إقـــرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

"Developing a National Practitioner's Toolkit for the Incubators and Accelerators in The Palestinian Territories"

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برنامج الدراسات العليا المشترك بين

العليا أكاديمية الإدارة والسياسة للدراسات

وجامعة الأقصى بغزة

Developing a National Practitioner's Toolkit for the Incubators and Accelerators in The Palestinian Territories

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قُدمت هذه الرسالة لإتمام متطلبات الحصول على درجة الماجستير في القيادة والإدارة

نتيجة الحكم على أطروحة الماجستير

بناءً على موافقة المجلس الأكاديمي بأكاديمية الإدارة والسياسة للدراسات العليا على تشكيل لجنة الحكم على أطروحة الباحث/ **محمد نجيب يوسف قنوع**، لنيل درجة الماجستير في تخصص **القيادة والإدارة**، وموضوعها:

"Developing a National Practitioner's Toolkit for the Incubators and Accelerators in The Palestinian Territories"

وبعد المناقشة التي تمت اليوم الأربعاء 04 محرم 1438 هـ، الموافق 2016/10/05 م الساعة الثانية عشر ضهراً، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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وبعد المداولة أوصت اللجنة بمنح الباحث درجة الماجستير في تخصص **القيادة والإدارة**.

واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله ولزوم طاعته وأن يسخر علمه في خدمة دينه ووطنه.

والله ولي التوفيق،،،

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رئاسة الأكاديمية

Declaration

I declare that:

This dissertation, "**Developing a National Practitioner's Kit for the Incubators and Accelerators in The Palestinian Territories"** is my own work that all sources used or quoted have been indicated and acknowledged by means of complete references, and that this thesis was not previously submitted by me for a degree at another University.

Mohamad Najeeb Qunoo

Signature _____, Date: __/__/____

Dedication

I lovingly dedicate this thesis to

My parents, Wife & Family,

Who has supported me every step of the way

Acknowledgement

This research would not have been possible without the guidance and the help of several individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this research.

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Abstract

This research proposes a new national regulation standard for the incubation and acceleration of business and technology incubators and accelerators in the Palestinian Authority.

The research aims to answer the following questions: 1) to what extent do the Palestinian incubators have the administration, technical and financial practitioner manual? 2) Do the Palestinian incubators have a Quality Assurance measures and to what extent do they meet them? 3) Do the Palestinian incubators meet the best practices for incubation applicant's evaluation? 4) Do the Palestinian incubators meet the best practices of the incubation graduation and termination? 5) Do the Palestinian incubators get support from donors, government and interested bodies? 6) to what extent does the technical ICT sector have the capacity to support the incubation and acceleration process.

This research uses quantitative and qualitative methods which consists of the following steps:1) stakeholder analysis 2) focus group discussion with the stakeholder to formulate the main survey items and 3) Structured Interview and survey.

The research findings and conclusions can be summarised as follows. ***First***, the Palestinian incubators are still young with the oldest established incubator is 10 years old. ***Second***, the Palestinian incubators and accelerators lack sector indicators and procedures. ***Third***, the main barriers to the developing a national practitioner's toolkit for the Palestinian incubators and accelerators are: (a) The lack of financial sustainability for the incubator/accelerator according to 50% of the respondents. (b) The insufficient capacity of governmental bodies to implement the toolkit according to over 90% of the respondents. (c) The inadequate incubation system according to management and institutional standards. And (d) The absence of any legalization involvement/laws in the issue according to over 83.3%. ***Fourth,*** the Palestinian incubators do not have a set model for incubation and still have an evolving conceptual and managerial business process.

الملخص

يقترح هذا البحث مستوى تنظيم وطني جديد للحضانات ومسرعات الأعمال في فلسطين.

يهدف هذا البحث إلى الإجابة عن الأسئلة التالية: 1) إلى أي مدى الحاضنات الفلسطينية لديها إدارة تقنيه و ماليه مطبقه في دليل الممارس؟ 2) هل حاضنات الفلسطينية لديها إجراءات ضمان الجودة، وإلى أي مدى؟ 3) هل الحاضنات الفلسطينية تلبي أفضل الممارسات لتقييم طلب الإحتضان؟ 4) هل الحاضنات الفلسطينية تلبي أفضل الممارسات من التخرج الحضانة والانتهاء؟ 5) هل الحاضنات الفلسطينية تتمكن من الحصول على الدعم من الجهات المانحة والحكومة والهيئات المهتمة؟ 6) إلى أي مدى قطاع تكنولوجيا المعلومات والاتصالات التقنية لديها القدرة على دعم عمليات الحضانات ومسرعات الأعمال.

يستخدم هذا البحث الأساليب الكمية والنوعية التي تتكون من الخطوات التالية: 1) تحليل أصحاب المصلحة و2) النقاش مع أصحاب المصلحة لصياغة بنود الدراسات الاستقصائية الرئيسية و3) الهيكلية مقابلة والمسح.

ويمكن تلخيص نتائج البحوث والاستنتاجات على النحو التالي. أولا، حاضنات الفلسطينية لا تزال شابة مع أقدم حاضنة أنشئت هي 10 سنة. وثانيا، فإن الحضانة والمعجلات الفلسطينية تفتقر إلى مؤشرات وإجراءات القطاع. ثالثا، الحواجز الرئيسية لأدوات طبيب الوطني النامية لحاضنات والمعجلات الفلسطينية هي: (أ) عدم وجود الاستدامة المالية للحاضنة / مسرع فقا ل50٪ من المستطلعين. (ب) عدم كفاية قدرات الجهات الحكومية لتنفيذ الأدوات وفقا لأكثر من 90٪ من المستطلعين. (ج) عدم كفائه نظام الحضانة. و (د) عدم وجود أي تقنين / القوانين ينظم عمل الحاضنات وفقا لأكثر من 83.3٪. رابعا، الحضانات الفلسطينية لا تملك نموذج محدد للاحتضان.

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List of Acronyms

BIs	Business Incubators
BTI	Business & Technology Incubator
BPR	Business Process Re-engineering
PICTI	Palestine Information & Communications Technology Incubator
IUG	Islamic University of Gaza
UCAS	University College of Applied Science

Chapter 1: Introduction

Introduction

Palestine has a very high unemployment rate. According to the Palestinian Central Bureau of Statistics (PCBS)[1], in Gaza, yearly average unemployment increased by as much as 11 percentage points to reach 43 percent in the fourth quarter of 2015 [2] - probably the highest in the world - and that in the West Bank dropped by 1 percentage point. In addition, the private sector in ICT is still weak and lack innovative expenditure.

In Gaza, the poverty rate reached 39 percent and with poverty in the West Bank at 16 percent, the aggregate poverty rate amounted to 25 percent. Young persons were also more likely to be unemployed with a 41.1% unemployment rate among youth aged between 20 and 24 years. However, Palestinian economy is unable to create jobs and suffers from lack of industrial material this is why it is essential to create knowledge based economy. The establishment of business incubators in Palestine aims to create more jobs, open new markets and rehabilitate and fertilize the local and national economy.

However, these incubators are still young, unregulated and operate using various evolving models. This has made it difficult to formulate national indicators for the amount of investment, business process and practitioner toolkit. The practitioner's toolkit is a way to benchmark the working of Palestinian incubators and accelerators. It provides clear set of indicators regarding the management, sustainability, financial sound policies and transparency.

This indicates that the incubators in Palestine are unregulated and need the practitioner's toolkit as a first step towards institutionalization of the technology and business incubators. Furthermore, this situation arises because the following reasons:

(a) The lack of a national body that regulates and oversee the working of incubators.
(b) The Palestinian incubation and acceleration sector is still young.
(c) The incubation and acceleration sector in Palestine is donor-based and lack sustainable funding sources.

Those problems are not exclusive to the Palestinian incubation and acceleration sector although they may differ in the severity of the problem.

Problem Statement

The business and technological incubation is a worldwide phenomenon. This is a new field that is growing and contributes to the knowledge based economy that we are living at. The Palestinian incubators seek to contribute to the local and global economy. There are 4 incubators in Palestine:

Palestine Information & Communications Technology Incubator

Business & Technology Incubator - IUG

UCAS incubator

Gaza Sky Geeks. (Incubator and Accelerator)

Those incubators are still young with the oldest only 10 years old. That is enough for the incubator to aim for more sustainability and institutional management and financial benchmarking to ensure its success.

In this context, the research will support the design and piloting of a Practitioner's toolkit for the incubators working in Palestine.

To achieve that, this research aims to answer the following questions:

1) Is a Practitioner's toolkit applicable in Palestine?
2) What are the barriers if any to design, implement and enforce a Practitioner's toolkit for incubators in Palestine?
3) What is the most suitable Practitioner's toolkit for incubators in Palestine?

Research Importance

While the incubation and acceleration in Palestine need a lot of investment, regulation and studies to make sure it achieves sustainability, transparency and high success rate, one issue that can make more progress is the ability to benchmark the incubator regarding its current state that can be evaluated regularly. Currently, there is no governing system in place in the Palestinian Territories, i.e. (a) there is no specific requirements for the incubator's financial

sustainability, transparency. (b) there is no standard incubation model to be enforced in Palestine. (c) There is no clear indicators to evaluate success of the incubators against.

Research Objectives

The research will contribute to identify, evaluate, and rank factors that influence the best practices for the incubators and accelerators in Palestine which can form a Palestinian Practitioner's toolkit for incubators.

Research Contribution

This research is the first research to discuss the issue of a Palestinian Practitioner toolkit for incubators and accelerators in Palestine. The research contribution can be stated as follows:

1- This research confirms the previously observed issue of unregulated incubators and accelerators in Palestine. It also shows that the Palestinian incubators and accelerators suffers from sustainability issues, transparency and low quality of services.
2- This research provides a theoretical framework for the research by discussing the concepts of incubation and acceleration, the literature review and the related studies.
3- This research describes the desired practitioner's toolkit characteristics from the conception of the idea to the implementation.

It has to be mentioned that this research is an exploratory research and its findings can be the base of many future research and projects that can be done on the Palestinian incubation and acceleration sector in general and in the technology sector specifically.

Thesis Structure

This Thesis is structured as follows. The Theoretical Framework is discussed in Chapter 2: Theoretical Framework.

Chapter 3 explores the incubation sector in the context of the Palestinian economy. The research methodology is explained in the Chapter 4: Methodology and data analysis. Data analysis, results and findings are detailed in Chapter 5 Data analysis, Results and Findings. The Proposed National Framework for Palestine is detailed in Chapter 6 Proposed

Incubation and Acceleration Practitioner's Toolkit for Palestine. Chapter 7 Conclusions and recommendations provides the conclusions, recommendations and future work.

Chapter 2: Theoretical Framework: The Incubation Sector in Palestine

Introduction

Recently, several business incubators have been emerged in Gaza Strip; these incubators have carried our several projects to support entrepreneurs to start their own businesses by supporting entrepreneurs in terms of financial and technical aspects. Till now, the operations of these incubators is not appropriately suitable with the commonly accepted concepts and goals of incubators. This study aims at reviewing the current status of the incubators in Gaza Strip and trying to overcome the shortcomings of them.

Background

Business incubator is an attractive tool for the economic development and helps new business growth through the provision of a support of the start-up companies and business incubation program have been the ability to generate jobs that remain in the community at a generally low public cost [3].

Business incubators attempt to accelerate the growth and success of entrepreneurial companies through a set of business support resources and services that could include physical space, capital, coaching, common services and networking connections. Their goal is to help the procedure of creating and developing young businesses by providing them the necessary support and financial and technical services.

Incubators provide numerous benefits to owners of startup businesses, their office and manufacturing space is offered at below-market rates, and their staff supplies advice and much-needed expertise in developing business and marketing plans as well as helping to fund fledgling businesses. Companies typically spend an average of two years in a business incubator, during which time they often share telephone, secretarial office, and production equipment expenses with other startup companies, in an effort to reduce everyone's overhead and operational costs [4].

Business incubators have played a key role in providing support to emerging entrepreneurs, mainly in the initial stages of their business's lifecycle. They provide a range of services from

hardware such as shared offices, access to research labs to software such access to knowledge and network pools to startup companies. Business incubators can be particularly valuable in helping to develop local economies, promote technology transfer, create new enterprises and generate jobs and fostering entrepreneurship [5].

Emergence of Incubations

The use of incubation emerged as early as 1980's in several developed countries by operating alongside other business development programs, later on, it evolved into narrow and very deep business services for supporting small selected groups of businesses.

On the other hand, developing countries began to adopt the concept of business incubation. The use of traditional business incubation methods, and their importance in enhancing growth and development, was the inspiration behind the adoption of business incubation programs among various developing countries. As argued by various economists, business incubation is a very vital tool in nurturing entrepreneurship and the development of small and medium enterprises to create more job opportunities, consequently leading to improved standards of living [6].

Incubation Programs

The incubation program is one of the most dynamic programs aimed at developing and supporting new commercial businesses. Incubators have the ability of nurturing young firms by helping them to survive during their startup stages and maintain a sustainable growth thereafter. Most importantly, helping new firms survive during their startup stages is the most crucial function of business incubators owing to the fact that, at this particular period, most new firms are vulnerable to failure and collapse. Additionally, business incubators are important in providing hands-on management practices, provision of the necessary resources, and orchestrated exposure to business strategies on critical thinking, and provision of the most important technical support for business success. Furthermore, business incubators are useful in providing new firms with the facilities to share office services, easy access to business equipment, and expandable space [7].

The Importance of Business Incubators

Business incubators support the development of start-ups by providing them with advisory and administrative support services. According to the National Business Incubation Association, an incubator's primary objective is to produce successful and financially viable firms that can survive on their own. Early incubators focused on technology companies or on a combination of industrial and service companies, but newer incubators work with companies from diverse industries [8].

Finance

Incubators help start-ups save on operating costs. The companies that are part of an incubator can share the same facilities and share on overhead expenses, such as utilities, office equipment rentals, and receptionist services. Start-ups can also take advantage of lower lease rates if the incubator is located in low-rent industrial parks. Incubators may also help start-ups with their financing needs by referring them to angel investors and venture capitalists, and helping them with presentations. Start-ups may have better luck securing financing if they have the stamp of approval of incubator programs.

Management

In addition to financial help, start-ups also need guidance on how to compete successfully with established industry players. Incubators can tap into their networks of experienced entrepreneurs and retired executives, who can provide management guidance and operational assistance. For example, a biotechnology start-up would benefit from the counsel of retired pharmaceutical executives who have first-hand experience of the drug development and clinical approval process. Similarly, a restaurant entrepreneur could learn about the difficulties of overseas expansion from retired hospitality-industry executives. Start-ups usually benefit from having respected individuals on their boards of directors and scientific advisory panels, because these individuals bring invaluable connections and experience to the table.

