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# Business incubators in the Arab World

## Comparative study of Jordan and UAE business incubators

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## Abstract

**Purpose** – The purpose of this paper is to determine whether the economic conditions and business strategy in the Arab countries are favourable for business incubation, and to suggest possible directions for establishing and implementing more business incubation in the Arab countries.

**Design/methodology/approach** – This study adopts quantitative strategy and uses a snowball approach for the distribution of designed questionnaire to the incubation units in Jordan and the UAE. **Findings** – The findings of the research contribute to the literature of business support services, innovation and entrepreneurship development, which enhances the knowledge and skills within the incubation units.

**Practical implications** – The implementation and development of business incubators (BIs) is a key requirement for the high technology industry. As developing countries, Arab countries have to make efforts to accelerate the birth and growth of incubators, aim of catching up with technologically more advanced countries.

**Originality/value** – The study ensures the acceleration of successful development of young entrepreneurs and their businesses in the Arab countries through the establishment and implementation directives for BIs.

**Keywords** Business, SMEs, Jordan, UAE, Incubators, Arab World **Paper type** Case study

## Introduction

Start-up small and medium enterprises (SMEs) are uncertain in nature. Entrepreneurs, although technically competent, do not always have the requisite financial, managerial, marketing or administrative capabilities needed to reduce the start-up risk. New companies often fail because entrepreneurs do not have these skills they have not hired people with these necessary skills (Masadeh, 2008). The role of SMEs in growth and development is globally recognised. It is demonstrated by the quantity of studies, research and literature dedicated to the subject. Both in industrialised and developing countries, governments have been playing a key role in defining policies, programmes and instruments which support the development of SMEs (Scaramuzzi, 2002). Unfortunately, the majority of any start-up business's capital is spent on administrative and logistics expenditures (utilities, secretarial, accountant fees and on employees' salaries whether full or part time employees), market studies and consultations, which may not be in the entrepreneurs priority. Therefore, SMEs may face significant problems and obstacles due to their lack of experience in dealing with these challenges (Hamad, 2007). SMEs need to adopt modern technology to promote business.

The emergence of new technologies and the increasing globalisation of research, development and investment have significantly changed the nature and scope of industrial competitiveness. Where the pace and pattern of technical changes have altered sharply, and many countries are being left further behind (Trade and



World Journal of Science, Technology and Sustainable Development Vol. 11 No. 4, 2014 pp. 282-293 © Emerald Group Publishing Limited 2042-5945 DOI 10.1108/WJSTSD-06-2014-0011 Investment Division, 2001). Nevertheless, several industrialised countries now have the technical infrastructure and skills for major innovations; for all the others, advanced technologies when adapted, applied, and absorbed can help improve peoples' lives. Technological progress and entrepreneurship have dramatically changed the global economic landscape (Lalkaka, 2002). These forces operate in the framework of open markets, government deregulation and privatisation, together with fresh concerns for the human condition, good governance, environment preservation, gender balance, and growth with equity (Lalkaka, 2001). The technology helps people to produce more innovations, According to (Smith, 2010, p. 5) innovation is, "The first commercial application or a new process or product or innovation is the successful exploitation of ideas". Innovation plays an important role in the development of successful economies (O'Riordan, 2008) and (Hamad and Arthur, 2011). Innovation is also widely recognised as a key factor in the economic development of a nation (Markatou, 2011), especially countries and regions that lack the capacity to innovate. Consequently, there is a lack of ability to improve their positions in the global market. Innovation helps countries and regional groupings achieve development, industrial and service sectors (United Nations, 2005). Those countries must encourage the growth of innovative and service businesses. Innovation can be a key motivation of growth, regardless of the conditions of the larger economy. It has been a topic for discussion and debate for many decades. In the nineteenth-century some economic historians observed that rapid economic growth was the result of technological progress. However, the policy interventions can play an important role.

