



BUSINESS INCUBATORS AS A TOOL FOR THE DEVELOPMENT AND GROWTH OF START-UP COMPANIES IN THE ARAB WORLD

Dr. Emhamad Elmansori

Omar Al-Mukhtar University, Libya

Faculty of Economics,
Omar Al-Mukhtar University,
Al-Bayda, Libya

E-mail: elmansori2010@yahoo.co.uk

ABSTRACT

Purpose: Business incubation facilitates the development and growth of start-up companies by providing entrepreneurs with resources and services. Incubator management usually develops these services that are offered by its wide network of contacts. Therefore, the aim of this research to contribute to general knowledge about the economic growth and development impact of business incubators, thereby assisting Arab governments and policymakers in establishing environments that would facilitate entrepreneurship and national development.

Design/methodology/approach: To meet this aim, a qualitative research approach was used. Interviews with 12 Arab experts in this field were conducted to understand how to establish and implement business incubation programmes.

Findings: The results of this research show that businesses that have been through an incubator programme are far more likely to succeed in the long term.

Originality/value: The research concluded by providing governments with guidelines for using incubators to foster technology transfer and commercialisation, which contributes to entrepreneurship and economic development in developing countries and other Arab countries, with particular consideration in Libya.

Keywords: Arab world; entrepreneurship; incubators and innovation.

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INTRODUCTION

The situation in the Arab world is of particular importance for business incubator research. Firstly, this region launched its first incubation unit in 2002; things are now changing, allowing a unique opportunity to study its initial impact. Secondly, the purpose behind the introduction of Arab business incubators is explicitly concerned with promoting the survival of Small and Medium Enterprises (SMEs), which makes it easier to measure subsequent levels of incubator success. Finally, the connection between incubators and SMEs is directly related to the promotion of specific Arab socio-economic objectives, for example, job creation, economic diversification and technological innovation.

This research serves as the foundation to provide the guidelines for the establishment and implementation of the business incubation programme. Arab experts were chosen owing to the focus of the study. The interviewees were selected based on their experiences in the field of SME policies and development of business support infrastructure. Semi-structured interviews were adopted for this data collection. The interviewees were asked several open-ended questions; therefore the structure of their answers were certainly different but there were many similar themes in their answers.

RESEARCH AIM

The aim of this research is to provide governments with guidelines for using incubators to foster technology transfer and commercialisation. It was the intention of the researcher to arrive at some form of objective knowledge about the optimal conditions for business incubation. This takes into account the general conditions necessary for successful incubator development and applies them to Libya and potentially the other Arab countries. This will then enable the production of guidelines (document) to be used as a reference point for those in the situation of designing, establishing and implementing an incubation unit.

METHODOLOGY

The study focused on 'experts' and policy-makers within organisations that are likely to play a decisive role in introducing and supporting their implementation at a national level. Moreover,

many Arab academic experts interact with policy-makers (via direct consulting, conferences and journal publications) to set up programmes for the development of incubators in the Arab world. The initial sampling procedure was non-probability purposive sampling. Respondents were selected according to their association with Arab agencies and organisations that directly impact the development of SMEs and incubators in the Arab world.

It was comparatively difficult to get hold of people who were experts from all Arab countries, and rather difficult to convince them to take part in this research. Therefore, the author travelled to Dubai and attended and participated in the Second SMEs 'Business Incubators' conference, which was held in UAE during the period 19–21/02/2012; it was organised by the Arab Administrative Development Organisation (ARADO). At the conference, the researcher met a number of experts, both academics and professionals, in these areas of research. During this time, interviews were then conducted with 12 experts in the field of SME policies and the development of business support infrastructure in the Arab World. These experts were keener to actively participate in research projects, which may be due to their academic background or links with academia. These interviews sought to reveal specific information from participants who understand and are conversant with the topic being investigated (Al-Sheikh, 2009; Bryman and Bell, 2011; Bryman, 2008; Elmansori, 2014).

