

# The role of business incubators in supporting small and medium enterprises in Saudi Arabia - with reference to some international and arb experiences

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## Keywords

Business Accelerators, Entrepreneurship Project, support Networks, Technological Incubators.

## Abstract

*This study aimed to investigate the current status of Saudi business incubators and their role in supporting creativity in the leading institutions to activate Saudization efforts and fight unemployment. With reference to most important Arab and international successful experiences, and the mechanisms for their use. In addition to focusing on the challenges imposed on the development of incubators in Saudi-Arabia.*

*The study was based on the theoretical descriptive approach through reviewing the previous literature in the field of research, books, periodicals, statistics and publication with a survey of the practical reality of business incubators based on the methodology of case study of Wa'ed Center in Aramco and Bader Program for technical business incubators, interviews as a key tool for gathering information.*

*The most important results of the study show the following: the modern idea of incubators in Saudi society 'where not more than ten years' in addition to the lake of benefit from previous international experiences. the role of Saudi incubators in supporting projects is still very limited due to the lack of experience and work to nonscientific methodology and the role of incubators is limited to the establishment of social headquarters for project, as they are not supported enough to be an effective mechanism to support projects. The study found the most important factors for the success of the incubators to be considered: available possibilities, entry and exit criteria of projects, follow- up after graduation, management of the incubators professionally and finally create a mental image of success and an appropriate business environment within the incubator, and the study recommended that:*

*-The need to benefit from past experiences to set incubators in some Arabic countries, especially Egypt and regarded as a part of the technological and economic cooperation with those countries*

*-The establishment of an association of Saudi business incubators and focus on the mechanism of linking universities with incubators and partnership with the private sector*

*-Setting specific priorities for the industrial sectors to be developed using technological incubators to support projects that have global skills, providing them with more competitive capabilities*

*-Apply the idea of industrial integration of projects during the incubation period to face problems and overcome them. Finally, the study suggests a range of future researches, including a study to measure the tends of small industries towards acceptance of the idea of business incubators and another study to identify the tendencies of intrapreneurs in incubated and graduated project towards the services provided by Saudi incubators.*

## Introduction

Economy followers easily noticed the changes in most countries mainly the big turn towards small and medium-sized enterprises. Those enterprises have a great significance when it comes to investment and development due to lower cost, wide geographic spread and its ability to employ a big percentage of the workforce which leads to higher rates of economic and social growth. Furthermore, those enterprises contributed towards vertical and horizontal bundling between different economic sectors. Therefore, it was necessary that many countries provide assistance to those enterprises to overcome any struggles that they may face which in turn can lead to their failure, one of the methods used was establishing support networks that exist in many forms. Most notably the business incubators.

This research paper discusses the current situation of the Saudi business incubators and their role in supporting small and medium-sized enterprises. Saudi Aramco has established Wa'ed Center for entrepreneurship that aligns with the vision of the kingdom of Saudi Arabia 2030 as well as Bader National program for technical business incubators. In addition to shedding light on some key and successful experiences of business incubators in some Arabic and Foreign countries as well as providing the necessary methodology in order to benefit from the support for those enterprises in Saudi Arabia.

### The Problem of Research and its Importance:

It should be further noted that business incubators have not fulfilled their roles in Arab Countries in general and Saudi Arabia in particular (Al Shabrawy, 2010; Shalaby, 2012). Thus, it is very important to address the current state of those business incubators in those countries. The main aim of this study is to clarify the state of business incubators in Saudi Arabia and the role that they play in supporting small and medium-sized enterprises. And what are the most notable successful global business incubators experiences and how can we benefit from them in order to have effective incubators in Saudi Arabia.

We can conclude the significance of the current study that focuses on the role of incubators in Supporting pioneer enterprises in the Kingdom and providing all the required assistance (Hanadi&Mechael,2013). Also, it is one of the few specialized studies that specialize in business incubators in Saudi Arabia. Therefore, it acts as a start point that encourages other researchers to carry out their studies to fulfil the deficit, we currently have in this category which in turn will lead to a big positive impact on the Saudi Economy in general.

### Research Objective

This study aims to fulfill the following theoretical and practical goals:

1. Provide a conceptual framework about business incubators, and types. The difference between business incubators and business accelerators. The global experiences in this field.
2. Focusing on the most important indicators of the success of business incubators.
3. Reviewing the Saudi experience of establishing business hubs and incubators.
4. Developing of Saudi incubators to be in line with the global trends as well as supporting its role in fully backing the development projects that are related to industrial and women fields.