Interventions aimed at creating an environment in which businesses can flourish are a central element of public policies, in order to improve the competitive environment of firms, large amounts of finance should be committed to the building and reinforcing of technological infrastructures, namely into the implementation and development of business incubators (BIs) (Vedovello and Godinho, 2003). One of the mechanisms employed to nurture small firms for more than three decades is, "business incubation". According to the National Business Incubation Association (NBIA, 2011), "Business incubation is a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by incubator management and offered both in the BI and through its network of contacts. A BI's main goal is to produce successful firms that will leave the programme financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalise neighbourhoods', commercialise new technologies, and strengthen local and national economies" (Hamad, 2012). Todays, a lot of attention is paid to technology transfer and commercialisation. For instance, technology incubators, technology parks, and most governmental actions are designed to support innovation creation and industrial deployment (Mazurkiewicz, 2011). Many governments view BIs as a dynamic tool for promoting new SMEs with the macro objective of economic development and job creation. The major role of BIs is to help entrepreneurs start or expand their business by providing various functions in a supportive environment (Alsheikh, 2009). The establishment of technology BIs is one measure of nurturing nascent ventures by providing focused counselling and facilitation services together with smart workspace and shared office facilities (Lalkaka, 2002).

As a broad approach to enterprise development, BIs are considered to be a positive and effective means of public intervention. Businesses generally report satisfaction from services and increases in turnover higher than non-incubated businesses (Nahayandi and Chesteen, 1988). International reports indicate that most of the Arab countries which include Libya, face numerous challenges related to the inefficiency of their goods, labour, and financial markets, as well as underdeveloped infrastructures and low levels of technological adoption and innovation (Hamad and Arthur, 2011).

The research is designed to be a descriptive study, given that it aims to describe what exists, with regard to exploring the rationale for the provision of business support, specifically business incubation as practiced by Arabic business innovation centres, and investigates the degree and extent to which their activities impact on the performance of assisted businesses.

The outcomes of this paper to contribute to the literature and thorough understanding of the incubation concept and processes especially best suited to the Arabic situation. In addition, fully academic researched knowledge on the entire incubation system will lead to addressing the implementation gaps not only in Jordan or UAE, but also regionally.

## The problem

According to the Global Competitiveness Report (Schwab, 2010) produced by World Economic Forum 2010-2011, it was concluded that most Arab countries, face numerous challenges related to the inefficiency of their goods, labour, and financial markets, as well as underdeveloped infrastructure and low level of technological adoption and innovation.

The SMEs contribution to innovation and economic growth is part of the economic system, and in the light of SMEs policies reviewed throughout the world, whether in developed countries or in the others, in particular the Arab States, which are in transition, such as Egypt, Tunisia and Libya, the SME policy rationale is strikingly consistent in its coherence and consideration of other social and economic issues. For instance, to provide employment opportunities for the elderly, youth and women, and the creation of new lifestyles, supporting the development of new forms of work organisation and new working arrangements, fostering innovation and entrepreneurship.

One of the more popular techniques to assist entrepreneurs and SMEs survive their early stage and grow and prosper in the community is so called BIs. The small BIs provide physical facilities various sizes of offices or office suites, warehousing and manufacturing space, common loading docks, shared board or meeting space, kitchen facilities and a common reception area. The incubator provides a receptionist to greet visitors and to assist tenants in using a shared copier, fax, and audio-visual equipment and often times computers (VBIA, 2011).

This study attempts to answer the following questions:

- What are the types of incubators currently in operation in Jordan and UAE?
- What are the types of financial model in Jordanian and UAE Incubation units?
- What are the target group and sectors in Jordanian and UAE Incubation units?
- What is the contribution of SMEs within the incubators to the economy in the incubation unites in Jordan and UAE?

## Aim and objectives

This research explores the rationale for the provision of business support, specifically business incubation as practiced by Arabic Business Innovation Centres and investigate

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The research investigates the development of business incubation and the policy rationale for the modality, specifically the role and importance of SME's and includes an investigation of business incubation as developed and practised by the Arab Business Innovation Centres and its impact on incubated businesses. In addition, this research will identify:

incubators in the

- (1) The type of incubators and the financial model in Jordanian and UAE Innovation Centres.
- The funding, target group and target sectors of incubators in Jordan Innovation Centres.
- The contribution of SMEs within incubated Iordan Innovation Centres.