Synergy

The close working relationships between an incubator's start-ups create synergies. Even after the start-ups leave an incubator, the connections and networks established through these relationships can endure for a long time. Start-up entrepreneurs can provide encouragement to one another, and employees may share ideas on new approaches to old problems. Start-ups may plan joint marketing campaigns and cooperate on product development initiatives. These synergies do not necessarily exist among start-ups funded by venture capitalists, because, as Kenneth Liss points out in a March 2000 Harvard Business School Working Knowledge article, the companies that receive the funds do not necessarily know one another and they may be located in different geographic locations.

Economy

By helping new businesses prosper, incubators assist in creating long-lasting jobs for their host communities. In a March 2003 Association for Small Business and Entrepreneurship conference paper hosted by the University of Central Arkansas Small Business Advancement National Center, Northwestern Oklahoma State University professor Patti L. Wilber and her colleague cited research to write that start-ups in incubation programs have greater viability and show superior financial performance over the long term. They create long-lasting jobs for new graduates, experienced mid-career personnel, and veteran executives. This benefits communities and drives economic growth.

Typology of business incubators (Objective and Characteristics of Tenant Firms)

There are three main types of business incubators according to their overriding objective and characteristics of tenant firms [9].

General/Mixed-Use Incubators

The main goal of these incubators is to promote continuous regional industrial and economic growth through general business development. While these incubators include knowledge-intensive firms, they also include low technology firms in

services and light manufacturing. A main focus of support is access to local/regional sources of technical, managerial, marketing and financial resources.

Economic Development Incubators

These are business incubators whose main aim is to stimulate specific economic objectives such as job creation and industrial restructuring. Often the result of local government initiatives, the main goal is to help create new firms and nurture existing firms that create jobs. In some countries, this goal may target specific groups such as youth, long-term unemployed, women and minorities.

Technology Incubators

These are incubators whose primary goal is to promote the development of technology-based firms. These are mainly located at or near universities and science and technology parks. They are characterized by institutionalized links to knowledge sources including universities, technology-transfer agencies and research centers. Specific industrial clusters and technologies may also be targeted such as biotechnology, software or information and communications technologies. A main aim is to promote technology transfer and diffusion while encouraging entrepreneurship among researchers and academics. In some countries, technology incubators not only focus on new firms but also help existing technology-based small firms, including subsidiaries of larger established firms

Typology of Business Incubators (Industry Focus)

Incubator categories have varied over time as the needs of communities and the overall national economic climate have changed. Below, the incubators have been categorized according to their industry focus [13].

Technology

A technology incubator is a program that fosters the growth of companies involved in emerging technologies such as software, biotechnology, robotics, or

instrumentation. At least 50% of the clients should be technology-oriented to be classified as a technology incubator.

Manufacturing

A manufacturing incubation program is designed to assist new enterprises primarily engaged in the manufacturing sector. Because clients typically require manufacturing space in addition to office space, manufacturing incubators tend to occupy more square footage than do other types of incubators. Generally, to be considered a manufacturing incubator, at least 50% of the client firms should be manufacturing-oriented.

Mixed-Use

A mixed-use incubator (also called general purpose incubator) is a business incubation program that fosters the growth of all kinds of companies; the businesses in a mixed-use incubator are not required to fit into any specialized niche. Companies in mixed-use incubators may include service, manufacturing, technology, and other types of firms.

Service

A service incubation program fosters the development of entrepreneurial firms in the service sector. Firms may range from landscapers, graphic designers, and accountants to Internet-based companies and Web development firms. An incubation program may target a segment of the service industry or a range of service-oriented firms. Again, at least 50% of the client companies should be service firms to be categorized as a service incubator.

Other Categories

Includes all incubation programs that do not fit neatly into the four primary categories

Common Types of Incubators

Von Zedtwitz, (2003) has classified the most common types of incubators as follows [10]:

1. Regional business incubators
2. University incubators
3. Independent commercial incubators
4. Company-internal incubators
5. Virtual incubators

The regional business incubators and university incubators are those who have strong non-profit goals. Incubators that have a strong motive for profit are commonly: independent commercial incubators, company-internal incubators and virtual incubators [11] [12].

Services provided by technology incubators

Whether the incubator target is an entrepreneur or spin-off of a large firm, the range of services provided by technology incubators aim to help small firms exploit and commercialize research knowledge. These services can be divided into [8]:

1. **Physical infrastructure**

   In addition to shared office space and administrative services, technology incubators require access to specific facilities such as laboratories and testing facilities.

2. **Management support**

   Owners of new technology-based firms require the business know-how to develop and commercialize their innovations. Business support from technology incubators begins with the evaluation and selection 21 of incubator tenants based on their business plans

3. **Technical support**

   A main objective of technology incubators is accelerating the transfer and diffusion of technological know-how. Experience from incubators at the universities suggests that having an appropriate technology transfer environment is necessary for incubator firms to be able to acquire and use technology in their own development.

4. **Access to finance**

   Equity financing is essential for start-up businesses, especially technology-based firms. While venture capital funds are a potential source, they generally are not an option for firms with little experience and without a proven market record.

5. **Legal assistance**

   Tenants of technology incubators often require legal assistance for incorporation, drafting licensing agreements, and ensuring intellectual property protection (e.g. registering trademarks and patents). While legal assistance may be too expensive for all incubators to provide directly, the incubator manager can help by maintaining a legal referral service

6. **Networking**

   Networking is an important element of successful technology incubators. Incubators may organize venture forums/fairs to bring together potential investors and tenant firm owners

The Measurement of Incubators Performance

Business incubation performance is measured by how the client company's growth and financial performance at the time of incubator exit. Operationally, there are five mutually exclusive outcomes at the completion of the incubation process [13]:

1. The company is surviving and growing profitably.

2. The company is surviving and growing and is on a path toward profitability.

3. The company is surviving but is not growing and is not profitable or is only marginally profitable.

4. Company operations were terminated while still in the incubator, but losses were minimized.

5. Company operations were terminated while still in the incubator, and the losses were large.

Development Role in Economy

Economic development is the method of creating wealth by the gathering of human, financial, capital, physical and natural resources to produce marketable goods and services [14].

Business Incubation Programs are aimed at promoting economic development of its community by supporting start-up companies and their business development. These programs offer services to support the establishment and development of new and medium companies. The services could be divided into [15]:

- Start-up consulting and business planning
- Consulting in all areas important for business development and growth
- Consulting for and/or access to financing
- Training and networking.

Many nations have utilized business incubators as a mechanism for economic development. At large-scale level, incubators work to encourage employment formation and economic development by connecting expertise, knowledge, resources and technology in a valuable model to promote the development of innovative company [16].

It is believed that business incubators can help new firms and entrepreneurs to survive and grow during their start-up years and can play a key role in the economic development of a country or a region [17]. Yet, others claimed that business incubators cannot transform an economy but instead have to be incorporated into a broader change of economic strategy, investing on infrastructure as well as funding. Supporting incubators from government is

one of the attributes of majority of developing countries context of incubation programs; therefore the profit motive is not preferred [18].

Business incubators have been utilized by most of the countries across the globe as an instrument for economic development as these incubators generally serve as a safe protection for the improvement of early stage business [19].

Measuring the Impact of Business Incubators on Development

The impact of business incubators in economic development in a given country or region could be measured by reviewing their impact/revenue in these countries.

As business incubators provide a group of future economic development advantages, their actual impacts on economic development could be measured by simple quantifiable measures such as number of job creation, level of company graduation and taxes received [20].

Measuring the success of business and technology incubators

The success of incubators generally depends on the objectives of the stakeholders. At times, the objectives are not explicit from the outset nor are the mechanisms for measuring success necessarily linked to objectives. In OECD countries, incubators are considered successful when they generate income for stakeholders, develop new businesses which move out, create jobs, diffuse technology, and generate tax revenue. Like the process of innovation, the success of firms in technology incubators tends to be viewed in a traditional linear fashion: a young firm or a start-up would stay in the incubator for a couple of years, graduate and hopefully grow. [8]

The following are the NBIA best practices which lead to success [21]:

- Commitment to the core principles of Business Incubation
- Collect and assess key information.

- Decide whether the Incubator is feasible or not.
- Structure the Incubator to be financially self-sustainable.
- Structure the Incubator organization to minimize governance and maximize assistance to Incubator Businesses.
- Engage stakeholders to help business and support Incubator operations.
- Recruit staff who will manage the Incubator like a business and a manager who has the capacity to help businesses to grow.
- Choose a building that will enable the Incubator to generate sufficient revenue and also support business incubation.
- Recruit and select tenant businesses that provide revenue required in the financial model and have the potential to grow and create jobs.
- Customize the delivery of assistance and address the development needs of each business.
- Engage in continual evaluation and improvement as the incubator progresses through various stages of development and as the needs of tenant businesses change over time

Organizational Management Structure

There are three general options of legal and governance structures for business incubators with variations on each. General structures include [22]:

1. **Private, For-Profit Corporation**

   For-profit incubators are usually established by venture capitalists or private corporations intending to spin-off internal technologies that lead to significant, short-term return on investment to corporate shareholders. Such returns are usually

realized through an initial public offering or an acquisition of the start-up company. A for-profit structure is well-suited to fast growth sectors that provide high-returns in a short period of time. This structure may be more attractive to sophisticated venture capitalists and angel investors which can increase an incubators ability to attract new ventures due to improved access to sources of equity capital. A for-profit structure is easily established. A for-profit structure may not be best suited for an incubator whose overall mission is to provide for broader economic benefit to a region. With such a mission, ventures that would grow stable small and medium size businesses.

2. Independent, Not-For-Profit Corporation

Not-for-profit incubators are not driven by return on investment to shareholders and therefore can be well-suited to serve promising ventures that would provide for job creation and economic benefit to a region. A not-for-profit structure also allows for access to charitable donations and public funds. However, a non-profit incubator may experience greater difficulty in attracting investors and professional service providers to the program who want to see proof that a non-profit organization can be effectively run to promote the growth of new business ventures.

3. Host Not-For-Profit Corporation

A host not-for-profit structure entails that an incubator be established under the not-for-profit umbrella of an existing corporation, such as a university foundation, community foundation, or economic development corporation. To be successful, incubators that operate under the umbrella of a host must meet the not-for-profit objectives of the host, but must be operated independently so that the incubator is not overshadowed by operations and culture of the host operation. Independent operations can be accomplished by establishing an incubator advisory board that acts in the capacity of a board of directors to provide strategic oversight to the incubator program while the host organization serves as the fiscal agent. The advisory board includes one or two representatives from the host corporation, and

representatives from the investment and business communities who are experienced in new business start-ups. A hosted not-for-profit structure allows the incubator access to charitable donations and public funds that are administered through the host. A hosted incubator allows for rapid roll out of the incubator project (compared to an independent not-for-profit structure). A strong host can also provide instant credibility to an incubator project.

4. Structure as a Department of the University

Another structure that could be considered is to organize the incubator as a department of the university. In this structure, incubator employees would be staff of the university. This would entail that the university see the incubator as an appropriate and logical extension of its current organization and mission. A key benefit to this structure is that it could provide the human resources to expedite the implementation phase of the incubator should the project move forward. Another positive aspect of this structure is that, as a public institution, the university is an eligible applicant for potential funding sources that appear most promising for incubator facility [23].

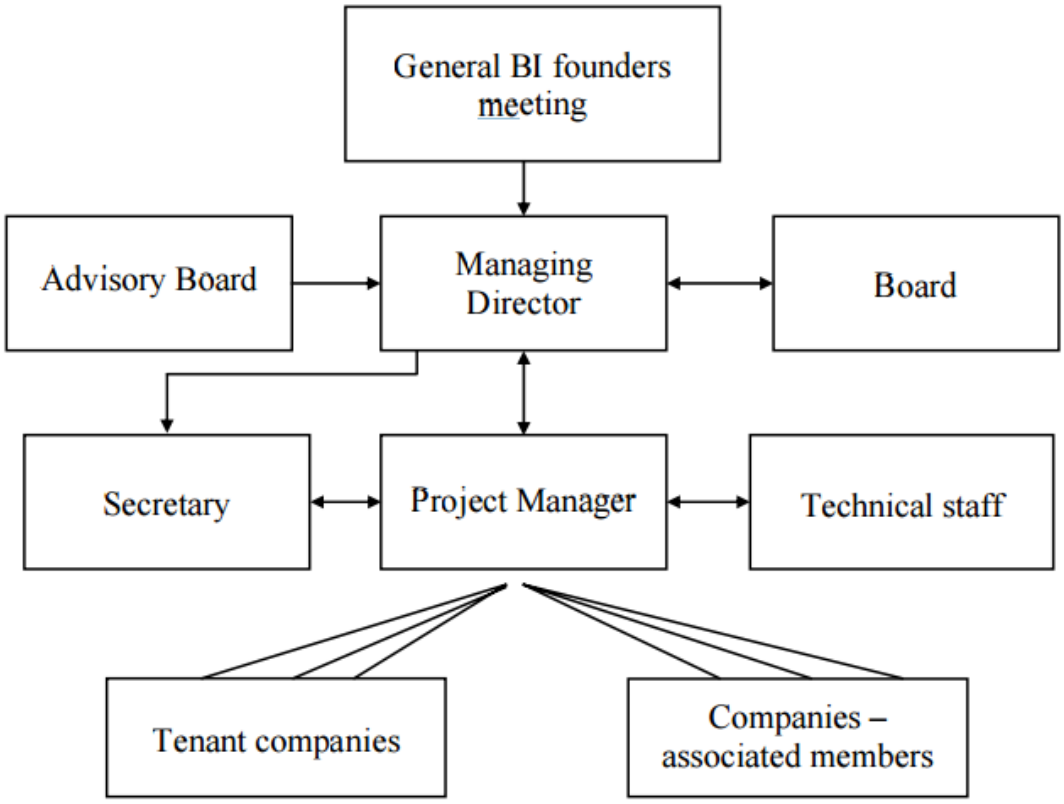


Figure 1 Structure of Business Incubator

Incubators in Gaza Strip

In spite of the fact that the incubators have emerged in other countries since 1980's, the first incubator was established in Palestine in 2004. The most important type of business incubators in Gaza is the university-based business incubators. These incubators are supported and sponsored by private sector companies, banks and other international organizations.

At the time being, there are there incubators in Gaza strip:

1. **Business and Technology Incubator (BTI)**

It was established at the Islamic University of Gaza in 2006 by a support from the World Bank. Currently, BTI is considered one of the most active business incubators in the Gaza Strip and one of the leading business start-up incubators in Palestine. BTI has implemented successfully different programs supported by the World Bank, European Union, the Netherlands Ministry of Foreign Affairs, Welfare Association, SPARK, Bid Network and other partners aiming at job creation and start-ups incubation:

There are several funded projects at BTI such as:

- **Mobaderoon Project**

  This project is funded by the Arab Fund for the Economic and Social Development and the Cooperation Foundation in partnership with the Deanship of Community Service and continuous Education at the Islamic University and the Palestinian Union of ICT PICTA. Mobaderoon1 was launched in 2010, Mobaderoon2 was launched in 2012 and Mobaderoon3 was launched in 2015.