In order to achieve the objective of the current study, we consider the theoretical framework, the previous studies, and the study methodology

### First: The Conceptual Framework for Business Incubators.

#### The concept of Business Incubators and their objectives:

The business incubators aim mainly at incubating and sponsoring new ideas and small-scale enterprises owners by providing basic services to support initiators (Qataf, 2010, P 117) The most important definitions of Business Incubators are as follows:

The definition of "ESCWA": is a UN organization and Business Incubators are defined as an integrated package of services, facilities, and support and advisory mechanisms that it provides for a

specific period of time. The incubator is institution has its legal entity and its relationship with the entrepreneurs in order to alleviate the burdens and reduce the starting stage of their enterprises.

The definition of National Business Incubators Association "NBIA": Entities that aim to help emerging creative establishments and new entrepreneurs, it is a tool for economic development designed to accelerate the growth and success of establishments through an integrated system of support means, the main objective is to produce successful institutions that can grow and continue.

#### **Business Incubators Types:**

There are many different classifications of incubator types according to the purpose for which they were established (Rashid, 2014; Hajri, 2014; Al-Shabrawy, 2010; Awady, 2018). According to the US National Association of Business Incubators, we review the following types of business incubators:

- International Business Incubators: aim to attract foreign capital with the accompanying transfer of modern technology.
- Regional incubator: serves a specific geographical area for its development, as well as serving certain minorities or a specific segment such as women.
- Technological incubator: contains small enterprises with innovative designs for new non-traditional products with advanced machines and equipment.
- Industrial Incubator: It is established within an industrial zone
- Sector-specific incubator aims to serve a specific sector or activity such as software.
- Incubators of public non-technological projects: focus on attracting agribusiness enterprises, light engineering industries and outstanding craftsmanship enterprises.

#### **The difference between business incubator and business growth accelerators:**

Paul Graham launched the 2005 Wye Combinator, the first accelerator to help in growth of enterprises after 20 years of business incubators programs prosperity in the US. Business accelerators offer short-term intensive camps (10 weeks to 90 days) in the form of intensive courses with experienced guides and entrepreneurs, and then adopt product and a customer segment or marketer and attract investors through a day of presentations in which each institutional team will present its proposals to a wide range of individual investors. Business incubator models and business accelerators vary, although the both of them support the success of new businesses. However, there are differences between them that can be illustrated below (Adkins, 2012; Barge, 2012):

The business growth accelerators are invested in the corporate business teams, where they are subject to a fast-track process to verify the feasibility of the products and markets. Due to the speed of work required by this model, customers should not require large investments or extended product development courses as timescale of the intensive labor camps not exceeding 9 months. While business incubators provide longer-term services ranging from 3 to 5 years for a more diverse group of companies. Business incubators, unlike accelerators, are not considered means of investment, but instead concern with community wealth, employment opportunities creation.

The services provided by each of them are different. The business incubators focus on administrative and specialized consulting services, and help the enterprise achieve maturity, self-sufficiency, as well as obtaining external funding in many cases. Business accelerators focus on subjugating ideas to test the rapid effectiveness of the product, find initial customers, and attract investments for the next stage. Incubators provide flexible working space at reasonable rents during the incubation period. Many incubators work with non-resident companies. Accelerators provide space for the meeting during the camp period.

Business incubators can serve as a pre-trial headquarters for the next phase of the evolution of companies graduated from the business accelerators.

#### **Second: Literature Review**

They are classified into three groups according to the following sequence:

**A - Studies that addresses the role of business incubators in supporting small and medium enterprises in the Arab countries:**

About the role of industrial incubators as a new entry point for the development of small industries, Batat study (Batat,2007) dealt with industrial incubators as a new mechanism to support enterprises and clarify its impact on the economic reality and conducted a survey of the industrial incubators in the world and in the Arab world. The most important conclusion was that social support plays an important role in establishing the success of industrial incubators, providing the required capital and maximizing the demand for their outputs and the fact that formulation of specific objectives for the incubator, avoid entering members whose aspirations are not commensurate with the incubator objectives and negatively affects its efficiency. The researcher concluded from the analysis of global experiences that industrial incubators contributed to economic growth and the fight against unemployment. The study recommended encouraging the establishment of industrial incubators in the field of telecommunications, electronics and software.

