Business stabilisation:** A number of countries around the world have begun to investigate the ways that business incubators can be used to help existing small-to-medium size (SMEs) enterprises that have become unstable. The purpose of these programs is to provide business support services and guidance to help to stabilise the business and reduce the chance of failure.
- **Business expansion:** Many countries have begun to deploy business incubators to help existing small-to-medium size enterprises to expand. These programs provide services to help business owners improving operational efficiency, identifying, accessing new markets, expanding production capabilities, hiring and managing labour and securing capital. The purpose of these programmes is typically to help businesses that employ 1-5 employees to expand to 10-20 employees.

Business incubators offer a range of potential economic development benefits. Their actual impacts on economic development have generally been measured in terms of basic quantitative measures such as number of jobs created, firm graduation rates and tax receipts (Lourenco, 2004).

Recently, however, there has been a shift in focus in the literature of business incubation to the potential role that incubation contributes to the economic development due to facilitating and the creation of the growth of social and intellectual capital, although empirical evidence of this is still limited. Social capital has been defined as “social networks”, where reciprocities arise from participation in these networks and the value that participated members derive from these reciprocities (Lourenco, 2004; Clark and Minor, 2000; CPAC, 1998).

3.3 Case Studies: Business Incubators in the Gulf Developing Countries

Interviews were conducted with senior executives of 5 incubators Organisations across the GCC members of states. As a result of the interviews, it was identified that currently, there are 21 incubators across 5 centers in the GCC including Kuwait. Also it has been noted that in developing countries including Kuwait and other GCC member states, business incubators could be particularly valuable in contributing to the development of the local economy, promote technology transfer, create new enterprises and impacts on job creation.

In the GCC member states, the efforts to support entrepreneurship through business incubators and similar facilities are on the increase. For example, in 2003, Manama in the Kingdom of Bahrain, through the Bahrain Development Bank and United Nation Industrial Development Organisation (UNIDO) has established business incubation centre as the first GCC member state who implemented this program. The reason behind this centre is to support new business formation in the Kingdom of Bahrain and in cooperation with commercial and the ministry of industrial affairs. The main objectives are to impact policy making, commercialise research, create companies that export revenues, create jobs, develop profitable enterprises and raise awareness of potential entrepreneurs. The category of the center is of mixed-use and governmental non-profit business type. The number of client firms on site is 35 with 265 employees in client firms. The Total Graduation firms are 15 with 66 employees in graduated firms (Almubaraki, 2008).

In the Kingdom of Saudi Arabia, BADIR-ICT is first ICT technology incubator to be established in Saudi Arabia. The BADIR initiative was launched in January 2008 and it is the first operational incubator program in the Kingdom. It accepted its first tenants and affiliates in November 2008. This centre is part of the National Badir technology incubator initiative of Saudi Arabia’s national research institute of King Abdul-Aziz City for Science and Technology (KACST). Badir focuses on ICT and ICT related enterprises supporting both technology and services companies with flexible services suite each segment. Badir’s ICT currently operates as a unit of KACST under a supervisory committee chaired by the (KACST) Vice President HH Prince Dr. Turki Al-Saud. Other committee members consist of one representative of major stakeholders including Saudi Telecom Company (STC), Saudi credit and savings bank, Mowhiba, ministry of commerce, Saudi Arabian Government investment Authority (SAGiA). The key strategy is focused on the best practice incubation finance and sustainability could offer; quality clients and investor relations. The BADIR–ICT facility based in Riyadh which comprises of 30 suites with over 100 rooms and up to 30 incubator business tenants. The statistics inferences of the BADIR’s ICT technology incubator are, total space of 5,800 square meters available and 4,400 square meters rented by client firms. The Total number of client firms on the site is 10 and the number of employees in client firms is 20.

Another initiative is based in Qatar Science and Technology Park which was established in 2008. The main objectives of being commercialise research, creating companies that deal in export and create jobs. It manages to develop profitable enterprises and raise the awareness of potential entrepreneurs to promote applied research technology development and commercialisation in Qatar. Also, to support the diversify economy of Qatar through applications of technology which accelerates the formation and growth of start up technology companies. By creating high-value employment opportunities, in particular for the graduates of Qatar University. The model of the program is governmental not-for profit, information and communication technologies sectors. The space of business incubator is 12,301 square meters and 3,043 square-meters rented by client firms.