## Research design and methodology

According to Bryman and Bell (2011), research design provides a framework for the collection and analysis of data, as a descriptive research. This study is designed to be a descriptive study, given that it aims to describe what exists, with regard to exploring the rationale for the provision of business support, specifically business incubation as practiced by Jordanian Business Innovation Centres, and investigates the degree and extent to which their activities impact the performance of assisted businesses. However, it goes beyond the scope of a descriptive study as it aims to explore and analyse the descriptive results by responding to their questions. In addition, it adopts the interpretative method with the intention of providing further meaning to the results by responding to questions. As regards to the research design of this research the framework of the study contains both types: descriptive-what things are like, and explanatory-why are they like that. Hence, this study is constructed within descriptive and analytical designs, as a case study design framework with cross-cultural data. Two types of tools research were used in this research:

- (1) a questionnaire was developed and distributed to some of BIs in Jordan; and
- opened qualitative interviews targeted some leading figures in Jordan.

## Research method

Quantitative measurement is perceived as more accurate, valid, reliable and objective than qualitative measurement, due to the former's scientific nature. However, this does not mean that qualitative research is less valuable. Research methods include specific instruments, quantitative research such as questionnaires, and qualitative research such as structured interviews and participant observation. These techniques include the need to listen and observe people from the chosen sample (Cohen et al., 2011). As a result of difficulties contacting all the incubator managers in the Arab Countries, I also try to focus on a specific geographic area (Jordan). The sampling approach used was "snowball sampling", which means that a number of incubators that fit the definition were asked to fill the questionnaire, then they forward the questionnaire to others they know matching the same definition (Welch, 1975). Using the snowball sampling method, five responses were obtained out of six required sample size; leading to a response rate of around 83 per cent. I also interviewed ten leading figures in Jordan to obtain information about SMEs, Entrepreneurship and BI in Jordan.

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## Comparison of Jordan and UAE (BIs)

This section compares Jordanian and UAE BIs along various dimensions by drawing on the results of the questionnaire. Based on framework developed by Mian, the analysis organised around three sets of variables:

- (1) describes incubator target groups, financial models and target sector of BIs;
- (2) selection process; and
- (3) services, and performance outcomes, selection and graduation and impact.

It is to be emphasised that central government is directly involved in the implementation and the monitoring of BIs in both Jordan and UAE, that is: BIs are mainly supported by public funding (they are non-profit organisations in Jordan), whose function is to reduce the cost of creating businesses by providing services, with the ultimate goal of creating jobs and sustaining regional economic development. Although there is also private sector BIs in UAE, half of BIs are promoted by the central government and therefore, the researcher takes them for comparison in with Jordan BIs in this part. However, the researcher also intend to survey BIs promoted by both the government and the private sector in the next stage of this research to have a proper understanding of the BIs environment in both countries (Figures 1 and 2).

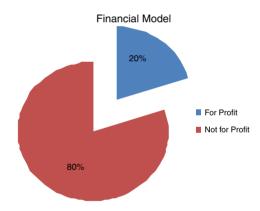
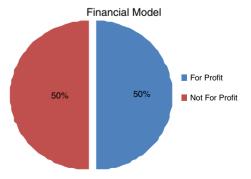


Figure 1. Financial model in Jordan



**Figure 2.** Financial model in UAE

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It is also clear from the charts below that the incubation programme is supported by government and private sectors as well in both countries (see Figures 3 and 4) (Figures 5 and 6).