- **SEED for Start-ups Economic Empowerment and Development**

  This project is funded by United Nations Development Program.

- **Information for Development Program**

  This project is a grant from (InfoDev) program and funded by the World Bank. The grant aims at establishing a business incubator at the Islamic University of Gaza to work on serving the community, particularly small businesses owners as well as to raise awareness of the importance of information and communication technology to improve the performance of industrial and commercial businesses in the Gaza Strip.

2. UCAS Technology Incubator

It was launched to nurture students' business aspirations and incubate small startups within the University College for Applied Sciences (UCAS), and is supported by Oxfam, Kuwait Fund and Islamic Development Bank. The incubator accepts ideas from potential entrepreneurs and university students and offers training, seed funding and logistic support.

3. **Gaza Sky Geeks (GSG)**

   It is a startup hub, incubator and accelerator in Gaza run by Mercy Corps which was established in 2011 with initial seed funding from Google.org. Its mission is to transform Gaza's most talented youth into successful startup founders who realize their own potential, create jobs and contribute to the Middle East's development as a modern business hub.

4. **The Palestinian Incubator for Communications and Information Technology (PICTI)**

   It is an independent Palestinian organization based in Ramallah with a branch in Gaza, which was established to support the growth of the Information and Communication Technology (ICT) sector in Palestine.

Strengthens of Incubators in Gaza

- The existence of several experienced or young incubators which are working on incubating and accelerating the start-ups in addition to the variety of incubation programs.
- The existence of high number of skilled ICT and business graduates
- The existence of a draft national strategy for ICT approved by the cabinet including the support of technology incubators. (not active yet.)

Weaknesses of Incubators in Gaza

- Lack of self-financing
- Poor communication between the incubators operating in Gaza
- Poor coordination and cooperative work between the incubators
- Lack of investment by private sector and businessmen in technology ideas
- Lack of protection of the intellectual property rights which might cause the entrepreneurs not to share their ideas
- Lack of experts and specialists in the field of business incubation
- Poor governmental support in financing the business incubators

- Lack of feedback studies and surveys in regards to evaluating the progress of business incubation and analyzing their activities

These are the results of a study conducted by Ministry of Telecommunication and Information Technology [46].

Chapter 3 Previous Studies

(Al-Mubaraki,2011), "The Development of Entrepreneurial Companies through Business Incubator Programs."

This study aimed to explore, investigate and identify the business incubators (BI) that are used worldwide for the development of entrepreneurial companies. Business incubation is a public and/or private, entrepreneurial, economic and social development process designed to nurture business ideas and start-up companies, and through a comprehensive business support programme, help them establish and accelerate their growth and success. The purpose of the study is, therefore to identify and develop the best practice of business incubation process based on successful implementation of case studies. The research methodologies adopted in this research study are desk-research and case study of 10 incubator organizations in the developing countries. The findings of this study indicate the business incubators as an effective and innovative tool in supporting the start up businesses. Practical implications: The empirical results highlight some implications for successfully developing and implementing best practice of business incubation program.

(P. Rice,2002), "Co-production of business assistance in business incubators. An exploratory study."

This study aimed to at explore the relationship between the managers of business incubation programs and the entrepreneurs who head the companies served by these programs. Also, to provide insights for sponsors and managers of business assistance programs that will allow them to increase program effectiveness, and to provide researchers with a deeper understanding of the theory of co-production as it is applied in the

environment of business incubators. This research project employs a multiple case study methodology where data was collected through a detailed survey instrument and in-depth interviews. This study utilized the three elements of the co-production equation: outputs, inputs of regular and consumer producers, and elasticities — to provide a framework for reporting the results of this exploratory study. The study found out that the incubator managers with greater impact invest more hours in co-production, invest more time on average in each co-production episode and engage in a broader range of co-production modalities. With respect to co-production modalities, the majority of incubators in this study engage primarily in reactive co-production — addressing a short-term problem or crisis identified by an entrepreneur. However, those incubators recording greater impact were engaged in the full range of co-production modalities — including proactive, continual co-production with some of their companies on a pilot basis. Finally, those entrepreneurs for whom co-production activities had greater impact exhibited greater "readiness" to engage in co-production. These findings highlight the importance for incubator sponsors and managers of carefully managing the balance between co-production and non-co-production activities of the incubator. They also provide useful implications for how incubator sponsors and managers should structure and deliver their business assistance programs. In addition, by customizing co-production to fit the readiness profiles of their entrepreneurs, incubator managers can enhance the aggregate impact of co-production on their portfolios of incubator companies.

(McAdam and Marlow,2007), "A preliminary investigation into networking activities within the university incubator".

This study aimed to investigate the degree to which the networking opportunities provided by the university incubator support the small firm in its pursuit of sustainability and growth. The longitudinal approach combined with a qualitative methodology, drawing upon interviewing, non-participant observations and informal discussion with a range of stakeholders associated with the incubator realized a wealth of information describing the detailed and changing picture of life therein. An Empirical evidence is presented from six in-

depth, longitudinal case studies of entrepreneurial firms based within a university incubator located within the United Kingdom. The interviews were tape-recorded and transcribed and then analyzed through the NUDIST software package. The current study highlights the specific role of the university context in networking activities, and in particular, the development of particular types of networks, namely, social and business. Having identified the role of the university in facilitating such networks, future research needs to consider how proximity and tacit knowledge establishes the trust which underpins successful networking. However, this paper has also revealed some disadvantages of university incubator placement worthy of further consideration and research, namely, how proximity between firms is seen as a threat to intellectual property rights and how the image of the academic might be seen as a disadvantage within the business community.

(Lee, Chu, Ling,2000), "The Critical Success Factors of Technology Incubators: An Empirical Study".

This study aimed to investigate critical factors that affect the success of incubators. The study used the quantitative methodology where an email survey of 193 established TIs was conducted using questionnaires. The study found out that the history and size of an incubator affect the level of its success. In general, the larger the incubator, the more likely it will succeed. Also, It helps if technology transfer is available to clients of the incubator and Cooperation and support from academic institutions and availability of entertainment facilities are positively related to the success of the incubator. In addition, the diversity and entrepreneurship of the clients are significant and the Office support, research facility, and a climate for strategic alliance are also important.

(Chen,2009), "Technology commercialization, incubator and venture capital, and new venture performance".

This study aimed to examine the effects of technology commercialization, incubator and venture capital supports on new venture performance from the resource-based view. This study uses regression analysis to test the hypotheses in a sample of 122 new ventures. The findings highlight the role of technology commercialization as a mediator between organizational resources, innovative capabilities, and new venture performance. Also, the

empirical evidence indicates that incubator and venture capital supports moderate the effects of technology commercialization on the performance of new ventures. Finally, this study discusses managerial implications and highlights future research directions.

(Hoffman and Kelley,2012), " Analysis of Accelerator Companies: An Exploratory Case Study of Their Programs, Processes, and Early Results".

This study aimed to examine leading accelerator companies in the United states. Specifically, five of the top seed capital companies or accelerators in America were selected and analyzed for purposes of this study. Due to the brief existence of accelerator companies, the limited number of graduates from accelerator programs, and limited quantitative data available, three extensive within-case and three between-case analyses were conducted. The study utilized an exploratory case study approach where the accelerators were examined through case studies, interviews, website analysis, and observation. The results led to propositions that accelerator companies use unique selection criteria and have higher success rates for their graduates. Success rates were based on new ventures that continued to receive subsequent funding or continued to pursue business endeavors versus those who failed. Findings indicate that mentorship driven programs increase the overall success rates of start-ups by providing entrepreneurs with access to angel investors and venture capitalists which tend to increase success rates.

(Xin and Jianhui, 2000), "A fuzzy evaluation method on the business incubator."

This study aimed to discusses the business incubator's current situation, the evaluation system and method. It first analyses the main function and purpose of the business incubator. And on the basis of analyzing the functions of business incubator and the traits of its management activities, an evaluation index system of the business incubator has been formed. The study employed the fuzzy multi-attribute evaluation method. This method is an analyzing tool to learn the strengths and weaknesses of business incubator. At last, Application of the method is further explained through an example. The study found out

that we need pointing out that while using this method, region where the incubator is an important factor of choosing incubator ,and the management ability is dynamic development , newly established enterprise should go on new evaluation along with its development.

(Vermulen,2000), "Business fixed investment: Evidence of financial accelerator in Europe".

This study aimed to provide empirical evidence of the presence of a financial accelerator in the four largest euro area economies: Germany, France, Italy and S pain. Usingannual firm balance sheet data over the period 1983-
1997 it is shown that weak balance sheets are
more important in explaining investment during downturns than during upturns. It is further shownthat the effects of the accelerator are largest for small firms. The study used the quantitative methodology where the financial accelerator hypothesis was tested using data on the four largest euro area economies: Germany, France, Italy and Spain. There is an evidence that a financial accelerator with different strength across size classes and asymmetric effects over the cycle is working in Europe. There is strong evidence that small firm investment is the most vulnerable to weak balance sheets. There is no evidence that small firms are victim of a stronger accelerator during downturns than outside downturns. For medium size firms and large firms there is no evidence that an accelerator is working outside downturns. However, downturns, medium firms with weak balance sheets seem to become victim of an accelerator. During downturns, large firms seem to be able to endure the storm. No evidence was found for an accelerator for them. The effect of weak balance sheets in downturns seems to be stronger in France and Italy than in Germany and Spain. Clearly further research with larger datasets is needed to address possible asymmetric effects of the financial accelerator in this dimension. Also, identifying different (real versus monetary) shocks over time might provide insight in the mechanism through which balance sheet variable matter. This is of special importance for policy makers.

(Abed Al-Naby,2015), " Prioritizing Critical Success Factors for Incubated Information and Communications Technology Enterprises in Gaza Using Analytical Hierarchy Process."

This study aimed to identify and prioritize the main critical success factors affecting the Incubated Information and Communications Technology (ICT) SME's in Gaza, such factors were widely investigated through previous studies and a set of experts and managers were carefully selected to eventually choose 8 main criteria which are Human Resources, Entrepreneurs‘ characteristics, Financials, Products/Service Characteristics, Marketing, Incubators Roles, Environmental Conditions and Organization Characteristics with 23 associated sub-criteria has been suggested. The Analytical Hierarchy Process (AHP) tool was applied with the help of Expert Choice Software to achieve the goal. The study found out that for the main factors ranking; Entrepreneurs‘ characteristics comes first with 20.9% then the Marketing factor with 19.1%, while in the sub-criteria level, Marketing and Experience get the top two ranks with 11.23% and 9.86% respectively, then, the results were modified by increasing 10% for each main criteria and then the ranks were reconsidered again. Finally, the main recommendations made by the research are to enhance the entrepreneurial skills among the students by promoting innovative ways for the education process and setting separate Marketing plans for the enterprises besides the business and financial plans.

(Lin, Christopher and Lu, 2011), " Improving business incubator service performance in China: the role of networking resources and capabilities."

This study aimed to analyze the relationships between resources and capabilities in Chinese business incubators to determine the relative importance in enhancing the service performance of incubators. A mixed-method design is used consisting of an in-depth case study and structural equation modelling based on survey data. The study found out that resources relating to government policy, such as funding, may have a negative impact on incubator performance while other integrated service capabilities have little correlation with improved performance.

(L.Studdard,2006), "The effectiveness of entrepreneurial firm's knowledge acquisition from a business incubator."

This study aimed to involve the United States and Finland, explored how the entrepreneurial firm's acquisition of business processes' knowledge from interaction with incubator management positively impacts on new product development, increased technical competence, enhanced reputation and lower costs of sales to customers. In a sample of 52 firms, the study's methodology depended on single response, self-reported data. The findings suggest that the sole knowledge benefits gained by the firm, from the incubator relationship, is a perception of enhanced reputation. Also, incubator managers should focus more on assisting new technology based firms with growing the venture in the marketplace

(B. Anderson,2012), " The Gateway Innovation Center: exploring key elements of developing a business incubator."

This study aimed to identify the key components to developing a successful business incubator as an effective tool for economic development, based on the case study of an unsuccessful effort. The study methodology based on the Gateway Innovation Center case study presents an opportunity to examine some possible pitfalls of developing a business incubator. A scant four months after opening, the organizers of the incubator decided to give up on the project. Exploring the various missteps in the formation of the Gateway Innovation Center provides a better understanding of key issues in developing successful incubators. The study found out that the lack of success was attributed to five features: function following form; lack of planning; lack of expertise; lack of due diligence; and market area would not support a technology incubator.

(Abduh,2007), "Investigating and classifying clients' satisfaction with business incubator services."

The study aimed to show that a business incubation/incubator program is an enterprise development strategy, aimed at accelerating the process of formation, development, survivability and growth of new enterprises by providing those new enterprises (clients) with a wide range of business assistance including physical facilities, business counselling and

networking. The study presented results of a research conducted to investigate the level of satisfaction/dissatisfaction of the clients with the provision of those assistance services. In this study, level of clients' satisfaction/dissatisfaction with a service is calculated using a proposed framework in terms of the mean difference between the importance of the service and the effectiveness of incubator management in providing the respective service as perceived by the clients. The findings of the study indicate that clients were generally more satisfied with facility related services than the counselling and business networking assistances services. However, there are significant differences between the perceived importance attached to a number of facility related services and the effectiveness of those services, suggesting a variation of the level of clients' satisfaction.

(Dahleez,2009), "The Role of Business Incubators in Developing Entrepreneurship and Creating New Business Start-ups in Gaza Strip."

This study aimed to identify the role of business incubators in developing Entrepreneurship and creating new business ventures. It also aimed at identifying and

Studying the business incubation initiatives, business fields suitable for business incubation, services provided of business incubators, and success factors and obstacles facing business incubators. Another objective of the research is studying the level of entrepreneurship, the entrepreneurial characteristics, and the effect of demographic data & family profile on the entrepreneurial characteristics of university students in Gaza Strip. The study used mixed methodologies where it used different tools to implement this study: workshops, interviews, focus groups with experts and professionals and by designing a questionnaire to test entrepreneurial characteristics and intentions of university students toward entrepreneurship and to test their perceptions about business incubators in addition to demographic factors and personal profile of entrepreneurs. The population of the study is the students in their final year of bachelor education in selected faculties and specializations in engineering, commerce, and information technology at the Islamic University of Gaza (IUG). The questionnaire was piloted and tested for validity and reliability and data didn't follow the normal distribution. Nonparametric test were used in the study. Data was described and analyzed for the whole sample to take a general view and respondents were classified as

entrepreneurially inclined and non-entrepreneurially inclined based on their desire to establish their own business after graduation from university. The study found out that nearly quarter of the students was entrepreneurially inclined and most of them are from the engineering faculty and the business administration department. Self-satisfaction is the primary motivation behind establishing own business and money is the most required resource for establishing business. Also, there were no differences between entrepreneurially and non-entrepreneurially inclined students regarding entrepreneurial characteristics but for business skills. Two thirds of entrepreneurially inclined students were males, (26.2%) were the first child in birth order in their families. There is no dependency between entrepreneurial inclination of students and their gender and faculty but dependency exist with academic specialization. The entrepreneurial inclination of students is dependent with their father's occupation and independent with the education of their parents.