Then the second study conducted by Al Qwassemi (Al Qwassemi, 2010) comes to aim for identifying the role of business incubators in the West Bank in supporting small enterprises. The descriptive approach was used in a questionnaire distributed to 42 individual incubated incubators. The study found several results, the notable among these results is that business incubators fail to overcome small enterprises problems, due to lack of expertise and the low rate of available potentials. The services delivery level during the incubation period was far better than that of the post-incubation period. The study recommended the importance of the follow-up of beneficiaries after introducing their enterprises to the practical life. Regarding the impact of business incubators on promoting entrepreneurship in Algeria, a study was conducted by Mahdi (Mahdi, 2015), aimed to study the impact of incubators services on incubated and graduated enterprises in the city of Annaba. The study showed a positive Intangible correlation between incubators services and the promotion of entrepreneurship. And the researcher recommended establishing alliances between business incubators, universities and scientific research centers, and encouraging the open communication between business sectors to provide the productive and stimulating environment for entrepreneurship. These study's results are similar to the study conducted by each of Dalila and Shiraz (Dalila and Shiraz, 2012) in Algeria at the University of Biskra, the research's problem was about the role of business incubators in Small Enterprises Development (SME), represented in a case study of the National Microcredit Management Agency (ANGEM), the study's recommendations focused on the necessity of activating the role of technological incubators in small multi-disciplinary enterprises, which focus on the distinctive skills and link them with the scientific institutions that provide them with more competitive capabilities, providing incentives in the distinctive enterprises of the incubator.

The Samai study (Samai, 2010) at the University of Biskra in Algeria also discussed the role of technological incubators in Small and Medium Enterprises Development (SME), He concluded that technological incubators in developed countries, such as America, play an important role in the development of small industries that require special services, high-risk enterprises, advanced technical services, intellectual work and highly specialized administrative services. Whereas incubators contribute in formulating these special types of enterprises in an advanced network including a group of partners, companies, entities and institutions, which guarantee their success. The study focused on a set of mechanisms assisting the developing countries in activating their development policies by relying on technological incubators, the set of mechanisms was to develop the relationship between technological entities, link such bodies with national institutions, set specific priorities for the required industrial sectors. On the other hand, Qassem's study in Egypt (Awadi, 2108) dealt with the role of business incubators in developing the competitiveness of Small and Medium Enterprises, The study concluded that business incubators are the effective and advanced tool to contribute in the elimination of economic and social problems facing the small

enterprises, and it recommended the importance of the establishment of multi-disciplinary technological incubators that focus on the universally outstanding craftsmanship.

Turning to business incubators reality in Kuwait, comes Al Hajri study (Al Hajri, 2014) that includes a working paper presented to the Arab Forum to enhance the role of industrial and technological incubators in industrial development. The research's problem was represented in the answer to the question of why business incubators play a fundamental role in the industrial development of Kuwait, in addition to providing a feasibility study to establish a technological incubator in the Al-Shadadiya area. The researcher found that Kuwait possesses a small number of incubators, as there are only four incubators, the feasibility study showed the effectiveness of the technological incubator being the focal point to exploit and market the outputs of scientific research, development and innovation.

On the other hand, Saket study (Saket, 2015) takes us to the role of business incubators in supporting women's small enterprises at Jordan Forum for Business and Professional Women. The researcher listed a number of conclusions and recommendations. The most important of these were that the two important factors for the success of the incubator are the accurate selection of its technical and professional director and the reduction of the operation and management costate.

We conclude this series of studies in the State of Iraq, where the absence of business incubators. The first study in this regard came to Batat and Safaa (Batat and Safaa, 2007), which aimed to measure the trends of small industries to accept the idea of business incubators in Karbala. The sample of the study included (40) industrial enterprises in a variety of fields. The two researchers found that there is a complete tendency for the sample to accept the business incubators to address their problems and raise the level of their performance, but there was a different view on the ownership of the incubators between those who support the public ownership and those who are skeptical about the administrative routine of governmental enterprises. The second study was conducted in Iraq to discuss the opportunities for setting up business incubators; Rasheed study (Rashid, 2014), which mainly aimed at benefiting from international experiences to show the opportunities and fields of establishing business incubators in Iraq. The study concluded that there are no business incubators in Iraq. However, there is a group of initiatives that should be activated towards building business incubators, as Iraq owns the necessary elements to build incubators in terms of human resources, finance, universities, research centers, etc.

Finally, we refer to one of the studies conducted at the level of developing countries by (Hanadi & Michael, 2013) where their study added a new dimension to the analysis, explaining that the impact process goes through three stage, The first stage includes the open support process for emerging enterprises, followed by the second stage that is related to the successful graduated enterprises that are mature enough to stand alone in the local market. Then, the stage of expansion comes through the growth of graduated enterprises that have a positive impact on economic development.