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Chart 5 above shows that the target group of Jordanian Incubators are focused on all groups. All incubators focus on rural enterprises, urban enterprises and women, whereas 80 per cent of incubators focus on rural enterprises, urban enterprises women and youth or students. In all, 60 per cent of Jordanian Incubators focus on all of the aforementioned groups as well. In chart 6 there are some differences. For example, 40 per cent of incubators focus on either urban enterprises or rural enterprises or

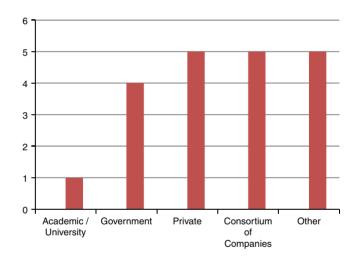
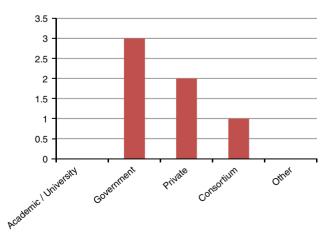


Figure 3.
Type of incubators in Jordan

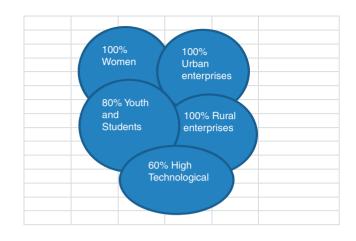


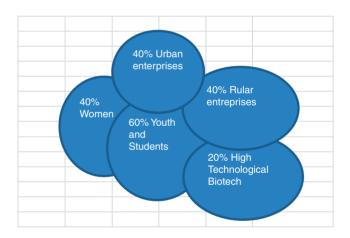
**Figure 4.** Type of incubators in UAE

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**Figure 5.**The target group of business incubators in Jordon





**Figure 6.** The target group of business incubators in UAE

women, whereas 60 and 20 per cent focus on youth and students or high technological biotech, respectively.

From Table I, the majority of Jordanian Incubators' target sectors are manufacturing and ICT, with 60 per cent of the incubators, followed by agriculture, energy and tourism with 40 per cent. The only exception is healthcare which has just 20 per cent working in this sector. In UAE, 80 per cent of the incubators are working in technology sector and 20 per cent agricultural and 20 per cent in manufacturing.

Governance structure. In Jordan, BIs, at the macro-level, are under the direction of central government, namely Jordan Enterprise Development Corporation. But at the micro-level, they are governed by local government, sometimes with participation from universities, state-owned enterprises and other sponsors. These founders and funding institutions have representatives on the BIs' Board of Directors, which is responsible for making policies and monitoring BIs.

In UAE, it has been establishing an organisation to support SMEs (Mohammed Bin Rashid Establishment for SMEs Development) the main objectives of this institution are:

- Business incubators in the Arab World
- (1) promote entrepreneurship by supporting innovation and research;
- enhance employability by providing access to quality education and professional development programmes; and
- (3) support BIs in UAE.

There is also (Business Incubation Centre) one of the pillars of Mohammed Bin Rashid Establishment for Young Business Leaders. The Centre aims to provide ideal working environment to aid in creating and developing small and medium projects, where the centre provides the ideal environment for entrepreneurs of UAE nationals to start their own private business and secure all the support they need to effectively manage and grow their enterprises at a very reasonable cost.

In recent years there has been increasing involvement of various government departments in setting up BIs. Various state (provincial) governments in both countries are also making strong efforts by setting up infrastructure and allocating funds to develop entrepreneurship. The government agencies are stepping up their effort with the aim of setting up BIs.

## BIs funding system

Incubators in Jordan 80 per cent are non-for-profit organisations; local governments provide subsidies to SMEs incubate. At the very early stage, governments often offer BIs free land and initial construction funds. For private BIs, the funding mainly depends on sponsors themselves. Bank loans are often easily accessible in the early incubator construction stages. In UAE 50 per cent of the BIs are non-for-profit supported by the government or local governments and also there are private BIs their funding depends on sponsors and government as well.

Responsibility for the assessment of new applicants. In Jordanian BIs, selection is often organised based on the project and the clients. The selection team comprises incubator staff and committee and the manager of the incubators and there are several criteria depend on the role of each incubator. For example, personal attributes idea feasibility, personal characteristics, project applied-idea, profitable business and qualification of tenants. Whereas in UAE, the selection of new application is sometimes rely on the managers or the partners of incubator. The criteria used by the incubation unit are new business, ideas level, market size, competitive advantage and new idea.