Academic courses and workshops were the most effective tools for disseminating

Knowledge about business incubators and no dependency exists between entrepreneurial inclination of students and their knowledge about business incubators.

Direct finance is the most important service to be offered by business incubators and

The training in creativity and critical thinking is the most important in training services. (44.2%) prefer to have a full partnership with the incubator for profit sharing and (58.6%) prefer to leave the incubator directly after achieving profits. Information technology is the most preferred field for incubation and (45.5%) of respondents prefer to build the incubator in technology town. Occupation, closure and siege were the most top ranked obstacles to the development and operation of business incubators.

(Ahmad Z. S. & Xavier S. R., 2012) "Entrepreneurial Environments and Growth: Evidence from Malaysia GEM Data."

This study aimed to explore the entrepreneurial activities in Malaysia through determining some demographic characteristics, expert and individual perceptions of Malaysian entrepreneurs, in addition to the environment for entrepreneurship, and to highlight Malaysia's entrepreneurial position internationally. The study was drawn from country-level data provided by the National Malaysia GEM (Global Entrepreneurship

Monitor) to evaluate the current status of entrepreneurial environments in the country. The study found out that that the early stages of entrepreneurship development in Malaysia are very dynamic and volatile. The number of early-stage entrepreneurial activities in Malaysia is still lower than in other parts of developing countries. Inadequate financial support, bureaucracy and inconsistency of government policies, lack of entrepreneurial education at tertiary level and inadequacy of entrepreneurial training are some of the important obstacles encountered by entrepreneurs in Malaysia. On the other hand, there are favorable entrepreneurial environmental conditions determined in this study that are promising: the physical infrastructures and services access towards entrepreneurship, and the financial environment related with entrepreneurship.

(Hall,2001), "Financial accelerator effects in UK business cycles".

This study used a dynamic general equilibrium model incorporating financial accelerator effects to examine interactions between corporate investment and financial conditions in recent UK business cycles. It then investigated whether a financial accelerator model, developed by Bernanke, Gertler and Gilchrist (1999), can shed light on key features of recent recessions. The study model is calibrated to broadly match UK financial conditions prevailing at the start of recent recessions, and is simulated
with and without its financial accelerator mechanism. Simulations of the model incorporating financial accelerator effects seem consistent with some of the observed features of corporate real and financial behavior in previous downturns. The study found out correspondences in recent recessions between the behavior of business investment, the financial health of the corporate sector and some indicators of the availability of finance.

(E. Stiglitz and others,2010), "The Financial Accelerator in an Evolving Credit Network."

The study aimed to explore the emergence of a network-based financial accelerator
in a credit network characterized by inside credit (i.e. credit relationships connecting agents belonging to different groups of the same sector, i.e. D firms and U firms) and outside credit (i.e. credit relationships connecting agents belonging to different sectors, i.e. firms and

banks). The findings of simulations showed that a business cycle at the macroeconomic level can develop as a consequence of the complex interactions of the

financial conditions of the agents involved. The network structure changes over time due to an endogenous mechanism of partner selection, which implies that changes of the interest rate on trade credit and on bank loans affect the number of clients of each U firm and each bank. The endogenous mechanism of partner selection affects essentially the skewness and the kurtosis of the credit network's degree distribution, increasing the likelihood of bankruptcy chains involving large firms or banks. From the exploration of the parameter space, we can infer that the credit network economy we have modelled can exhibit higher growth rates by extending more credit to finance increasing levels of production. The consequent rise of agents' leverage, the extent of which depends on the parameters' configuration, may cause an increase of systemic risk, that is a higher likelihood of bankruptcy episodes potentially leading to the deterioration of the system's financial conditions.

(Paustian and others,2013) ," Estimating Contract Indexation in a Financial Accelerator Model."

This study aimed to address the positive implications of indexing risky debt to observable aggregate conditions. These issues are pursued within the context of the celebrated financial accelerator model of Bernanke, Gertler and Gilchrist (1999). The benchmark model follows the JPT framework closely is used as a study method. The model of agency costs comes from BGG with the addition of exogenous contract indexation. The BGG loan contract is between lenders and entrepreneurs, so we focus on these two agents first before turning to the familiar framework of JPT. The study found out an evidence for the importance of financial shocks in the business cycle. But the evidence also suggests that the effect of non-financial shocks on real activity is unaffected by the inclusion of financial forces in the model. That is, the results suggest the importance of financial shocks, but not the existence of a financial accelerator. This analysis thus implies that Bayesian estimation of financial models

(Huijgevoort,2012), " The 'Business Accelerator': Just a Different Name for a Business Incubator?".

This study aimed to explore if the 'business accelerator' model is a distinct model, in comparison with other business incubator models. The study employed a theoretical framework of the different business incubator models in the history. In this framework, the "main characterizing variables" (Grimaldi & Grandi, 2005) of the different business incubator models will be reviewed and the models are placed into the 'Business Incubator Continuum' of (Allen & McCluskey, 1990) where the study conducted a qualitative research amongst 3 'business accelerator' programs, consisting of a survey questionnaire (see appendix) and 8 personal interviews with both management members and (ex-) participating start-up firm members. The study found out that the 'Business Accelerator' should be defined as a distinct model of business incubation. By comparing the "main characterizing variables" (Grimaldi & Grandi, 2005) of the business accelerator with these variables of the 'third generation' of business incubators (Allen & McCluskey, 1990), it observed two significant differences: the 'selection and admission criteria' and the 'incubation period' of 'Business Accelerator' programs. Despite for the fact that the main value-added components observed in business accelerators are largely similar to the findings in business incubators, it found interesting differences in the empirical part of the research. The 'size and quality of the mentoring network' and the amount of 'pressure and discipline' embedded in business accelerator programs, have proved to add major value to start-up firms' development. Additionally, 'Business Accelerator' programs provide major value to the start-up firms in facilitating access to future capital, as one of the main value propositions. These 3 elements are remarkable, since these weren't observed as top value-added components in previous incubator literature.

(Clarysee and others,2015), " A look inside accelerators: Building business".

This study aimed to extend Miller and Bound's(2011) study about accelerators and what its implications are on the entrepreneurial ecosystem. Their study has provided a wealth of insights regarding the categorization od accelerators, however, a lot of questions remain

outstanding due to the paucity of data. The study followed the call for more in-depth research on the origins and features of accelerator models and the heterogeneity of their strategies and operations. The study used the qualitative methodology. The study produced several interesting findings that have novel implications for the incubator and entrepreneurship literatures and practice. First, in order to categories accelerators and avoid confusion, we have slightly adapted the definition of Miller and Bound(2011). Second, the report provides a comprehensive set of diverse features to describe the architectural blueprint of an accelerator. Third, the accelerator can fit into at least three different configurations, some with more than one variant. Each of the different archetypes has its own actionable principles, depending heavily on the affiliated strategic partners (investors, corporates, government agencies etc). The model of the accelerator and its services is often dictated by or related to, the capital structure i.e. the type of funding it receives. As each stakeholder strives to invest in something they believe in to generate the right output, the study also remains cautious of whether hybrid archetypes have the ability to meet the different expectations of their stakeholders.

(Yen and others,2012), " The Explosive Growth of Business Accelerators in Los Angeles in 2012."

This study aimed to provide a comparative analysis of three business accelerators located in West LA to gain a better understanding of their operations and economical sustainability. In particular, we studied these accelerators based on five important factors – leadership, budget control, business and product development support, risk management, and startup evaluation processes – with the goal of generating certain predictors of success. The study used the quantitative method by using survey where it was sent to the companies housed within the three accelerators. Out of the 27 startups currently in the accelerators, 13 of them responded to us (one of them replied twice, but since the responses were very different, it is

assumed different people replied and considered them as separate companies). The study findings showed some optimistic results in the LA accelerator industry as a whole and believe that there is definitely potential for growth. Since the survival and sustainability of these accelerators are highly dependent on the low-probability successes of individual seed companies, however, we predict a somewhat binary outcome for each accelerator; in 5 years, some of the weaker performers will likely be out of business, while the successful ones will continue on to become major forces in the industry.

(Salido and others,2010), "The Accelerator and Incubator Ecosystem in Europe."

This study aimed to do a complete picture of the different entrepreneurial ecosystems around Europe and a better understanding of the different initiatives and best practices, Telefónica set out to map accelerators, incubators and company builders in leading European countries,1 creating a first-of-its-kind portrait of the relative density and scope of accelerators and incubators in 10 key European economies.2 By mapping the different entrepreneurial ecosystems we can understand the different stages and needs of each ecosystem, gain first-hand insights from local players through interviews, site visits and conference calls and learn how to scale up existing programmes to mobilize European talent for startups. The study findings are summarized as (1) Europe has a healthy and thriving early stage startup scene. (2) Europe and the United States have a comparable number of startup programmes per capita. The study found 260 startup programmes in the 10 countries surveyed, compared to roughly 200 in the US. Given the relative similarity in population density between the two economic areas (the US has a population of 316 million, and the 10 countries surveyed here have roughly 361 million people). This means that, on a per capita basis, Europe has roughly as many and perhaps even more accelerators than the US. (3) The number of European accelerators and incubators has increased dramatically since the start of the financial crisis. Between 2007 and 2013, the number has risen nearly 400%. (4) The accelerator and incubator landscape in Europe is diverse, with different geographical models running on different principles. In the United Kingdom and France, most accelerators and incubators are concentrated around the national capital while in other countries (i.e. Spain and Sweden),

the business startup programmes tend to be spread more evenly throughout the territory. (5) Information or benchmarks of the different programmes is not easily available. (6) European accelerator programmes vary widely in terms of the amount of equity they ask in return for funding or for accepting a company into their mentoring programme. The equity cost to attend accelerator programmes also varies greatly across and within countries. (7) Good, sound policy initiatives at the European level could do much to boost the potential of European entrepreneurs.

(Tasic,2013), " STARTUP ACCELERATORS: AN OVERVIEW OF THE CURRENT STATE OF THE ACCELERATION PHENOMENON".

This study aimed to contribute to the advancement of the entrepreneurship field by mapping the current research and definitions of the acceleration phenomenon and suggesting a number of potential investigation lines to be deployed in the upcoming years. The study depends on studies that are excessively descriptive, trying to create its own typology / taxonomy on the topic. As pointed out previously, the lack of available and reliable data, associated with the novelty of this phenomenon, has led to scant research, theoretical and empirical, leading to the existing flaws on a consensual definition of what is an accelerator and initial insights on how to measure performance of such programs, and of its accelerated startups. The study reviewed in this work provided a number of additional lines of future contributions worth noticing as the comparison among ecosystems and regions (in central and non-central areas) in other countries and continents other than North America and Europe; the analysis of how different acceleration models evolve over time, absorbing the feedback from early results and failures, while adopting legitimating characteristics founded in other programs or required by stakeholders involved (most notably, investors); the study of the variability of performance and characteristics of accelerators focused on areas other than digital startups, such as social, hardware, health etc.; the analysis of the impact accelerators have on startups according to the phase they joined the program (idea, early-stage, startup) and the long-term performance of accelerated companies, and understand the impact accelerators have on the entrepreneurial process.

(Kühl,2014), "The financial accelerator and market-based debt instruments: a role for maturities?"

This study aimed to modify the financial accelerator approach by introducing market-based debt instruments, i.e. it is allowed the debt to have a market-determined price. In addition, It introduced a maturity structure for these corporate bonds. The modified financial accelerator approach is then embedded into a New Keynesian dynamic stochastic general equilibrium model in order to investigate how the modifications change the transmission of shocks. The findings showed that, compared to the standard of the financial accelerator approach introduced by Bernanke, Gertler, and Gilchrist (1999) (BGG) framework, a dampening of shocks can occur due to the price component in debt instruments. Price changes contribute positively to the finance premium because the ability to service the debt is affected. This result crucially depends on the average maturity of the bond portfolio. The resulting attenuation effect is stronger for longer maturities. As opposed to longer maturities, shorter maturities tend to produce similar quantitative and qualitative dynamics to those obtained by the standard BGG case because the price effect vanishes. The results showed that the BGG approach can be modified by market-based debt. However, the average maturity crucially affects the dynamics.

(Coric,2010), " The financial accelerator effect: Concepts and challenges".

This study aimed to concentrate on the relationship between information asymmetry on financial markets and short-run aggregate economic fluctuations, the so-called financial accelerator effect. The study found that the financial accelerator effect offers a consistent, first-principle based, explanation of the relationship between financial markets and short-run aggregate economic fluctuations based on informational asymmetry on financial markets. This effect also offers a plausible rationalization of the severe consequences of the subprime mortgages market's crash in September of 2007. Finally, this effect, or more precisely, the prevention of its even stronger manifestation, provides a theoretical background for the credit policy measures taken during the recent crisis by many central banks and fiscal authorities. These features made the financial accelerator effect recently very popular in the broader economic community. Despite its popularity, and the recent financial crisis, which

seems to confirm its significance, the empirical literature has faced serious challenges in the empirical identification of this effect. Overall, the study found that existing empirical literature is still unable to provide robust assessments of the size and economic relevance of the financial accelerator effect.

(M.Kilcrease,2011), "Multi-factor assessment of service delivery in business incubators: Perspectives from incubator tenants".

This study aimed to identify specific incubator types, or too narrow, by identifying only one or two types. Four hundred and seventy-eight business incubator clients, representing five different incubator types, completed a survey measuring their perceptions of quality of service delivery for organizational, networking, financial, and technological services. The study found out that for-profit seed capital incubators are the most successful in delivering services in all four categories. Further, academic incubators are the least successful in delivering organizational and financial services, while private non-profit incubators are the least successful in delivering networking and technology services. These results are cross tabulated based on industry types, and implications of the results for business incubator managers and tenants are presented.

(McAdam and Marlow,2011), " Sense and sensibility: The role of business incubator client advisors in assisting high technology entrepreneurs to make sense of investment readiness status."