THE INTERVIEW PROCESS

The interviews started with a few minutes of discussion between the interviewer and the interviewees. The conversation was about almost anything including sports, food, shopping and events such as the Libyan revolution and Arab spring. The discussion also addressed the Second SMEs 'Business Incubators' conference and some economics issues. The researcher started all interviews by asking the interviewees for personal information (e.g. their names, jobs and experience). However, as a result of the researcher's awareness of the Arab culture, the author had to persuade the interviewees that the information taken from these interviews would be handled confidentially. Furthermore, the researcher described the aim of the research to his subject as this led to

a more productive interview. Interviewees often want to know how the interviewer happens to be interested in them and why he particularly wants to have an interview with them.

The interviews were conducted face-to-face in the rooms of the conference. Curran and Blackburn (2001, p.74) suggest that the maximum length of a face-to-face interview should be 50 min, but in this project the duration of each interview was between one and one and half hours; all were semi-structured and designed after a preliminary literature review. All interviews were on a one-to-one basis, except two where there were two respondents. All 12 interviews were tape-recorded. The interviews were transcribed and a preliminary report was written that was later refined and made final by consulting the tapes where and when necessary. The interviews were continuously interpreted throughout the study and were finalised after the survey data collection had taken place.

In an interview situation the researcher is in control of directing and redirecting the questions that may improve the understanding of questions in a desired way. Answers can be checked to ensure that they are understood properly. Interviews provide a good opportunity for researchers to explore new issues of which he/she was unaware of prior to the interview. During the next step of analysis, he/she has the advantage of knowing the perspective of the larger context in which the questions were asked. This research used a thematic analysis as qualitative data were collected.

INTERVIEW ANALYSIS

Q1. Does a business incubator need to have a business plan prior its establishment?

A total of 12 participants were interviewed. All participants stated that they believed that having a business plan prior to the implementation of business incubator is important. According to the respondents, all businesses need a plan to be successful with their goals and types of services provided. Another participant responded that it is necessary to have a business plan for a business incubator, not only in the stage of the establishment of the business incubator but also after that. The business plan is indispensable to ensure the success of the business incubator.

There are a number of issues to consider when discussing 'success factors' and 'effectiveness' of business and technology incubators. For example, many regional business incubators will define their success by the number of jobs created, capital raised by tenant companies, tax base increase and revenues generated by the incubated firms. Other incubators might define success by the number of companies that 'graduated' from the incubator. In truth, these are all measures of success from the standpoint of the incubator. The goal of the incubation process, then, becomes getting the 'client company' out of the incubator. That becomes viable when a client company can stand on its own. In other words, when a client no longer needs what are essentially subsidised rents and discounted services that a typical incubator provides, or has secured enough financing that it is ready to stand on its own (Rothaermel and Thursby, 2005).

Q2. How do we measure success? What are the criteria of success of a business incubation process?

Some of the main criteria that were emphasised most by the respondents were the efficiency of the entrepreneurs, success of the incubated companies, diversity and financial strength. Respondents (X3, X5, X6, X11 and X12) believed that the incubator service is one of the most important criteria for the success of the business process; this is because it enables the availability of the developing and the attracting of entrepreneurs with new, innovative business ideas. On the other hand, financial strength was also considered to be a significant aspect in an efficient implementation of the business incubators. Entrepreneurs would learn more from each other and other businesses than consultants. The following are the main areas that were given importance by the respondents.

The strict selection of incubator tenants: whenever the selection criteria are clear and specific, the chances of attracting good ideas increase chances to succeed. These standards vary and may include the ability of exponential growth, the relationship to advanced technologies, provided by a detailed business plan and the possibility

that the project developed an innovative idea or invention.

Incubator Manager: the incubator manager plays a key role in the success of incubator, where he must have some skills in the areas of business planning, management, marketing and accounting, in addition to the time spent with tenants inside the incubator and detecting problems before they escalate.