### **B - Studies That Address Some Global Experiences of Establishing Business Incubators:**

Some distinctive international experiences of Business Incubators are reviewed as follows:

#### **1- The United States of America Experience:**

Adkins (Adkins, 2012) notes that the US experience is one of the oldest global experiences. The concept of incubators was created and developed for the first time in the USA in the early 1950s, after the USA had found its way out of the World War II and after the spread of depression and unemployment, as well as the collapse of some traditional industries such as coal, steel. That resulted in the need to adopt a new strategy to create job opportunities. The first incubator in the United States of America was founded in 1959 at "Batavia" Business Center.

However, the real outset of the incubators' spread was precisely in 1984 when the US Micro and Small Enterprises Authority showed an interest in incubation programs. The number of incubators did not exceed 20 incubators; then it was increased significantly when the US Business

Incubation Association was founded in 1985 by some US industrialists in the form of a private institution aiming at activating the organization of incubator industry. By the end of 2000, the number of incubators in the USA reached 800 (Attar, 2008). That is in addition to the National Association of Business Incubators (NBIA) in the USA that represents the National Network of Incubators, the most important characteristics of the US Business Incubators according to the statistics of the National Association of Business Incubators (NBIA) (Adkins D., 2012; Samai, 2010) are as follows:

- Business Incubators are geographically distributed among various states, but 45% of Business Incubators are located in large cities, 36% of Business Incubators are located in rural areas, and 19% of Business Incubators are located in urban areas.
- Over 90% of incubators provide office and factory spaces, 55% of which represent plant spaces, and 41% of which are storage-activity spaces.
- Sources of funding are usually financed by the government, the sector contributes 8%, and churches and chambers of commerce contribute 5% in order to serve industries and provide job opportunities for certain social groups.
- 27% of the incubators in the United States of America are technological incubators associated with universities and educational institutes, 10% with specialized industrial objectives, 9% with specialized technological orientation (biotechnology and information technology), and 16% of the joint type: those fund by the non-governmental organizations and private authorities. Governmental authorities are responsible for financing and establishing incubators, while the private sector provides consultancy and expertise as well as financing enterprises.
- Incubated enterprises are chosen in accordance with their potentials for creating jobs, the quality of business and the possibility of rapid growth.

## 2- The French Experience

The US Experience of incubators has moved to the European Union of which France is at the forefront. It is one of the oldest experiences of the European Union, which began in the mid-1980s and now has no less than 200 incubators spread throughout the French cities (Samai, 2010; Johan, 2012).

A central institution has been recently established to organize the activity of these incubators: France Incubation. It has developed a new classification for various types of technological specialties according to which the new enterprises are divided (Samai, 2010 and Al Qawasmi, 2010) as follows: biological sciences that apply technology in the field of health and food industries; information technology and communications in the field of software, network and communications science; and humanities and social sciences. France Incubation has registered the trademark as Incubator to legalize the use of the term because there is a number of conditions to be called Business Incubator and to be able to obtain the required support. There are two distinct types of incubators in France (Al Qawasmi, 2010): the first type is manifest in Open Business Incubators that provide all financing, administrative and marketing services for small enterprises, except to provide a headquarters to establish the enterprise inside which. The second type is manifest in Closed Incubators that, other than the previous type, provide an enterprise headquarters. One of the most famous examples of French Business Incubators is the Technological Gardens "Antipolis Sofia" which was founded in 1969 and is called the Valley of Communications (Al ianousi and Al Thwaibi, 2003).

The French Experience of incubators has a number of characteristics that make it an ideal model to follow in most of the European experiences as follows:

- Incubators are distributed in an organized way in most French cities. The incubation period is not more than 23 months for enterprises in exchange for a low rent. Too.
- The vast majority of these incubators follow the local administration and the Ministry of Scientific Research and take a unified form under a non-profit governmental association.

- Incubators in France vary from Technological Incubators to enable enterprises to keep abreast of the huge development in the field of technology such as the specialized incubators in the pharmaceutical industries and the products based on nature, to Agricultural Incubators for crop development, and to Industrial Incubators and Environmental Enterprises Incubators.

### 3- The Egyptian Experience

Finally, the Egyptian Experience is moved into. It is one of the oldest and largest experiences arising in the Arab world (Al Qawasemi, 2010). The Social Fund for Development (SFD) has adopted Business and Technology Incubators as mechanisms to support the establishment of small enterprises and the development of initiators' self-employment skills. In this way, the idea of establishing the Egyptian Incubator Association for Small Business was arisen in 1995. It is a civil society organization established by businessmen and former ministers. The Association has set up a national program in several governorates aiming mainly at establishing, setting up and managing Business Incubators and technological, scientific and industrial assemblies; in addition to supervising the preparation and formation of human competencies in the field of incubations; as well as supervising the programs of cooperation with international entities in the field of incubators. Several enterprises have been started in coordination with the Egyptian universities (Shalaby, 2012). The Tala Incubator in Monufia governorate was the field of experiences which resulted in accumulated experiences contributed to the success of many other incubators (Abdul Irada, 2009).