This study aimed to explore how incubator Client Advisors (CAs) and entrepreneurs act in concert to mound innovative ideas into plausible business plans that make sense to venture fund investors. To illustrate this process, the study draw upon empirical evidence which suggests that CAs act as sense makers between venture fund managers (VFMs) and high-technology entrepreneurs, yet their role and influence appears undervalued. The study used the qualitative approach by adopting the case study. The case study site was situated in the Republic of Ireland, an economy which has been defined by growth and expansion during the last 20 years (Barry, Bradley, and Hannan 2002) with notable support for the development of entrepreneurial firms through incubator placement. The theoretical contribution of this study was fourfold: first, this article adds to the contemporary debate by

arguing that fund managers act in a 'sense giving' capacity (Gioia and Chittipeddi 1991), yet not from their position as organisational leaders, but as investment gatekeepers. As such, they are highly influential regarding the constitution of legitimate investment readiness proposals. In fact, the fund manager's understanding of what a funding application should look like in terms of information and how it should sound when verbally presented underpins the meaning attached to investment readiness status. CAs are, in fact, acting as impression managers (Goffman1969) who mound entrepreneurial presentations to meet investor ambitions regarding ROI without losing the essence of innovation. As such, they enact sense making. Yet, this role is afforded somewhat limited legitimacy by both entrepreneurs and investors. Second, we illustrate that there is hierarchical, but contested ordering underpinning the enactment of sense making within the investment readiness process. Attaining incubator tenancy ensures that the protagonists, within the process, are brought together within a context which should facilitate the attainment of investment readiness. However, the process to construct a business proposition which meets the preferences of fund managers and so encourages them to go further than executive summary is a complex process. Third, from our evidence, we see that it is unlikely that good ideas alone will be sufficient to achieve success; whilst the fund managers recognised that a critical element of their task was to identify 'good ideas in bad hands', this challenge could be ameliorated through incubation to some degree. Yet, whilst the incubator may offer a physical space where investors, entrepreneurs and CAs can interact, the process of developing an investment relationship is far more complex, tacit and tenuous. Finally, given the fragile nature of managing multiple realities through the politics of language within a specific context, the evidence presented here certainly illuminates some of the issues raised by Callegati, Grandi, and Napier (2005) regarding the puzzle of why incubated firms are not more successful in meeting the requirements of VFMs.

Chapter 4: Methodology and data analysis

Introduction

This chapter describes the methodology of the research adopted to accomplish the objectives of the research. The term methodology is used to establish a systematic procedure for reaching the intended research results.

The purpose of any research is to search for answers to questions through the application of scientific procedures. The main purpose of this research is to study **"Developing a National Practitioner's Kit for the Incubators and Accelerators in The Palestinian Territories"**.

This chapter divided into the following sections: Research methodology, research population, instrument, statistical techniques used in the study. It also includes discussing and commenting on each question in light of the study problem.

Research methodology

There are two types of research approaches quantitative approach and qualitative approach (Naoum, 2007). Quantitative approaches seek to gather factual data and to study relationships between facts and how such facts and relationships accord with theories and the findings of any research executed previously (Fellows and Liu, 2007).

This research used quantitative research method, and used a descriptive analytical method, which studies the phenomenon as it is, describe it accurately and clarifying its characteristics through collecting, analyzing and explaining data. The researcher used two type of data sources .The first type secondary sources which are the previous studies and books that are related to the research subjects .The second type is the primary sources which are the data that the researcher collected through the questionnaire that analyzed by using SPSS.

Research population

The research population consists of all the employees who work in the incubators in Gaza (20) employee. To complete the research process the researcher made a census for the employees, so he distributed (20) questionnaire and get (13) back with response rate (65%). According to (Sekaran, 2000) the percentage of (30%) is the minimum appropriate percentage for research; therefore, this percentage is an appropriate one.

Instrument

There are two types of research approaches quantitative approach and qualitative approach (Naoum, 2007). Quantitative approaches seek to gather factual data and to study relationships between facts and how such facts and relationships accord with theories and the findings of any research executed previously (Fellows and Liu,2007). The questionnaire was designed. An English version is attached in Appendix I: Structured Interview (Arabic Version)

This research used quantitative research method, and used a descriptive analytical method, which studies the phenomenon as it is, describe it accurately and clarifying its characteristics through collecting, analyzing and explaining data. The researcher used two type of data sources. The first type secondary sources, which are the previous studies and books that are related to the research subjects. The second type is the primary sources which are the data that the researcher collected through the questionnaire that analyzed by using SPSS.

By focusing on eight constructs, the research questionnaire consists of two sections as follows:

Section (1): Consists of the general information of the respondents (**Name of The Incubator and Number of Years Working in The Field**).

Section (2): Consists of (52) item distributed in six dimensions. Table (4.1) illustrates that:

Table 4.1 Items distribution on the dimensions

Dimensions		No. of items
1.	**The availability of administrative, financial and technical strength standards for incubators and accelerators operating in Gaza Strip**	**23**
2.	**The availability of quality of services provided to companies incubated standards and the possibility of measuring these criteria**	**4**
3.	**The suitability of the process of assessing the optimal incubation practices requests**	**5**
4.	**The appropriateness of the graduation process and the end of the incubation best practices**	**5**
5.	**Over the support and transferred beneficiary governments and stakeholders to work and the success of the incubator / accelerated programs**	**10**
6.	**The readiness of the technology sector to support the incubation and acceleration process**	**5**

Total	52

Measurement scales

The researcher used a combination of measurement scales and a combination of the questions kinds. He used the open questions, yes, no questions, and he used Likert scale with some of the items in the questionnaire. All these kinds of questions help the researcher to achieve his research objectives through the respondents' answers on the questionnaire.

Data coding and editing

Once the quantitative data were obtained via the survey, the data were checked for missing values, inconsistencies and any other response errors. A coding manual was constructed which contained general instructions on how each variable was coded. For quantitative data input and analysis, the Statistical Package for Social Science (SPSS) was used. The coded data were rechecked visually for the detection of any possible data entry errors. Descriptive statistics were computed for all the variables for accuracy of inputs as follows: the range of each variable was checked for out-of-range values; frequency counts were performed; the distribution of each variable was analyzed to detect irregular answers and cases with extreme values; and the means and standard deviations were computed.

Statistical methods

Describe personal information for the respondents and analyze the dimensions: **Frequencies, Percentages and charts.** Identify to what extent the responses for items and the main dimension of the study: **Mean**. Show how much variation or dispersion exists from the mean: **Standard Deviation**.

Characteristics of respondents

Table 4.2 illustrates the characteristics of the respondents (N=13). In the following charts, we presenting the distribution of respondents according to demographic factors (**Name of The Incubator and Number of Years Working in The Field**).

Table 4.2 characteristics of the respondents

Demographic factor	Frequency	Percent
Name of the incubator		
Palestine Information and Communications Technology Incubator (PICTI)	9	69.2%
"UCAS" incubator for technology	2	15.4%

Missing	2	15.4%
Number of years working in the field		
0-2 years	3	23.1%
2-5 years	7	53.8%
Over 5 years	3	23.1%

4.8.1 Name of the incubator

Figure1 shows the respondent according to name of the incubator, we notice that (69.2%) of the respondents work in Palestine Information and Communications Technology Incubator (PICTI), (15.4%) of them work in "UCAS" incubator for technology, and (15.4%) are missing.

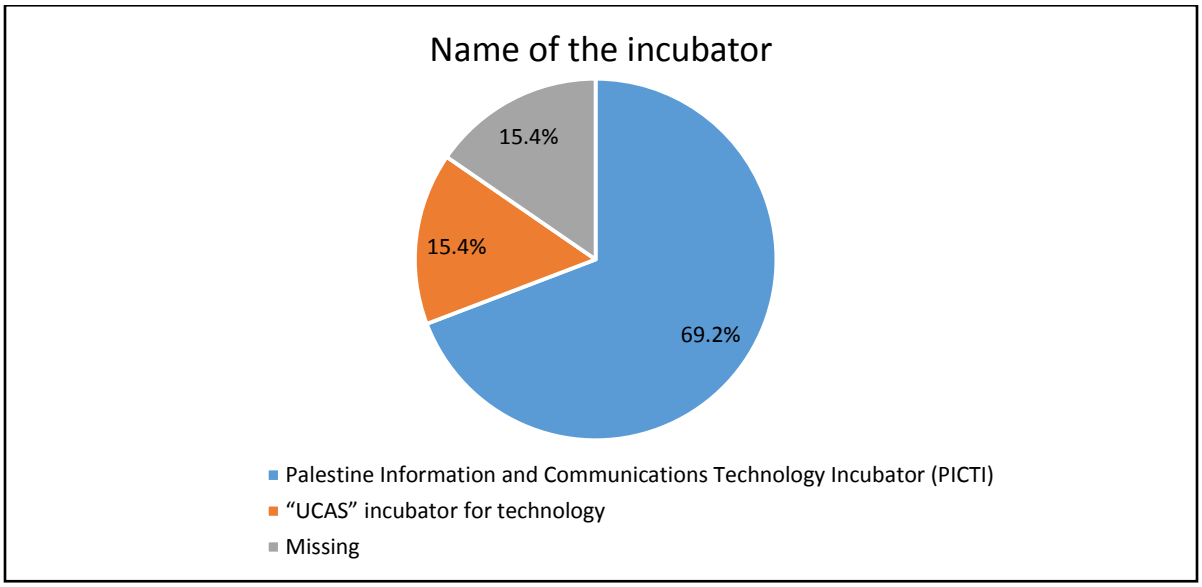


Figure (1): Distribution of respondents according to name of the incubator.

4.8.2 Number of years working in the field

Figure2 shows the respondent according to number of years working in the field, we notice that (53.8%) of the respondents work in the field since (2-5) years, (23.1%) of them work in the field since (0-2) years and the same percent work since in the field over 5 years.

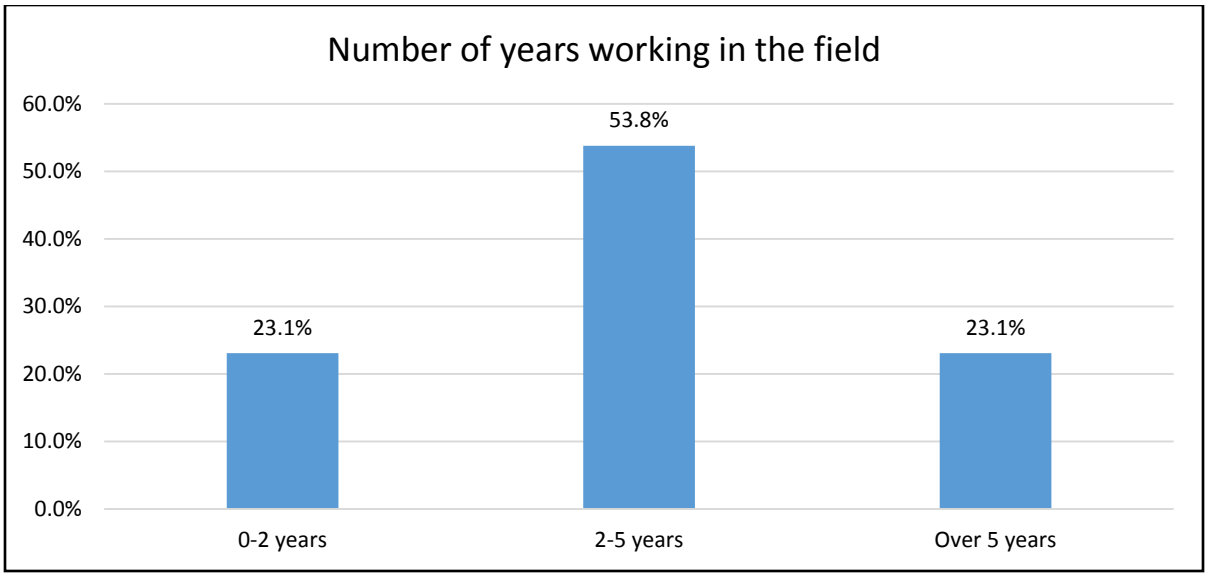


Figure (2): Distribution of respondents according to number of years working in the field.

4.9 Developing a National Practitioner's Kit for the Incubators and Accelerators in The Palestinian Territories dimensions analysis

4.9.1 The availability of administrative, financial and technical strength standards for incubators and accelerators operating in Gaza Strip

We notice that (100%) of the respondents said that It is important to have short and medium term goals, whereas (46.2%) said that there is no clear procedure to deal with the late payments which means that (53.8%) of them said that there is a clear procedure to deal with the late payments.

Table 4.3 Analysis of results for "The availability of administrative, financial and technical strength standards for incubators and accelerators operating in Gaza Strip"

No.	Item	Yes		No	
		Freq.	%	Freq.	%
1	Does your Incubation/Acceleration Program has a Clear Marketing Plan?	**11**	**84.6 %**	**2**	**15.4%**
2	Is Your Accelerator/Incubator Achieve Financially Sustainabile?	**9**	**69.2 %**	**4**	**30.8%**
3	If Your Program Is Not Financially Sustainable At The Moment, Do You Have A	**11**	**84.6 %**	**2**	**15.4%**

	Sustainability Plan?				
4	Do You Have A Timeframe To Achieve Sustainability?	**7**	**53.8 %**	**6**	**46.2%**
5	It is important to have short and medium term goals	**13**	**100%**	**-**	**-**
6	Was the incubator strategic goals approved by the higher management?	**11**	**84.6 %**	**2**	**15.4%**
9	Does The Incubation Program Has A Mission	**12**	**92.3 %**	**1**	**7.7%**
11	Is there a clear procedure to deal with the late payments?	**6**	**46.2 %**	**7**	**53.8%**
12	Do you have a steering committee?	**11**	**84.6 %**	**2**	**15.4%**
13	Do you have a board of directors?	**11**	**84.6 %**	**2**	**15.4%**
14	Do you have a clear management structure?	**11**	**84.6 %**	**2**	**15.4%**
18	Do you keep the data you collect regularly?	**11**	**84.6 %**	**2**	**15.4%**
19	Do you keep track of the temp jobs created?	**11**	**84.6 %**	**2**	**15.4%**
20	Do you keep track of annual income?	**12**	**92.3 %**	**1**	**7.7%**
21	Do you have a track record of Intellectual Property Rights achieved?	**12**	**92.3 %**	**1**	**7.7%**
22	Do you keep data regarding NGOs financial contribution to the incubator?	**11**	**84.6 %**	**2**	**15.4%**
23	Do you keep data regarding the financial contribution from private sector?	**12**	**92.3 %**	**1**	**7.7%**

We notice that (69.2%) of the respondents strongly agree that It is important to have external advisers/consultants, in addition the mean of this item equal (4.69) with a standard deviation (0.48). (23.1%) of them strongly agree that the incubator long term and short-term goals should be known to Beneficiaries, the mean of this item equal (4.15) with a standard deviation (0.56).

In addition (15.4%) of the respondents strongly disagree that It Is Important To Have A Clear Procedure For Collecting Fees From Graduating Companies, the mean of this item equal (3.69) with a standard deviation (1.44).