Community support: it is important that incubators gain moral support and have economic relationships at the local level. The support comes from the municipalities, universities or large companies. When it becomes apparent that the incubator is a reflection of the community's goals and has a positive economic development, it is then able to attract support from a wider base.

Access to finance: applicants for membership of the incubator need to be nurtured and to know the different financing alternatives. The incubator is able to collect good information from the various sources of financing, for example, banks, institutional grants, loan funds and various senior investors.

Creating success: the image can be enhanced through the incubator by a new or refurbished building, the existence of links with major local parties, good links with the media and local public relations, and the association between the incubator and its success stories. All of these things help to create opportunities for the proven success of an incubator.

Benchmarking and continuous improvement: the incubator needs to evaluate its operations and performance on a regular basis. This does not include the mere control of performance in terms of growth and associated facilities, but also includes the growth and development of companies after graduation from the incubator. Such information suggests incubator in the planning and delivery of services. More importantly, marketing itself and attracting high-quality promising and expected growth in non-traditional projects.

Q3. *What kind of services should a business incubator provide to the clients?*

The most important services as per the respondents are consultation, flexible space,

the transfer of ideas and knowledge of research to the marketplace. New opportunities to determine the method for facilitating the incubation process concerns various critical aspects of business incubation, such as control governance, leadership, management and professional development.

All SMEs assistance arrangements are localised in terms of local or regional industries, and the local business environmental settings differ in terms of regulatory framework, financial and institutional requirements. Basically, the type of service offered could be real estate, basic office services, advisory and support services, training and contact building. The financial models revolve around rental and external services, subsidies, sponsorships and deferred revenue, for example, royalties. Finally, the context may be rural or urban, and range from mixed use incubators to high-tech, corporate incubators and special-interest incubators.

For the purpose of this research, the business incubation process encompasses the provision of the following areas: services, training, business support, financial support, technology support, facilities and infrastructure, networking and mentoring and after-care services. It is observed that research on performance measurement emerged from two dimensions. Namely, organisation theory (as defined by Kast and Rosenzweig (1970, pp.69–72)), "is the set of propositions (body of knowledge) stemming from a definable field of study which can be termed organizations science" focusing on goal-based systems (multiple generic performance aspect) and multiple-constituency approaches (agenda for stakeholders). The second dimension, strategic management, combined the three developed measures based on financial performance (market share, sales, operating cost) and organisation effectiveness, measured through product quality and market share. Though these measures yield results if applied in corporate environments, it is further acknowledged that, since it may be difficult to collect financial data from small businesses, operational measures can be used to assess performance of start-ups within a business incubation environment.

Q4. How long an incubation period to choose for a tenant?

As per the accumulative responses, the period of incubation may be about 18 months for service projects and about three years for industrial projects. According to X2, X3, X5, X6, X11 and X12, all successful incubators take not less than three years and some incubators take only three months. The type of incubator plays an important role in this question.

There is no unanimity of criteria when we refer conceptually to the process of business accommodation, and several definitions have been proposed by international bodies in order to clarify the term business incubator. Having the assessment of a specialised consultant, together with the synergies that are produced between companies located in the business creation centres (incubators), gives a competitive advantage that encourages companies to form business groups or clusters.

Q5. Who are the stakeholders of the business incubators?

The key stakeholders, as identified by the respondents, are the companies, customers and society as a whole. For some of the respondents, the main stakeholders are governments, banks, universities and companies, all of which benefit from SMEs. For others corporate businesses, commercial firms, entrepreneurship supporting organisations and financial institutions are the main stakeholders for whom business incubators are facilitating. One of the respondents believes that governments, universities and development agencies such as development banks should be directly involved as key players in establishing incubators in the Arab World. Because these various stakeholders provide valuable expertise, networking and access to specific scarce and immobile resources in addition to monetary support, it is generally accepted that one of the key factors of incubation success is the application and selection process itself. In addition, factors such as the business plan, industry experience and the composition of the entrepreneurial management are also factors in the success of the

company, together with the market potential of the product or service. These factors are all considered as part of the selection process.