Incubators in Egypt vary from incubators based on simplified technology to provide services or light manufacturing, to Technology Incubators that are set up near universities and scientific and technological centers such as Tabbin Institute for Metallurgical Studies (TIMS) and the incubators specialized in information, knowledge and biotechnology. The most important characteristics of the Egyptian incubators are as follows:

- The Incubator accommodates approximately 40 enterprises and the duration of incubation is 3 years.
  - The Incubator needs financial support for the first three years due to the difference between expenditures and revenues, and then self-financing is adopted through resource development.
- Egyptian Incubators are fully funded through the Social Fund for Development (SFD) until they reach the stage of self-reliance, as well as the financing through venture capital by a company partially owned by the country and partially owned by private sector investors (Al Sanousi and Al Thwaibi, 2003)

Although the Egyptian Experience in the field of Business Incubators is the first one of its kind in the Arab countries and has the lead in combining both the Technological Incubators and the venture capital (Al Qawasemi, 2010); the lack of correlation among these incubators, the governmental companies and the major sectors, in addition to the economic recession contributed to highlighting the problem of marketing the products of some incubator enterprises.

### C - Studies on the Most Important Indicators and Factors of the Success of Incubators

The studies carried out to evaluate a number of incubator programs in different countries of the world agree to identify the success or failure factors of incubators in six key components: (Saleh, 2013; Alissa, 2011; Abdul Amer, 2017; Mahdi 2015; Shalaby, 2015, p. 3)

- 1- The available potentials in the incubator and its site and creation of an appropriate work environment within the incubator. Incubators tend to concentrate in urban areas, especially cities and regions which combine the power of technology with the creative and entrepreneurial talents and the professional and financial services.
- 2 - The accuracy of selection and the existence of a clear policy for entry in and graduation from the incubator that is characterized by transparency, flexibility and disclosure.

- 3 - Acceptance of the Incubator in the Community: community acceptance and gaining trust in the incubator is one of the cornerstones of the success of the incubator's work.
4. The Suitability and Quality of Services Provided by the Incubator: The evaluation and identification of appropriate services based on what is required by work, and the interconnection between the services provided by operational services highlighting the need for which in the production processes and the strategic services in order to improve the quality of production, access to markets and access to diversified financing resources.
- 5 - Management of the Incubator in a Professional Manner: the efficiency of the incubator manager and his association with the affiliate enterprises have a great role in the success of the incubator which requires a manager whose personality is with practical experience, leadership and the ability to establish permanent and successful networks of relations. That is an addition to the availability of a skilled team of human resources with the appropriate expertise and qualifications offering professional services with the independence in budget and operation to make appropriate decisions. (Margaret, 2014, p19).
6. Creating a mental image of success plays a key role in the development of an Incubator and helps to quickly integrate into society, attract resources and partners, aid small enterprises with gaining credibility, and attract new enterprises with stronger potentials (Al Shabrawi, 2010, p. 37). Creating a mental image of success requires the collaboration of the five previous factors, and finally the good relationship with the media and the press (European Commission, 2002, p35-36).

### **Third: Research methodology**

The study was based on the theoretical descriptive approach through reviewing the previous literature in the field of research, books, periodicals, statistics and publication. With a survey of the practical reality of business incubators based on the methodology of case study of Wa`ed Center in Saudi Aramco and Bader Program for technical business incubators, interviews as a key tool for gathering information.

**Fourth: Findings/results:** this research chooses two study cases in Saudi Arabia: Wa`ed, Aramco's entrepreneurship arm, and the Badir programme for technology incubators in the King Abdulaziz City of Science and Technology.

#### **1- Wa`ed:**

Wa`ed, Aramco's Entrepreneurship Center, was established to support small and medium enterprises in response to economic transformations in Saudi Arabia and it is based on encouraging people to innovate in the technology sector. It was established in November 2011, but it has also taken upon itself the support of companies and emerging projects, benefiting from its history and experience in this field. It has launched Wa`ed, whose future is promising.

Wa`ed has supported more than 100 diverse enterprises in the country, based on creativity and the creation of diverse new ideas in the Saudi market.

In 2017, Wa`ed also signed an agreement with the General Authority for Investment to support pilot projects in the Kingdom of Saudi Arabia. This agreement provides the licensing and government services necessary for investors. Its partners in supporting entrepreneurship include: The Centennial Fund; Imagination at work; Bab Rizk Jameel; King Abdullah University of Science and Technology; King Fahd University of Petroleum and Minerals; Prince Mohammed bin Fahad University; Ryada; Schlumberger, Siemens, Umm Al Qura University, Dammam University, Jazan and finally Nama al-Munawwarah.