Table 4.4 Analysis of results for "The availability of administrative, financial and technical strength standards for incubators and accelerators operating in Gaza Strip"

No.	Item	SD	N	A	SA	Mean	SD
		%	%	%	%		
7	The incubator goals must be available to donors	-	**7.7%**	**61.5%**	**30.8%**	**4.23**	**0.60**
8	The Incubator Long Term and Short Term Goals Should Be Known To Beneficiaries	-	**7.7%**	**69.2%**	**23.1%**	**4.15**	**0.56**
10	It Is Important To Have A Clear Procedure For Collecting Fees From Graduating Companies	**15.4%**	**23.1%**	**23.1%**	**38.5%**	**3.69**	**1.44**
15	The steering committee must have member from diverse backgrounds	-	**7.7%**	**30.8%**	**61.5%**	**4.54**	**0.66**
16	It is important to have external advisers/consultants	-	-	**30.8%**	**69.2%**	**4.69**	**0.48**

17. What are the services you provide for the beneficiaries?

1. Embrace training, Place, Hospitality, Logistic services and participating in exhibitions.
2. Training, Funding, Hosting, Guidance, Marketing and Networking.
3. Providing administrative, legal and technical consultations in the field of technology and entrepreneurship. Providing entrepreneurship support services (funding, networking, specialized training, and participating in exhibitions and conferences). Renting center facilities (embrace units, conference room, permanent exhibition lobby, modern technology labs, and training halls).
4. Project idea, project planning, marketing, technical support, work environment, training, networking and guidance.
5. Administrative, financial and professional training, financial support for the project, allowing participation in exhibitions in Gaza Strip.
6. Electronic education saves time and effort to the student.

7. Financing embrace guidance and direction.
8. Administrative technical marketing and technique services, networking and financial and legal relations.
9. Marketing services.
10. Providing products, pastry, and sweets in a new way online with delivery service.

4.9.2 The availability of quality of services provided to companies incubated standards and the possibility of measuring these criteria

We notice that (92.3%) of the respondents said that they provide dedicated space for each incubated companies, whereas (69.2%) of them said that they decide the per person space based on a defined criteria.

Table 4.5 Analysis of results for "The availability of quality of services provided to companies incubated standards and the possibility of measuring these criteria"

No.	Item	Yes		No	
		Freq.	%	Freq.	%
1	Do you provide dedicated space for each incubated companies?	**12**	**92.3 %**	**1**	**7.7%**
4	Do you decide the per person space based on a defined criteria?	**9**	**69.2 %**	**4**	**30.8 %**

2. What is the average cool off period after a company graduated from the incubation program?

The respondents said that the average cool off period after a company graduated from the incubation program is one month, from two to six months and one year.

3. What is the average space provided for each company?

The average space for each company is from 3 to 10 sqm, 20 sqm, a small office in the meeting room and an individual office according to the group members.

4.9.3 The suitability of the process of assessing the optimal incubation practices requests

We notice that (100%) of the respondents said that they take into consideration the suitability of the incubator services with application of the company applying. Whereas (46.2%) of them said that they take into consideration in the selection process the whether the company has agreed on a 5 year commitment with the incubator, which

means that (53.8%) of them said that they do not take into consideration in the selection process the whether the company has agreed on a 5 year commitment with the incubator.

Table 4.6 Analysis of results for "The suitability of the process of assessing the optimal incubation practices requests"

No.	Item	Yes		No	
		Freq.	%	Freq.	%
1	Do you factor in the feasibility study in the evaluation process?	**12**	**92.3 %**	**1**	**7.7%**
2	Do you take into consideration the team ability to learn in the evaluation process?	**12**	**92.3 %**	**1**	**7.7%**
3	Do you take into consideration the suitability of the incubator services with application of the company applying?	**13**	**100%**	**-**	**-**
4	Do you ask incubated companies to sign future financial commitment in the case of the company is successful?	**11**	**84.6 %**	**2**	**15.4%**
5	Do you take into consideration in the selection process the whether the company has agreed on a 5 year commitment with the incubator?	**6**	**46.2 %**	**7**	**53.8%**

4.9.4 The appropriateness of the graduation process and the end of the incubation best practices

We notice that (84.6%) of the respondents said that the company is graduated once it meets the incubation graduation benchmark, whereas (53.8%) of them said that they do not ask the company to move out of the incubation in the case of graduation.

Table 4.7 Analysis of results for "The appropriateness of the graduation process and the end of the incubation best practices"

No.	Item	Yes		No	
		Freq.	%	Freq.	%
1	The company is graduated once it meets the incubation graduation benchmark	**11**	**84.6 %**	**2**	**15.4%**
2	Do you have a clear criterion for graduation of the companies?	**10**	**76.9 %**	**3**	**23.1%**
3	Do you ask the company to move out of the incubation in the case of graduation?	**7**	**53.8 %**	**6**	**46.2%**
4	If a company reaches the full term of the incubation period, do you graduate it?	**10**	**76.9 %**	**3**	**23.1%**

5. Over what period you collect indicator data like income. Successes ...etc.
From one to six months, one to two years, since 2010.

4.9.5 over the support and transferred beneficiary governments and stakeholders to work and the success of the incubator / accelerated programs

We notice that (100%) of the respondents said that they think that the donors understand the mission of the incubator/accelerator, whereas (84.6%) of them said that they do not believe government taxation policy is helping the incubators/accelerators.

Table 4.8 Analysis of results for "Over the support and transferred beneficiary governments and stakeholders to work and the success of the incubator / accelerated programs"

No.	Item	Yes		No	
		Freq.	%	Freq.	%
1	Do you think that the beneficiaries understand the mission of the incubator/accelerator?	**12**	**92.3 %**	**1**	**7.7%**
2	Do you think that the donors understand the mission of the incubator/accelerator?	**13**	**100%**	**-**	**-**
3	Do you think that the beneficiaries support the mission of the incubator/accelerator?	**11**	**84.6 %**	**2**	**15.4%**
4	Do you think that the donors support the mission of the incubator/accelerator?	**12**	**92.3 %**	**1**	**7.7%**
5	Do you think that the government support the mission of the incubator/accelerator?	**3**	**23.1 %**	**10**	**76.9%**
6	Do you believe that the existence of policies and produces?	**6**	**46.2 %**	**7**	**53.8%**
7	Is there a government framework for the national incubators/accelerators?	**3**	**23.1 %**	**10**	**76.9%**
8	Do you believe government taxation policy is helping the incubators/accelerators?	**2**	**15.4 %**	**11**	**84.6%**
9	There is a good cooperation between the incubator and the academic sector when needed	**10**	**76.9 %**	**3**	**23.1%**
10	In the case of an intellectual property registration, the procedures are clear and easy to follow	**8**	**61.5 %**	**5**	**38.5%**

4.9.6 The readiness of the technology sector to support the incubation and acceleration process

We notice that (61.5%) of the respondents strongly agree that The ICT sector is capable of supporting the incubation/acceleration process with a mean of (4.46) and standard deviation (0.88). (61.5%) of them strongly agree that The ICT services must be provided at a reduced price for the incubator/accelerator and We must have mechanisms to calculate the incubated company financial success with a mean of (4.62) and standard deviation (0.51). Whereas (7.7%) of them strongly disagree that Start-ups graduated from the incubation program should help the work of the incubator after the graduation with a mean of (4) and standard deviation (1.23).

Table 4.9 Analysis of results for "The readiness of the technology sector to support the incubation and acceleration process"

No.	Item	SD	D	N	A	SA	Mean	SD
		%	%	%	%	%		
1	The ICT sector is capable of supporting the incubation/acceleration process	**-**	**7.7%**	**-**	**30.8%**	**61.5%**	**4.46**	**0.88**
2	The ICT services must be provided at a reduced price for the incubator/accelerator	**-**	**-**	**-**	**38.5%**	**61.5%**	**4.62**	**0.51**
3	The incubator must be able to provide ICT services to the private ICT sector as long as it does not affect the IT eco-system	**-**	**-**	**15.4%**	**38.5%**	**46.2%**	**4.31**	**0.75**
4	Start-ups graduated from the incubation program should help the work of the incubator after the graduation	**7.7%**	**7.7%**	**-**	**46.2%**	**38.5%**	**4.00**	**1.23**
5	We must have mechanisms to calculate the incubated company financial success	**-**	**-**	**-**	**38.5%**	**61.5%**	**4.62**	**0.51**

Figure 2 shows that the total number of experience years in this field as they are classified into three categories. Results showed that the majority of the participants have been working in the field for less than 5 years. Only a 23.1% of the respondents had years of experience that are greater than 5 years. This indicates that the incubators in Palestine are still at their beginnings and the lack of experience is one of the major challenges that are facing this substantial sector.

On the other hand, the results show that 53.8% of the respondents have an experience that ranges from 2 to 5 years in the field. This comes from the fact that the emergence of the incubators markedly increased during the last few years. Such urged emergence hinders the transfer of experience of from old incubators to the new ones. This calls for clear strategies for development of expertise in the incubators.

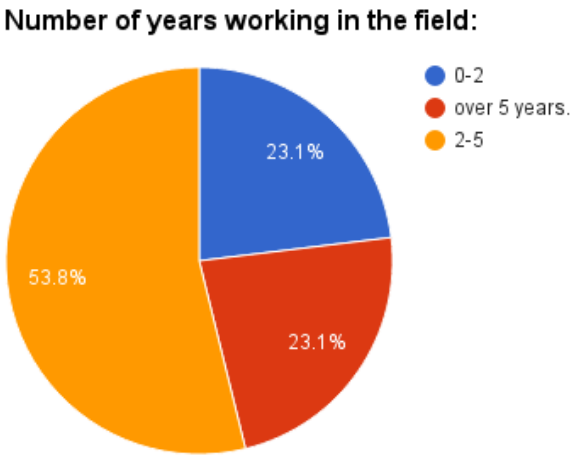


Figure 2 Number of year working in the field.

Figure 3 shows the percentage average of whether the acceleration program of has a clear plan for marketing or not. 84.6% of the participants confirms that there is a clear and well-

defined marketing plan for acceleration/incubation program, while 15.4% of the participants has no clear or undefined plan for marketing the program.

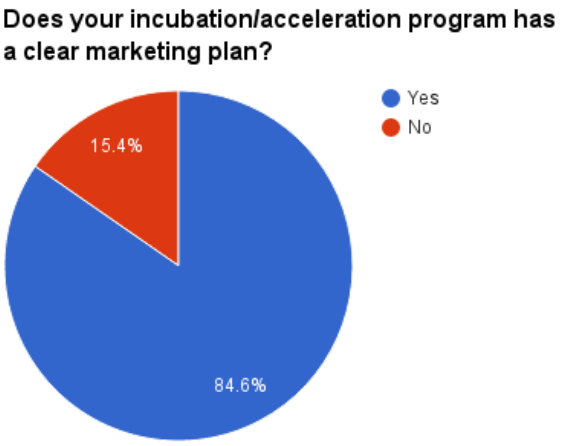


Figure 3 Does your incubation/Acceleration Program has a Clear Marketing Plan?

Figure 4 shows the percentage of the participants in the term of archiving the sustainability in financial affairs. Around 69.2% of the participants have a financial sustainability archive, the rest of the participants who represent 30.8% do not have an archive. This means that there is no sustainability and maintainability of the data.

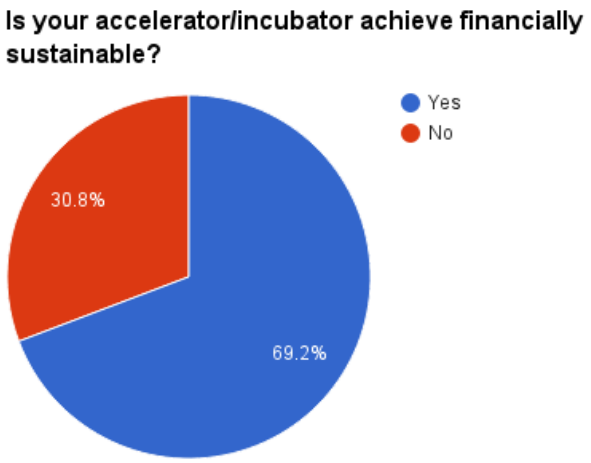


Figure 4 Is your accelerator/ incubator archive financially sustainable?

Figure 5 describes the percentage of participants -who answered with (No) to the previous question which displayed in figure 3- whether they have a plan for financial sustainability or they even don't have a one. The statistics show that 84.6% of the participants already have a plan but it's not applied at the moment to sustainability in terms of financial aspects, the others don't even have a plan.

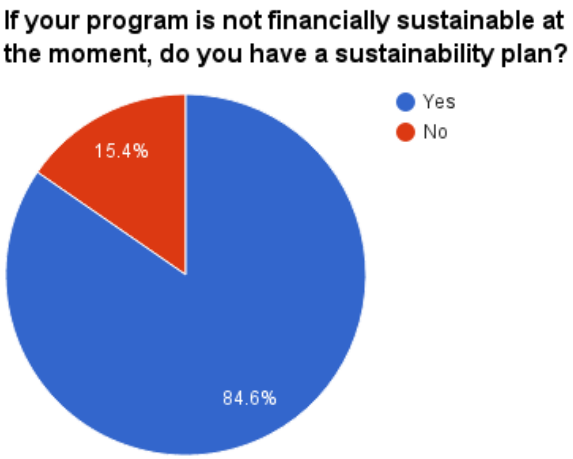


Figure 5 If your program is not financially sustainable at the moment, do you have a sustainability plan?

Figure 6 shows if the participants have a specified period of time in which archive of the sustainability occurs or is planned to take place. 53.8% of participants answered yes they have a period of time to perform a archiving to their sustainability, while 46.2% don't have a predefined period.

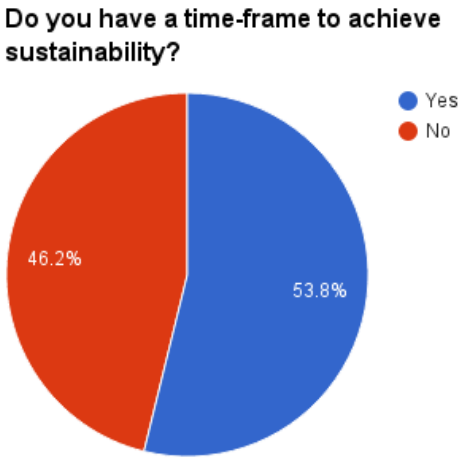


Figure 6 Do you have a time-frame to achieve sustainability?

Figure 7 checks whether the incubator's strategic goals were approved by the higher management level of the corporation such executive managers, board of directors, 53.8% of participants answered with yes, the strategic goals have been approved, whereas 46.2% answered with no, the strategic goals were not approved.

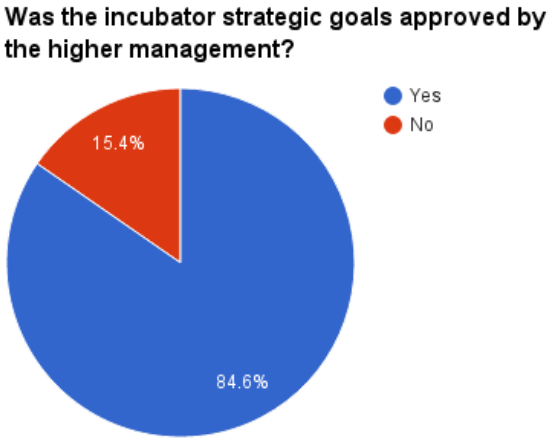


Figure 7 Was the incubator strategic goals approved by the higher management?