Q6. How to finance business incubators? Donors of funds

Financial resources are originally hypothesised to encompass all the financial activities available through the incubator. However, access to investors (angel and venture capital) is split off from the other financial resources, as they did not all load at the accepted minimums. What is left in financial resources are the indicators for economic literacy, financial and accounting assistance and access to commercial loans and specialised funds. The financial construct has no impact on incubator effectiveness, as the path coefficient is small, statistically insignificant, and, in fact, negative.

However, finance does have an influence on the organisation, the construct that represents the assembled professional services available through the incubator. This lends support to the concept that knowledge gained through the financial construct may be useful when interacting with the profession services, again lending support to the process model of incubation as a staged development. Access to financial resources is discussed in the literature as an important component of incubator effectiveness. As above-mentioned, access to angel investors and access to venture capitalists was split off from other financial resources and put into a new construct (investors).

This construct is statistically insignificant and, indeed, has a negative impact on the dependent variable. This unexpected anomaly could be explained as the influence of angel or venture capital investors when they invest in an incubator client company. It is not uncommon for investors to supply the resources (e.g. marketing assistance, MIS assistance, management team members) that were previously supplied by the incubator, possibly causing the client company to abandon or otherwise leave the incubator. It is quite common for venture capitalists and angel investors to take an active role in the management of their client companies, and this could result in the client requiring fewer

resources from the business incubator, or even leaving the incubator without 'graduating', *per se*, but moving under the wing of their respective investors.

Q7. *How to select the business incubator supervisory board?*

The board is selected by creating a panel of business professionals in the field of entrepreneurship and who are not employees, as the panel should be entrepreneurs. The manager is the representative of the credit institution and the local banks. Most of the respondents believe that the supervisory board is chosen by implementing the acceptance of the donor or the agency. The board of the business incubator is often appointed by the founders, and its task is to protect the implementation of the intention of the founders.

Q8. *How to select the best possible incubator manager?*

The best incubator manager struggles with their start-up business, and is involved in the tenant selection, coordination and the day-to-day operations. The manager needs to be responsible for all the components of an incubator and will serve as a mentor, coordinator and a facilitator. This manager is linked within the business community by bringing the experience, resources and the contacts. The best criteria to select the incubator manager are that the individual needs to be innovative and cooperative and should have a vision. As stated by participants, one of the main expectations is an excellent ability to develop the contacts and rapport, as the entrepreneurs are difficult people with whom it is not easy to develop a trouble free working relationship. The management responsibilities of the business incubator cover a broad spectrum of areas, so that it is not possible to find someone who possesses all the skills that are required to manage such an attendance and facility programme. Every incubator needs a committee of specialists.

However, few studies have focused on measuring the business incubation process, due to a lack of reliable and valid scales, resulting in 'anecdotal' and 'fragmented' data, leaning toward description for the

business incubation practitioner. Due to the many factors influencing the success or failure of new venture development, and the lack of an agreed-upon model for describing the incubation process, together with a lack of reliable and valid scales that capture this process, measurement is difficult and research has not yet been able to answer the question, "if the incubatee had not been incubated, would there be any difference in the survival rate of new ventures?"

In an effort to fill this gap in the literature, Hackett and Dilts (2004) proposed and developed an options-driven theory that they proposed would be the most suitable theoretical approach for developing a theory of business incubation able to explain and predict incubation outcomes. Based on this new theoretical model, Hackett and Dilts conducted an exploratory study in which they empirically tested and developed a set of scales they suggest can measure the constructs that capture the process of business incubation. These were defined in their theory as selection performance, monitoring and business assistance intensity, and resource munificence (Hackett and Dilts, 2004).

Q9. *What are the reasons for offering (or not offering) particular services?*

Incubators provide a valuable service, not only to the fledgling businesses that are their clients, but also to the economies of the communities and academic institutions that they serve. This research assumes that incubators will continue to be a valuable resource for the communities and institutions they serve. It is also assumed that definitions of success will be important to incubators, and to the client companies, and that incubators will continue to be selective in choosing their client companies and in the allocation of the scarce and valuable resources they provide.