Furthermore, StartUp Lab (SUL) is a new generation of high-impact and locally tailored business incubators. Wa`ed launched the first SUL programme in July 2013 at the King Fahd University of Petroleum and Minerals. Here it supports innovative and unique projects, in cooperation with the university, in order to benefit from the university's public facilities. It focuses on technological projects, which contribute to the creation of joint cooperation between the university

and entrepreneurs, as well as the creation of opportunities for talented people. Also, two main programmes are actively offered at Startup Lab:

1. Business accelerators: focus on building start-ups within a short period of ten weeks.
2. Business incubators: focus on supporting innovative and high-risk projects and require full-time commitment from the project owner.

The required standards for business accelerators and business incubators center on profitability, technical standards, seed funds, concept, small size (no more than 3-4 employees), market need, full-time projects, cooperation and a business plan.

In addition, the Center offers many services that support business incubators:

1. Provides equipment and workplaces required for incubated projects.
2. Provides consultation on different aspects of business for the success of incubated projects.
3. Provides technical advice related to oil, gas, energy and information technology.
4. Provides communication opportunities with members of the board of directors and entrepreneurs, so that start-ups can take advantage of their expertise.
5. Deals with partners such as Microsoft and the Fablab Laboratory in Dhahran.
6. Seed funds, as previously mentioned. (Wa'ad, 2011)

Finally, a business incubator provides support for early-stage start-ups and is locally tailored to create high-impact ventures. Wa`ed has been supporting the business world by offering support to more than 200 participants and more than 60 incubated teams. It has achieved more than 20 successful launches (Aramco Entrepreneurship Centre, 2017).

## 2- Badir

Due to Saudi Arabia's objective to diversify its economy and focus on small and medium enterprises that will support the country's non-oil technical economy, King Abdul-Aziz City for Science and Technology (KACST) was established as the national research institution for science, technology and scientific research. Badir was founded in 2008 and the second business incubator for advanced manufacturing was established in 2010, followed by the Badir incubator for biotechnology. In 2011, the City established a system of assurance and audits of quality in Badir incubators.

King Abdulaziz City has been able to incubate 11 projects in the technology field belonging to universities and institutions in Saudi Arabia. There are branches of Badir in Saudi Arabia at the Prince Salman bin Abdul-Aziz University in Al-Kharj, Qassim, Jeddah and in the Eastern Region.

Additionally, Badir has a range of business incubators, business accelerators and programs offered to beneficiaries in all technical and developmental fields. Firstly, the Badir incubator for information and communication technology, the first incubator, was established at the end of 2008. Its scope of work is computers, communications, infrastructure, Smartphone applications and software. It helps with development in all fields and provides legal, administrative and marketing advice. It also provides equipped offices and the necessary funding and development strategies.

Secondly, the biotechnology incubator was established in March 2011 at the Faculty of Medicine, King Fahd Medical City and its scope of work is biotechnology and life sciences, health care, medicine, the environment and agriculture. It provides the same services as the Badir ICT incubator, but in the field of biotechnology. It has a pre-incubation program that includes consultancy, market research and an incubation stage, along with funding and facilities.

Thirdly, the advanced manufacturing technology incubator was established in May 2010 with the aim of achieving an advanced industrial renaissance in Saudi Arabia. Its scope of work is to innovate and develop industrial equipment and materials as well as new and innovative products that provide administrative and commercial services. Finally, the Badir technology incubator was established in August 2015 in Taif. It is the second business incubator to support technology in Taif. Its scope of work is information and communication technology, advanced manufacturing technology and biotechnology. The last business incubator to be established was Boot-camps and Accelerators.

Furthermore, Badir provides programs to support business incubators. The first one is technology groups, which are run by young Saudis (women and men) in order to share their experiences through activities. They focus on the field of technology, information technology, biotechnology, technology and nanotechnology. They provide services such as office space, inviting international speakers with experience and finding links with investors to support projects.

The second program is Technology Enterprise Funding, which assists entrepreneurs with obtaining funding for emerging technical projects, by making strategic partnerships between government and private financial funds, investor networks, financial funds, businessmen and their partners, government funds, retail and corporate investor networks, and entrepreneurship centers. This program also offers services that involve evaluating and following up investments for projects, and the establishment of networks of investors.