Figure 8 indicates the mandatory of providing goals to whom who donates the incubation or funding the incubation projects. The participants' statistics shows that 30.8% of participants are strongly agreed with the mandatory of goals availability to the incubation's donors, whereas 61.5% are agreed with the necessity of providing the goals and 7.7% don't know or prefer to make goals available for donors.

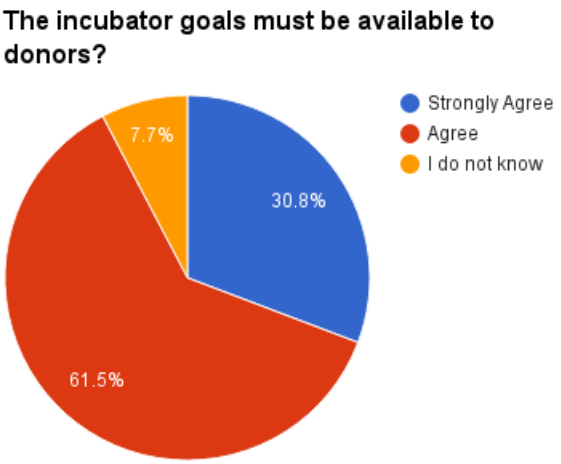


Figure 8 The incubator goals must be available to donors?

Figure 9 describes the beneficiaries' degree of knowledge of long and short terms goals. The participants' statistics shows that 23.1% of participants are strongly agreed with the mandatory of beneficiaries' knowledge of goals, whereas 69.2% are agreed with the necessity of beneficiaries' knowledge of goals and 7.7% don't know if the beneficiaries should know the goals.

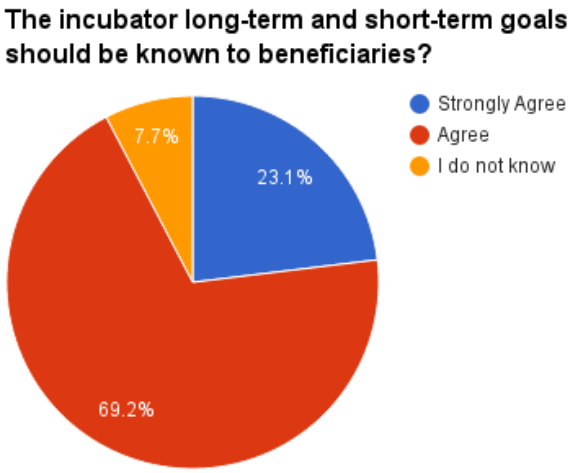


Figure 9 The incubator long-term and short-term goals should be known to beneficiaries?

Figure 10 indicates that the incubation program has a clear well-defined mission or not.

About 92.3% which are the majority of participants answered with yes, the program has a defined mission where the others who represent 7.7% answered with no there is no clear mission of the program.

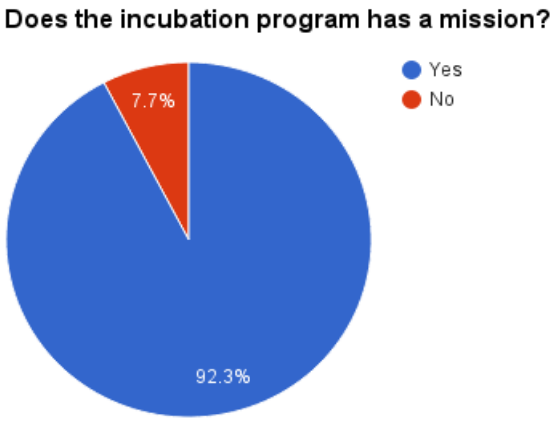


Figure 10 Does the incubation program has a mission?

Figure 11 shows the importance percentage of having a clear mechanism for collecting fees from graduating companies. 38.5% are strongly agreed with having a clear mechanism for that while 23.1% are agreed, meanwhile 23.1% don't know if it's important to have a clear collecting fees mechanism, the rest who represents 15.4 are against having a clear mechanism and prefer an ambiguity mechanism.

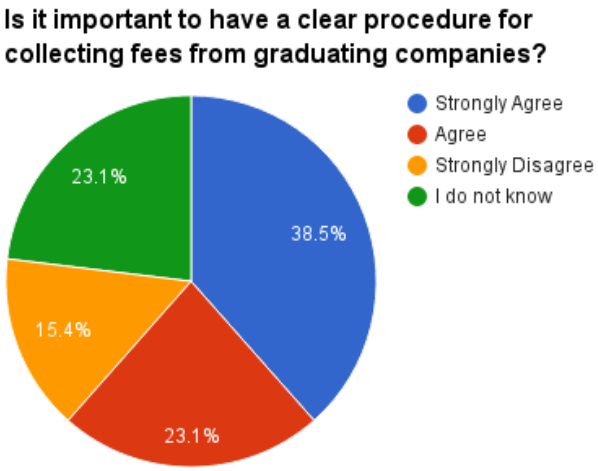


Figure 11 Is it important to have procedure for collecting fees from graduating companies?

Figure 12 indicates whether there is a predefined procedure to handle payments that delivered lately, 46.2% of participants answered with yes, they can handle late payment, while the rest who represents 53.8% don't have a mechanism to handle late payments.

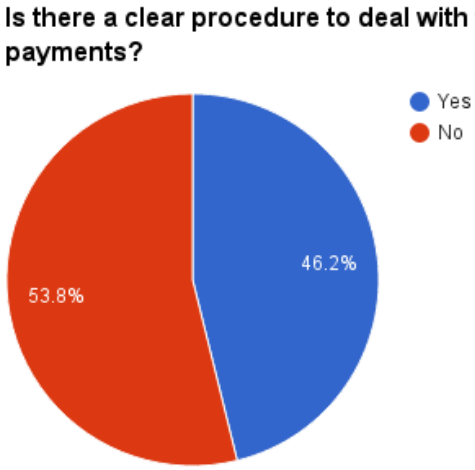


Figure 12 Is there a clear procedure to deal with the late payments?

Figure 13 shows the average of participants who have a steering committee –which direct the program and orient employees- . The majority of participants have a steering committee and they represents 84.6%, while 15.4% don't have a steering committee.

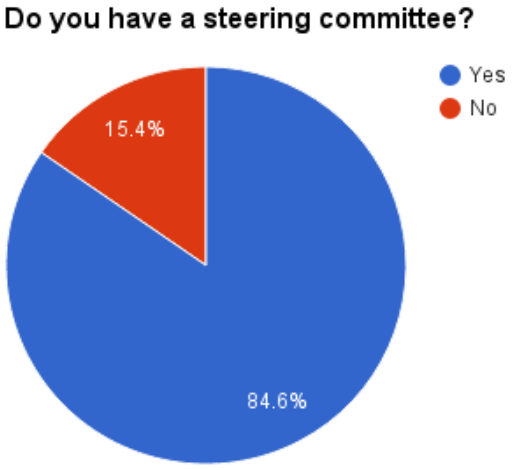


Figure 13 Do you have a steering committee?

Figure 14 indicate the percentage of participants who their corporations have a board of directors –which establish corporate management related policies and to make decisions on major company issues-. The statistics shows that 84.6% have a board of directors, while 15.4% don't have a board of directors in their corporations.

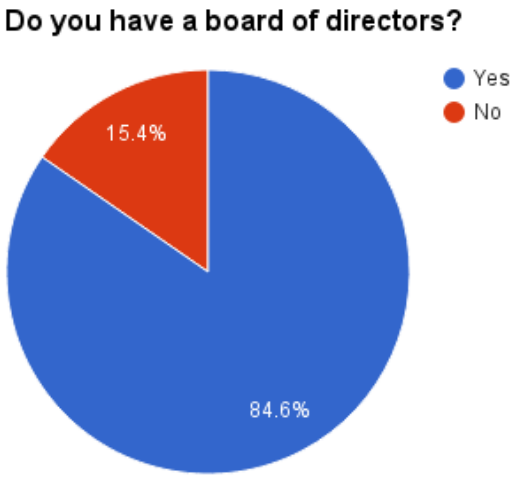


Figure 14: Do you have a board of directors?

Figure 14 represents the percentage of participants who have a well-structured managerial pyramid. 84.6% of participants have a well-known and obvious management structure, meanwhile 15.4% don't have a clear management structure.

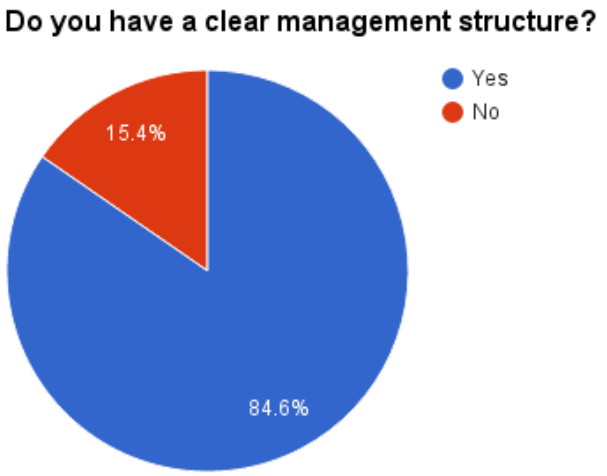


Figure 14 Do you have a clear management structure?

Figure 15 shows degree agreement of existent of member in steering committee who has a variety of backgrounds and knowledge required to lead the steering committee. 61.5% are strongly agreed with having that member, while 30.8% are agreed, meanwhile 7.7% don't know if the existence of this member is required.

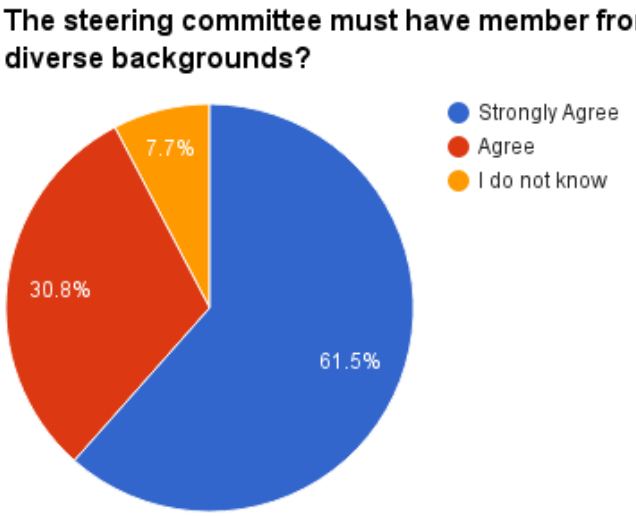


Figure 15 The steering committee must have member from diverse backgrounds?

Figure 16 indicates importance of having external advisors/consultants from outside the corporation –who hired partially to provide advice and consultations. 69.2% of participants answered with the mandatory of having advisers/consultants outside the corporation, while 30.8% answered with the necessity of having this person(s).

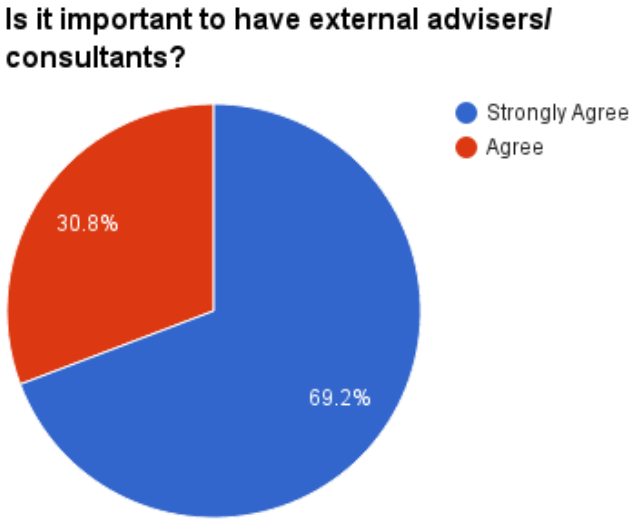


Figure 16 : Is it important to have external advisers/ consultants?

Figure 17 shows the percentage of participants whose regularly collected data kept and stored in their corporations. 84.6% of participants store their regularly collected data, while 15.4% of participants don't keep their regularly collected data.

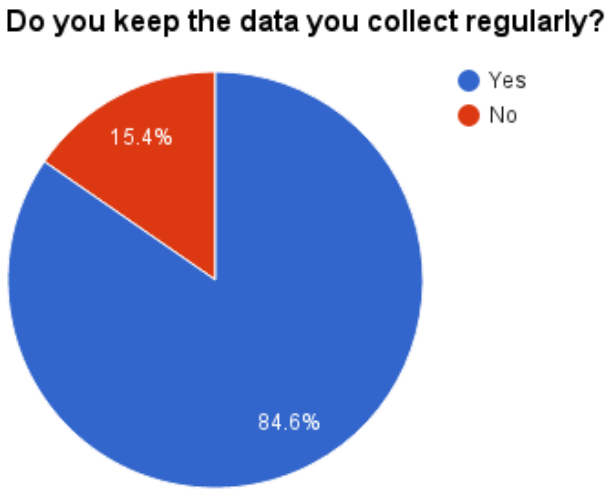


Figure 17 Do you keep the data you collect regularly?

Figure 18 refers to the average of keep tracking of temporary jobs created. 84.6% of participants answered with yes, they keeps track with temporarily created jobs, while 15.4% don't keep track with temporarily created jobs

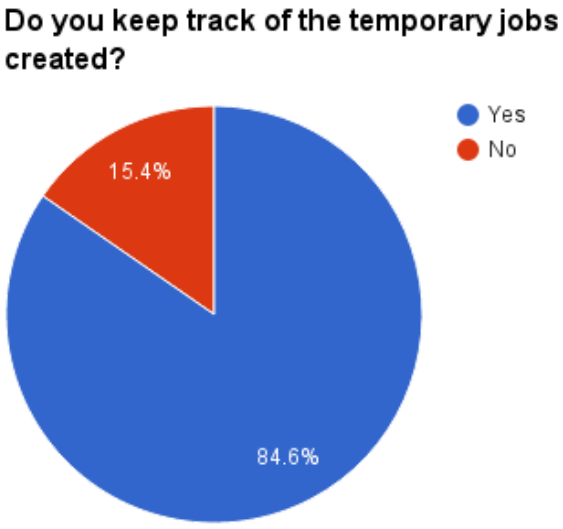


Figure 18 Do you keep track of the temporary jobs created?

Figure 19 shows the average of keep tracking of annual revenues and expenses (income). 92.3% of participants keeps track with annual income, while 7.7% don't keep track with the annual income.