Services are mostly offered according to the quality of projects in the incubator, because each area has a different form of services. According to some of the respondents, the services are offered in terms of the region, aim and objectives; this is because each incubator has characteristics

and aims. It depends on the client's requirements, aims or goals, which are the reason for offering some services and it might be incubator type or region or objectives.

An incubator is really an intervention system that hopes to increase the likelihood of a start-up succeeding by intervening in the start-up process to provide necessary resources. In this equation the incubator management intervenes with the start-up at a strategic moment in time to provide certain resources (i.e. education, alliances, access to a network of financial providers) that enable the start-up to survive to another stage. It is important to note here that this theory focuses not so much on the facility of an incubator, but the process of incubation (or, more correctly, business intervention) as a driver of success. Not only is it the process and the physical presence of the client company in the incubator that contributes to success, but also the inclusion of a wide range of what would be termed 'network services'.

This study suggests that integrating and exposing client entrepreneurs to a variety of resources, both within and outside of the incubator, may be additional keys to success. For example, the incubator at the University of Central Florida in Orlando has demonstrated that interaction with incubator staff and advisors, interaction among all the clients in an incubator, and interaction with outside individuals and organisations in the Orlando region that are involved in business creation and entrepreneurship, all significantly contribute to success.

Q10. What particular benefits can incubators provide for entrepreneurs and small companies?

The majority of the respondents believe that business incubation brings about shared basic operating costs. Tenants of a business share a wide range of the overhead costs, office equipment, conference rooms, receptionist and computer services. Moreover, the basic rent costs are below the normal rent for the region in which the business operates and that allows the entrepreneurs to realise additional savings. It is worth noting that the incubators do not allow the tenants to remain in the programme. Most of the lease

agreements at the incubator are for three years, with some of the programmes offering one or two year renewal options.

On the other hand, the incubation manager and the staff can proceed with insightful suggestions on a broad spectrum of the business concerns ranging from marketing to business expansion finance. Small business owners know that the people held accountable for overseeing the incubation programmes are mostly quite knowledgeable about different aspects of the business world. Most of the business incubators provide entrepreneurs with access to the early stage capital that the companies mostly need.

In other words, incubators should select client companies that are promising ventures but which would most benefit from the resource availability in the incubator, and the incubator stakeholders would benefit from supplying the resources. Barney (1991) concluded that effective entrepreneurs may not need an incubator to facilitate their start due to their business resources and skills. These include their individual networks and the access to funds; adverse selection may not support the best entrepreneur but the required one.

Q11. What are the similarities and differences between SMEs and entrepreneurship?

The main differentiating factors between small businesses and entrepreneurship were found to be the innovative ideas of an entrepreneur leading to the development of SMEs. Both of them aim towards the same objectives that are economic growth, employment reaction and economic transformation. According to X3, Egypt uses entrepreneurship development as an approach to quality-based vocational and technical training. The enterprise (sometimes called an entrepreneurial firm) is a business organisation and it could be a large business, a small business or a family business. The entrepreneur is the person who organises or operates an enterprise (business organisation). Both contribute to the economy's development either in developed or developing countries and both need to take risks. Also, SMEs and

entrepreneurship have been acknowledged to be important tools for economic transformation and economic growth of a country. Entrepreneurs take more risks and are more innovative, but they usually need support. An entrepreneur starts from nothing with no licence, while the SMEs are organised with licences and need development supporting them by financing or services.

Q12. What are the barriers to business incubation in the Arab World?