Recently, the United Arab Emirates (UAE) has established Dubai Business incubation center to foster the development of technology venture involving the internet, information technology and other related technology sectors. Finally, Oman, through the “Knowledge Oasis Muscat” establishes business incubation programs as joint venture with the U.K. technology park programs. The main services are business information finance and incubation development with technology transfer. The program is a non-profit governmental model.

4 FINDINGS AND DISCUSSION

Business incubators help in accelerating the economic development process. They provide access for small business though the provision of resources that small enterprise might not otherwise be able to access due to capital or network availability and challenges. The difference between business incubators and small business development centres is that, unlike small business development centres, incubators in essence, actually nurture or adopt the businesses, supporting them in their infancy until they can be independent on their own. Further “though some investment groups call themselves incubators, they offer no guidance or expertise, services or other forms of nurturing“ (Campbell, 2001). They seek true, legitimate business incubation, the programs should carefully be differentiated between organisation that simply act as landlord to entrepreneurs or professor for business owners and programs that take on the challenge of embracing the business owner and assuming responsibility for the growth and success of the business itself .

The development of business incubators might lead to the following issues:

- 1) Economic development effort intended to stimulate the economy, create jobs, and diversity of the local economic losses.
- 2) The commercialisation of research and the transfer of technology into new and different commercial applications; and
- 3) The enhancement and sustainability of small business success (Greene & Butler, 1996; NBIA, 1996; Smilor & Gill, 1986).

According to a report by the NBIA (2000), business incubators reduce the risk of small business failures. In fact statistics show that 87% to 90% of all businesses that graduated out of incubators

Hanadi Mubarak Almubartaki, Wafi. Al-Karaghoul, and Michael Busler

programs are still in business. This is in contrast with approximately 20% to 30% of non-incubation businesses are still in business after the same period of time. The effect of taking up residence in a business incubator reaches the revenue stream of businesses. The average sales of a firm increase by more than 400% from the starting time it enters the scheme until the time it leaves the incubator. Also, start-up firms in incubators have annually increased sales by \$240,000 each with added average of 3.7 full-time and part-time jobs per firm (NBIA, 2000).

Table 1 below illustrates the resources and services available to incubator residents that fall into three categories, i.e. shared office, management/technical assistance, and financing.

Table 1 Resources and services of incubator clients

Shared Office	Management/Technical Assistance	Financing
Conference room	Business plans	External aided
Photocopying	Marketing	Internally provided
Receptionist coverage	Accounting	"Survival Funding"
Word processing/typist	Government grants and loans	
Security	Legal services	
Computer equipment	Patent assistance	
Fax machine	Computer training	
Office equipment	International trade	
Business resource library	Government procurement	
Audio/visual equipment	Equity and debt financing	
Extra storage	Access to sophisticated computer processing	
Bookkeeping	Access to other resources outside the incubator	
Group health insurance	Research and development	
Secretarial services	Business taxes	
Postage machine use	Notary services	
Binding machine use	Desktop publishing and design	
Computer software	Website design and training	
Secured mailboxes	Technology support services	
Manufacturing equipment	Mentoring	
Commercial kitchen use	Access to interns	
Other		
Below-market office space		
Flexible leases		
Dedicated phone services		
Common lounge areas		
Business waiting areas		
Group health insurance		
Membership in professional orgs.		
Chamber of Commerce benefits		
Relocation services		

Hanadi Mubarak Almubartaki, Wafi. Al-Karaghoul, and Michael Busler

Custodial/Maintenance services		
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Source: The National Business Incubation Association (2000, p.11-13)

According to the National Business incubator association, there are currently about 1,000 incubator clients in North American that are classified into 7 main incubator categories, of which the number of Mixed-use is 43%, with technology comprises approximately 25% of all incubators in North America (NBIA, 2000; NCEO, 2000; Hackett & Dilts, 2004; Pappas, 2003; JBV, 2002). On the other hand, manufacturing comprises 10% of business incubators, targeted makes 9% of all incubators, Service consists 6% of business incubators, empowerment makes up 5% of all incubators, and 2% Other (NBIA, 2000). Some of the main 5 categories would be explained in more detail as follows:

- Mixed–use: this type of incubator accepts clients from a wide variety of business sectors. They are largely created by local governments to spur economic growth and create jobs (Burger, 1999). Mixed-use incubators contain a variety of different types of enterprises including service companies , general contractors, specially foods vendors, marketing firms, staffing companies, and financial service advisors. Except for restaurant and retail operations, most start-up businesses are well suited for incubators (JBV, 2002).
- Technology incubators: these incubators “focus on enhancing community research and development in high-technology, rapid-growth industries that have a good chance of attracting capital and can have a long–term impact on spurring economic growth and creating jobs“ (Burger, 1999). While firms in all types of business incubators show similar increases in their annual gross values, but firms from the technology incubators category manage to create more jobs than other types of incubators (CPAC, 1998).
- Manufacturing incubators: provide physical space and technical business assistance for those in the manufacturing industries (usually lighter manufacturing industries). These incubators must often provide ample, large production spaces in order to accommodate the physical manufacturing needs of their clients.
- Targeted incubator: are those that focus on specific industry such as software, food manufacturing, multimedia, arts,...etc. (NBIA, 2000). They may also target populations of a specific demographic area, e.g. the Houston Women’s Business Centre. The Women’s Business centre targets “contemporary, fact–track women business owners and career professionals and proud itself as the first incubator to teach entrepreneurship and in particular entrepreneurship to women“ (Campbell, 2001). Service incubators, are those that cater their products and physical space offerings to businesses in service industries, and including professional services.
- Finally, empowerment incubators are also sometimes referred to as “micro enterprise“ or “community” incubators in the current literature. These organisations tend to focus on assisting targeted populations in their efforts to develop and support small business entrepreneurs.

Hanadi Mubarak Almubartaki, Wafi. Al-Karaghoul, and Michael Busler

5 CONCLUSION AND REFLECTION

In this study, benefits and issues associated with the adoption of incubators as stimulus for the economic development have been pursued. This paper describes the important role and the impact of incubation on the economic development process of a country with supporting lessons from the current literature. In conclusion and throughout a careful review of the published literature, and the analysis of the business incubators as effective tool for economic development. The study supports previous work that suggests that quality initiatives and careful planning of incubators may present a pathway to stimulate an economy and in particular in the GCC members of states. But that requires a different approach to the experience in the USA. As little progress will be made in the GCC when organisations persistently drive an inwards focus on efficiency in their business incubator units, resulting on conflict with an outward focus on the overall effectiveness of the initiative.

The paper establishes that, first business incubators aspire to become a cluster/catalyst for economic development. Business incubators impact wide range of economic activities such as build confidence amongst the finance community. Also, in supporting start-ups, promoting a culture change and help in fostering a culture of entrepreneurship. Assist companies out-side the incubators and act as a catalyst for the development of wider business support structures. The paper shows that business incubation can be considered as cost-effective economic development process due to the evidence that, if a thorough and objective feasibility study is planned, performed and best-practice is applied, business incubation could be an effective tool for economic development at significantly higher cost than originally anticipated.

However, the evidence shows that there is no such thing as a typical incubator with similar elements. Incubators come in all shapes and sizes and highly influenced by surrounding (internal and external) factors. The incubators can be classified in different levels and according to the main objectives (e.g. job creation, real estate, social inclusion), main sponsors/stakeholders (e.g. university, corporate, public/private), geographical focus (e.g. rural, urban), target sectors (e.g. biotechnology, arts), target-development stages (e.g. start-ups, growing businesses), financial structures (e.g. profit, not-for-profit), and provision of space (e.g. virtual, bricks-and-mortar). Furthermore, the role of business incubators generating social and intellectual capital and the impact of these forms of capital on economic development is hard to measure. Largely, is due to the difficulties, which is supported by the evidence of the available research in this area, which is limited. It is worth mentioning that the incubators experience in USA is well established, i.e. often innovative and located at the heart of an environment that encourages entrepreneurship in which public and private entities often work together. Business angle and untrue capitalists are more powerful than other counties.

Finally, this study has clearly stated that the real added value to business incubation is in supporting services and business assistance, e.g. the quality of technology support, range of business assistance, training of interveners, and access to capital. This is evident in both the United States of America and the developed countries, but still taking shape in the developing countries such as the GCC member of states.

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