The third program is the Individual Investors Network (IIN). It was established in May 2012 to support individual investors in Saudi Arabia financially and administratively. It builds effective channels of funding and offers effective communication with government agencies and investors. Furthermore, it is supported by the King Abdullah University of Science and Technology, the Jeddah Chamber of Commerce and Industry, the CBA Business School, and Dar Al Hekma College. This network provides an electronic portal to investor databases and enables entrepreneurs to present their projects and organize regular meetings between investors and entrepreneurs.

Fourthly, the Incubator Support Service supports business incubators in terms of development strategies, planning, the implementation and development of marketing programs and the community education role of business incubators and improving their performance. It offers preliminary studies and feasibility studies, and the establishment of a network and external information management development relationships.

Moreover, the fifth program is Entrepreneurship, which is based on awareness-raising and the development of entrepreneurs. The sixth one is the Badir market access and soft-landing Program, which offers international assistance for small and medium-sized companies to access the Saudi market. Finally, there is the Inventors Office, which provides specialized assistance and consultancy in the fields of invention and works to develop the capabilities of inventors. It also offers follow-up on the application of the invention and provides the necessary assistance to help ensure its success.

Equally important is the Saudi network for the establishment of business incubators (SBIN), which was established in 2009. It offers guidance, encouragement and best practices for business incubators and its members' consultants, businessmen and academics.

Furthermore, additional data was collected by the researcher through a field visit to Badir. Personal interviews were conducted with a Badir member who was responsible for incubated and graduated projects. A list of open questions was used, focusing on the number of projects that had graduated from the incubator and the success of the follow-up after graduation. The most important information obtained from this interview is that the Badir business incubator had incubated 275 companies in both the service and production categories. Ninety percent of the incubated companies were manufacturing companies and 10% were service companies.

In addition, Badir graduated 27 projects from 2011 to 2016, 24 projects in 2017 and 12 projects in 2018. The interviewee said that Badir was doing follow-up work after graduation from the incubator by providing services such as accounting services, the use of meeting rooms, and inviting guest speakers to the meeting.

#### **Fifth: Result, Discussion and conclusion:**

The result of previous studies indicates that business incubators in most Arab countries – except Egypt- not live up to the level required if they compare with the developed countries of Europe and Asia, despite their importance and the great role they play in the national economy.

The study aimed to investigate the reality of incubators in Saudi Arabia and the most important emerging experiences. The study found that the Saudi business incubators have

undergone rapid development stages in the recent era, but their experience is still emerging, and the number of graduate projects is limited, making it difficult to evaluate the Saudi experience in an integrated manner at the present time. Although there some points of excellence where graduated from Bader more than 50 project, which provides financial and logistical support and services in cooperation with some international organization. Wa'ed also has partnership with Microsoft to support business and benefit from its expertise. In general, the results of the study can be noted:

- 1- The novelty of the idea of incubators in Saudi Arabia where not more than ten years, and there are only 24 incubators in Saudi Arabia, in addition to the fact that the vast majority of them do not benefit from international experiences in this field.
- 2- The role of business incubators in supporting projects is still very limited. It operates in accordance with a non-scientific methodology, with limited services provided, and its role is confined to establishing social headquarters for incubated projects.
- 3- Lack of interest in follow-up projects after leaving the incubator and only to provide places for meetings and presentation of their experiences on other projects incubated.
- 4- Business incubators are not supported enough to make them an effective mechanism for supporting new projects.
- 5- The most important factors for the success of business incubators derived from the previous studies (which are not yet available in Saudi Arabia) the available facilities, the entry and exit criteria of the projects, the continuous follow-up after graduation, the professional management of the incubator and finally the creation of an appropriate business environment within the incubator.

#### **Sixth: Recommendations**

**According to the study's results, we produce the following recommendations**

- 1- Establishing an association for Saudi business incubators to support and organize business incubators administratively, financially and legally.
- 2- Activate the role of chambers of commerce and industry to serve as a virtual incubator to provide more support.
- 3- To take benefits from the experiences of foreign and Arab countries, especially Egypt, as part of the technological and economic cooperation of these countries.
- 4- Business incubators should establish alliances with research centers, universities, banks and business sectors to provide a productive and stimulating environment for entrepreneurship.
- 5-It is recommended to adopt a strategy of diversification in the ownership of incubators, with the priority of the public sector as the private sector contributes to the mechanisms of capital risk.
- 6- Setting specific priorities for the industrial sectors to be developed and the most favored segments of the community and joining the incubator.
- 7- Apply the idea of industrial integration of projects during the incubation period to face problems and overcome them.
- 8- Determining accurate criteria for selecting projects that fit the objectives of the incubator in order to avoid the entry of members whose ambitions do not match the goals of the incubator
- 9-Follow-up projects after graduation, even for a specified period of time to promote them, and provide incentives for outstanding projects, with continuous evaluation of the incubator program to improve performance and maximize the added value of the associated projects.