Sector	Jordan (%)	UAE (%)
Agriculture	40	20
Energy	40	_
Manufacturing	60	20
Healthcare	20	_
Tourism	40	_
Other	60 (ICT)	80 (technology)

Table I.
The target sector of business incubators in Jordan and UAE

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Services provided by BIs to clients

Jordanian and UAEs BI provide business development services at the pre-incubation and incubation period:

- (1) assistance with manufacturing practices, processes and technology;
- (2) comprehensive business training programmes;
- (3) general legal services;
- (4) intellectual property management;
- (5) marketing support (advertising, promotion, market research);
- (6) assistance with product design and development practices, processes and technology;
- (7) support with accounting or financial management;
- (8) international trade assistance (import/export facilitation);
- (9) help with presentation skills; and
- (10) legal advice on international markets regulations.

Overview of performance and outcomes in Jordanian and UAE's BIs

In this section, some outcomes are showed that characterise and indicates the performance of the incubators. The number of incubated companies can be used as indicator, accumulated number of graduated tenant firms, the number of tenant employee and also the patents or copyright have been registered for start-ups. Table II provides a number of indicators about the growth of BIs in Jordan and UAE between 2010 and 2011.

## Results

The overview of comparison of the BIs in Jordan and UAE revealed that there are number of similarities and differences in the BIs environment in Jordan and UAE. Similarities include objectives, incubation programme is supported by government and private sector, funding of new ventures, and various basic services provided to the clients. The differences include nature of structure and governance, funding of BIs, value-added service and specialists services provided by BIs to the clients. In addition, there is a big difference between Jordan and UAE in terms of number of employees of clients and the target sector as well. Although, both Jordan and UAE were helped to develop technology incubators under the initiative and support of the governments, both countries still struggled with a small number of incubators as compared with other successful incubation programmes.

Table II.
The development
and performance of
BIs in Jordan and
UAE (2011)

Statement	Jordan	UAE
Current business	38	60
Business graduated	22	17
Jobs created	648	216
Patents registered	4	2
Copyright registered	9	3

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The findings of the research indicate that provide case study examples of BIs in Jordan and UAE. In addition the provide support for further sources of information and highlight the business incubation programme as a model for demonstrating economic impact. And provide information on business incubation as a tool for fostering and strengthening innovation and entrepreneurship:

- (1) businesses that have been through an incubator programme are far more likely to succeed in the long term;
- (2) the UAE and Jordanian's incubator programmes are designed to accelerate the successful development of young entrepreneurs and their businesses through an array of support resources and services; and
- (3) launching incubation programmes is crucial for technology innovation and exporting tech-based products: the technology incubator can form a supportive component of a national innovation system.

## Conclusions

This study examines the fostering innovation and entrepreneurship in the SMEs with the help of BIs in the Arab Region. It also distinguishes the entrepreneurship and SME development. Both entrepreneurship and SME have been approved to be essential tools for the transformation and growth of economy in the country. Through this they are said to have the same objective. It can clearly be observed in this study that SME are the organisations that are engaged in any single form of business. When observing the size of the SMEs they are classified in medium and small. The definition of SMEs also varies in different countries, industries, markets, asset value and the number of employees. Alternatively, entrepreneurship can be considered as a procedure for the creation of SMEs or ventures for business which can later be observed as medium and small size business and organisations. Therefore, this study shows that entrepreneurship is a procedure that SMEs are not based on the study that is made in this research, it can be said SMEs can be considered different from entrepreneurship. However, the target that is achieved from both can be said to be same but both differ based on their definition, function and purpose as they have been discussed in Chapters 2 and 3.

We have to raise awareness of the importance of innovation and entrepreneurship for economic development and business incubation as an important tool for reaching this goal of contribution of SMEs within the incubators to the economy in the incubation unites in Jordan and UAE. This has clearly been demonstrated by this research. Furthermore special programmes and schemes to improve the effectiveness of incubators should be implemented. Development agencies like development banks should be directly involved in as a key player in establishing incubators in the Arab World.

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