The first barrier is finance and the management of institutions of SMEs. The shortage of financial resources and access to finance, and inability to manage innovation processes inside the incubators. Some of the other main barriers are a lack of management skills and training programmes, financing, difficulties in identifying/finding partners for incubators (e.g. knowledge providers, other companies with shared incubators and product/service development interests, suppliers, consumers). Weakness of the contributions of institutions for development of SMEs, financial support and the awareness of the role can be played by the incubators. For some of the respondents, seed and angel capital, venture capital, difficulties in spotting the relevant foreign markets for innovations and new products are the main challenges. On the other hand, lack of specialists to lead the incubators and institutions interested in the SMEs or entrepreneurs are also significant in this context.

The overall response remained towards a lack of governmental leaders and support to be the main hampering factors for an increase in business incubation. The government have not understood how the incubation system works; maybe they think that the innovation centres are better. Funding, training and bureaucracy, poor performance of state institutions and the awareness of the role of business incubators, also play an imperative role in discouraging business incubators.

As a result of the availability of financial resources and providing salaries for all people, Arab oil states do not give sufficient attention to SMEs, and the citizens do not have problems with living costs.

CONCLUSIONS

The following main ideas can be summarised from the analysis.

1. Before the development of a business incubator, establishing a comprehensive business plan is significant.
2. The success of incubation is measured in terms of the success of incubated companies and the efficiency of the entrepreneurs in the targeted work areas.
3. The main services provided by the incubation are marketing, consultation, finance and office equipment.
4. Generally, the incubation period is about 18 months, but for industrial projects the incubation tenure can be three years.
5. The main incubation stakeholders are the universities, governments, banks and private companies.
6. The financial sectors, R&D centres, banks and the government are the main donors of funds for the business incubators.
7. The business incubator supervisory board is usually appointed by the manager, local authority representative or labour organisations.
8. There are no defined criteria for selecting the best manager for the incubator. However, the individual needs to show entrepreneurial skills.
9. The incubation services are provided on the basis of the aim and objective of the project, the region, the type of incubator and the capacity of the finances.
10. The major barriers to incubation services in the Arab world are a lack of information about the business incubation process, lack of government funds and lack of entrepreneurship initiatives.

Business incubation is an important tool for stakeholders and policymakers who are interested in new ways of growing, regulating or supporting businesses. Business incubation organisations are an effective advocate for better awareness of business and for regulatory change. Successful locally grown companies can stimulate other developments and they are important role models to encourage others on the entrepreneurship

path as well as slowly improving their business culture. The business incubator's Public Private Partnership (PPP) arrangements build important cross-sectorial linkages to improve social capital and trust; both of which foster better innovation and entrepreneurship. In a business incubation environment, lessons can be learned about how to foster innovation, entrepreneurship and technology transfer more easily and collaboratively than in less bounded environments.

Companies involved in business incubations reduce their on-going costs by sharing the cost of telecommunications, broadband Internet access, and the use of current technology. This was a major selling point for business incubators in developed countries in the early years of the Internet revolution, although, more recently, as the Internet has become pervasive with numerous providers, costs have reduced eroding the cost savings a business incubator can deliver. Where power and security are problematic, as in many of the more difficult environments, the business incubator can provide a safe environment with reliable utilities, possibly with its own back-up electricity generator and security guards.

Business incubators can help their clients navigate regulatory environments, which can be invaluable for clients, reducing their compliance costs and the time involved. Small businesses often do not have the resources or the contacts to navigate sometimes very difficult regulatory environments. A business incubator, with good networks, credibility and links, cannot only advise

its clients but can also play an important role in raising specific issues with policymakers that are particularly problematic for entrepreneurs, where business incubators contribute to the economy service to assist in the development and survival of new enterprises.

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BIOGRAPHICAL NOTES

Dr. Emhamad Elmansori is a Lecturer at Omar Al-Mukhtar University. Head of General Trend Department at the Faculty of Economics – Omar Al-Mukhtar University. He was a public sector employee, 1985–2005 and has been a Faculty member of the Collage of Economics, Omar Al

Mukhtar University-Libya since 2005. He was a Coordinator of the Faculty of Economics, Al-Qubbah Branch, 2006, Head of the Department of Business Administration, Omar Al-Mukhtar University, 2007. He has been published in different academic conferences.