#### **Seventh: Limitation and direction for future research**

In light of the limited study we suggest the following research:

- Measuring the trends of small industries in Saudi Arabia towards accepting the idea of business incubators.
- Evaluating the performance of business incubators by surveying the opinions of entrepreneurs in the projects incubated towards the services provided and their development.

## References

- Adikines, D. (2012). What are the new venture Accelerators? *NAIA Review*, 27(1), P.4.
- Abdul Amir, A. (2017). Business Incubators and Their Role in Establishing Small Project. Iraq: Case Study, University of Qadisiya, unpublished *Master Thesis*.
- Abdu Irida, H. (2009). The role of business incubators in facing the cost of transition to market economies. University of Mustansiriya: Faculty of Management and Economics.
- Alissa, H. (2011). Evaluation of the Role of Female Business Incubators in Support of Women's Projects in Kuwait. *Master Thesis*, Faculty of Administrative and Financial Sciences: Gulf University, Bahrain.
- Al Hajri, A. (2014). The Role of Business Incubators in Industrial Development in Kuwait. In *the Conference of Technological Business Incubators in Industrial Development*. Kuwait. 12-14 October.
- Al Qawasmi, M. (2010). The Role of Business Incubators in Supporting Projects in the West Bank. *Master Thesis*, University of al Khalil, Palestine.
- Al-Sinousi, R. and Al-Thawaibi, A. (2003). Business incubators and microenterprises. Arab Center for Human Resources Development, Benghazi: Libya.
- Al-Shabrawy, A. (2010). Business Incubators: Field Concepts and Global Experiences. Publications of the Islamic Cultural Organization, ISESCO: Rabat, Morocco.
- Awadi, M. (2018). Business incubators as a model for activating the sustainability of small enterprises. Working paper presented to the *National Forum in Aljazayir*: Faculty of Economic and Commercial Sciences. Aljasayir.
- Barge, R. (2012). Understanding seed Accelerators and their impact on Business incubation. In: *NBIA International conference on Business incubation*, Atlanta, GA, May.
- Batat, K. and Safa, J. (2007). Measuring the trends of industries in Karbala to accept business incubators. University of Karbala: Iraq.
- Dalila, B. and Shizar, H. (2012). The role of incubators as a tool to support small projects Case Study of Biskra State. In *the National Conference: Ajazayir*. 22-24 May.
- European Commission (2002). "Benchmarking of business incubators" center for Strategy and evaluation services.
- Hanadi, M. & Mechael, B. (2013). The Effect of business incubation in developing countries. *European Journal of business & innovation research*, 6(1), pp. 19-25  
<https://badir.com.sa/ar/programs/sbin>  
<http://www.waed.net/en/home.html>
- Johan, B. & al (2012). The Evolution of Business Incubation: Comparing demand and supply of business incubation services across different incubator generation. *T echnovation*, (1) pp.110-121.
- Mahdi, J. (2015). The impact of business incubators in boosting entrepreneurship in Annaba. *Journal of Economic Sciences*, 16(2), pp.16-19.
- Margaret, C. (2014). Business incubation in the Eastern cape; A case study. *International Journal for Innovation Education Research*, 2(5), pp. 76-89.
- Qataf, H. (2010). Technology incubators as a mechanism to support creative projects: a study of some international experiences. Faculty of Economic and Commercial Sciences, University of Biskra.
- Rashid, T. (2014). Small and Medium Enterprise Support Strategy in Saudi Arabia - With Reference to the Iraq Experience", Anbar University: *Journal of Economic and Administrative Sciences*, 5(10), pp. 145-150.
- Samai, A. (2010). The Role of Technological Incubators in Support of Small and Medium Enterprises. *Journal of Economic and Administrative Research*, 6 (7) pp. 133-164.
- Saleh, Ta. (2013). Ways to Upgrade Business Incubators in Algeria in Light of Global Experiences. *Master Thesis*: Faculty of Economic and Commercial Sciences, University of Marbaha: Warglat, Aljazayir.
- Saket, W. (2015). Business Incubators: The Experience of the Jordanian Business and Professional Women Forum - *Paper presented to the Forum of Arab Women*. Jordan. 22-27 May.
- Shalaby, N. (2012). The Role of Small Business Incubators in Supporting Arab Creativity. *Afaq Economic Journal*: University of Dubai, (97) pp. :123-124.
- Shalaby, N. (2015). Proposed Model for Technical Incubator in Saudi Arabia" Working Paper presented to the *Symposium on the Reality of Small Enterprises*, Chamber of Commerce and Industry: Saudi Arabia.