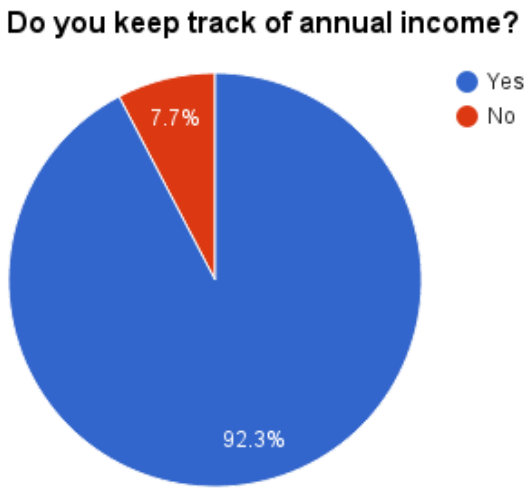


Figure 19 Do you keep track of annual income?

Figure 20 indicates whether the participants have an archived record of intellectual property rights - the rights of authors of literary and artistic works which protected by copyright- that participants own it. 92.3% of participants have an archived record of intellectual property rights, while 7.7% don't have that record.

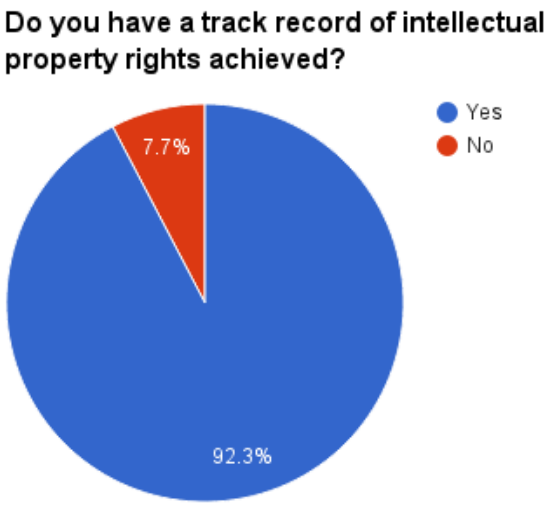


Figure 20 Do you have a track record of intellectual property rights archived?

Figure 21 describes the percentage of participants who store the data of NGOs' financial contribution involved in and related to. 84.6% of participants keeps the data of NGOs' contribution and store it, while 15.4% don't keep this kind of data.

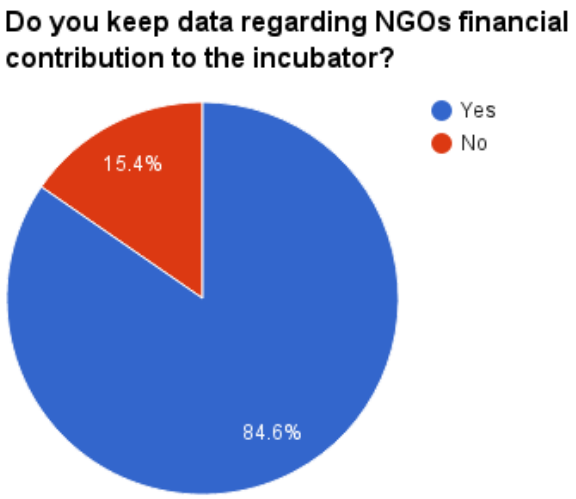


Figure 21 Do you keep data regarding NGOs financial contribution to the incubator?

Figure 22 shows if the participants store data related to private sector's financial contribution in terms of private sector polices. 92.3% of participants answered with yes and confirm that they keep data regarding to financial contribution of the private sector, while only 7.7% answered with no, they don't store that kind of data.

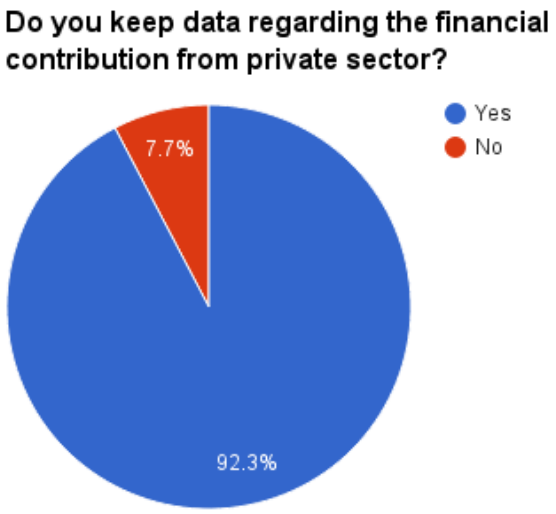


Figure 22 Do you keep data regarding the financial contribution from private sector?

Figure 23 indicates whether the participants dedicate a space to incubate the incubators. The majority that represents 92.3% confirms that they have already made a dedicated space for the incubators, while the rest of participants who show 7.7% haven't made a dedicated space for incubators.

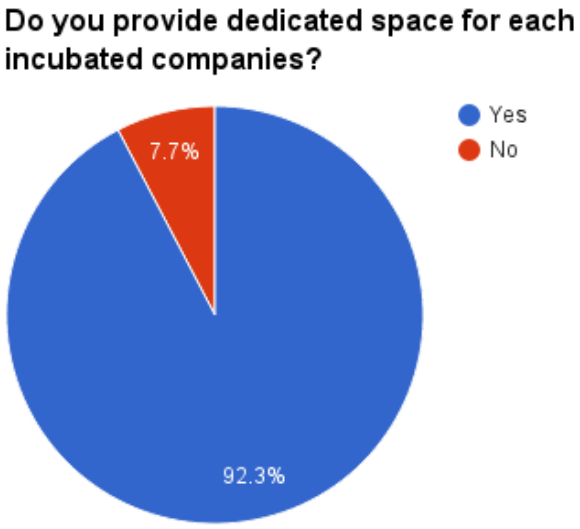


Figure 23 Do you provide dedicated space for each incubated companies?

Figure 24 shows the percentage of participants who decided to make a per-person-based space in corporation. 69.2% of participants confirms that they already made a per-person-based dedication of space in corporation, while 30.8% don't have this kind of classification.

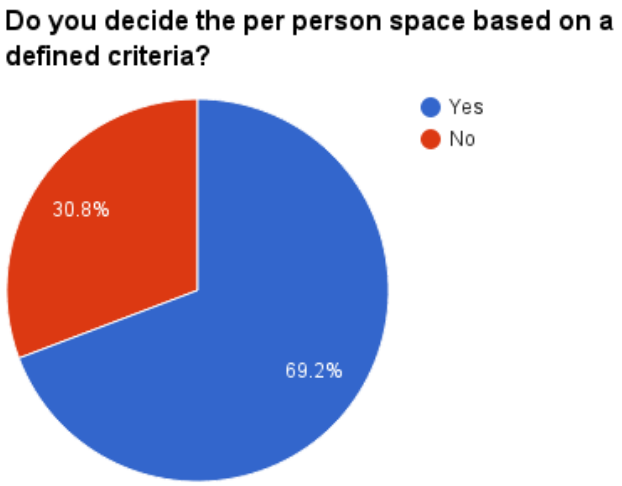


Figure 24 Do you decide the per person space based on a defined criteria?

Figure 25 indicates whether the participants take into consideration the factor of feasibility study - aims to objectively and rationally uncover the strengths and weaknesses of a proposed venture- in the evaluation process. 92.3% of participants confirms that they have took the feasibility study as a factor in the evaluation process, whereas only 7.7% don't take it into consideration.

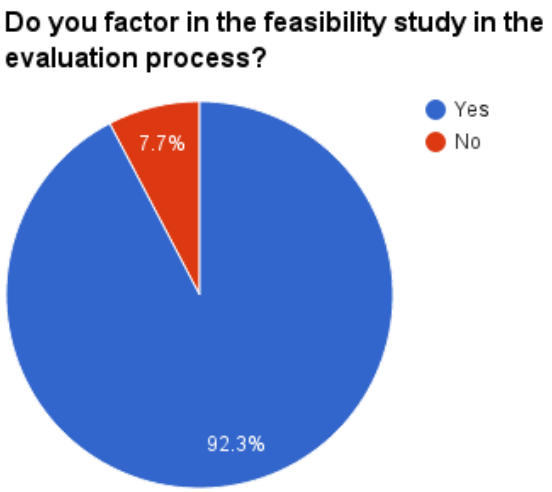


Figure 25 Do you factor in the feasibility study in the evaluation process?

Figure 26 shows the percentage of participants who have the ability to learn in evaluating process whether it is goals-based, process-based and outcomes-based evolution. 92.3% of the participants confirms that they have the ability to learn in this process, while only 7.7% don't have that ability.

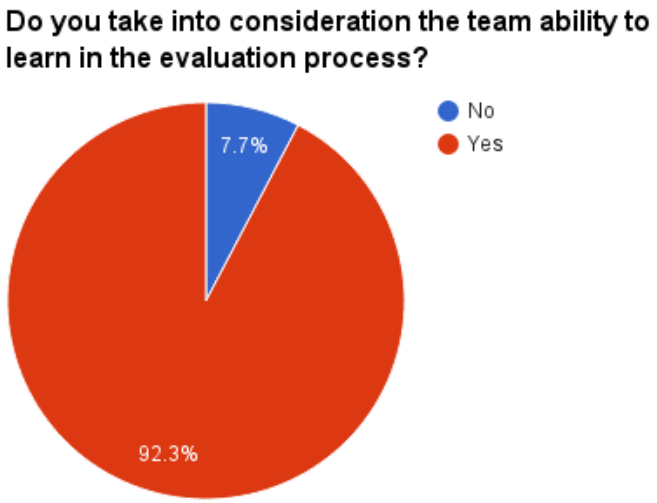


Figure 26 Do you take into consideration the term ability to learn in the evaluation process?

Figure 27 shows if the participants asked the companies to sign a financial commitment in case of successful business with the incubated companies. 84.6% of participants answered with yes they would sign a contract in case of successful business, while 15.4% wouldn't do.

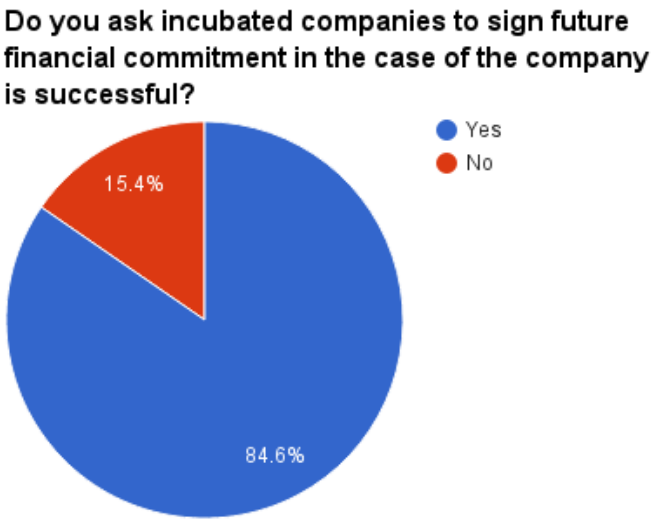


Figure 27 Do you ask incubated companies to sign future financial commitment in the case of the company is successful?

Figure 28 indicates whether participants take into consideration in the selection process the whether the company has agreed on a 5 year commitment with the incubator or not. 46.2% of the participants agreed to prefer a 5 year commitment in the selection process, while 53.8% don't take it in selection process.

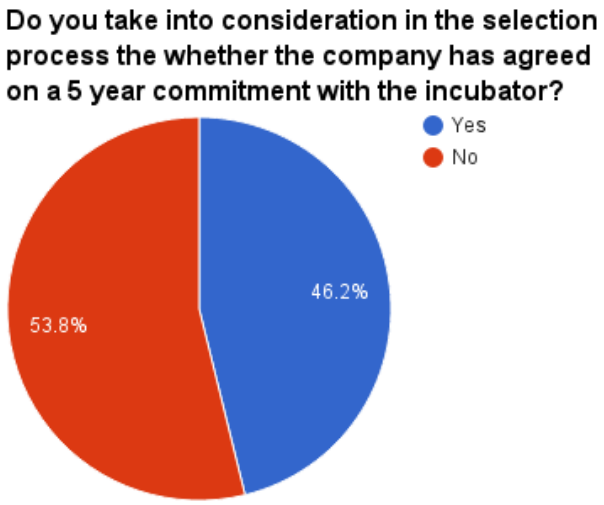


Figure 28 Do you take into consideration in the selection process the whether the company has agreed on a 5 year commitment with the incubator?

Figure 29 shows the percentage of participants who agreed with graduating the incubation company once it meets the criteria of graduation. 84.6% of participants agreed that the incubation company needs to be graduated once it reach the benchmark of graduation, while 15.4% don't take that criteria into consideration.

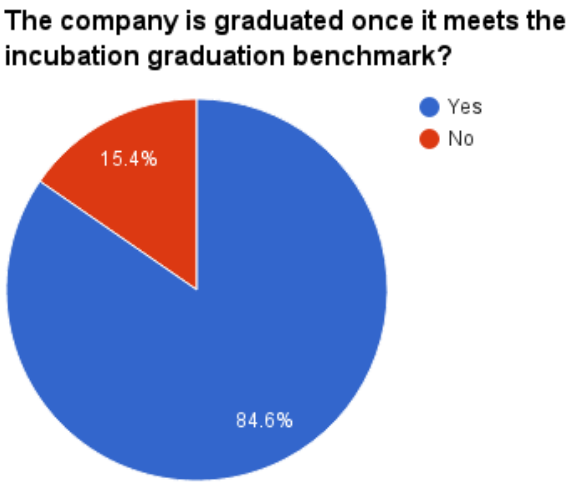


Figure 29 The Company is graduated once it meets the incubation graduation benchmark?

Figure 30 indicates whether the company have a clear and well-known defined criteria for graduating the incubated company or not. 76.9% of the participants have already defined criteria for graduation, while 23.1% don't have that criteria.

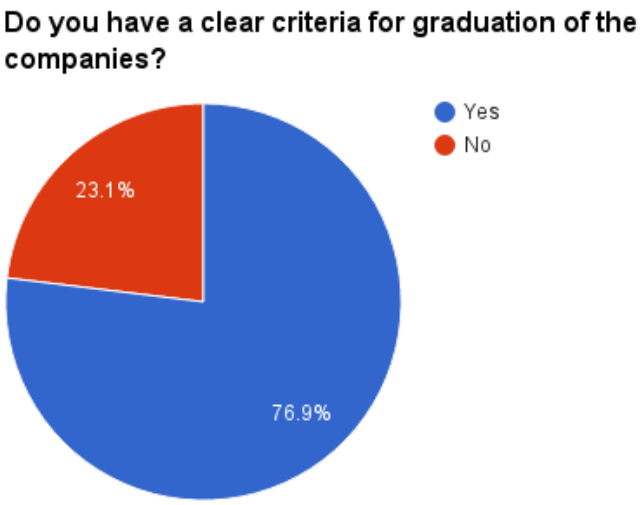


Figure 30 Do you have a clear criteria for graduation of the companies?

Figure 31 shows the percentage of participants who asked their companies to move out graduated incubation in case of incubation reached the criteria of graduation. 53.8% of participants answered with yes, they asked to move out the incubation in the case of graduation, while the rest who repents 46.2% don't ask their company to do that.

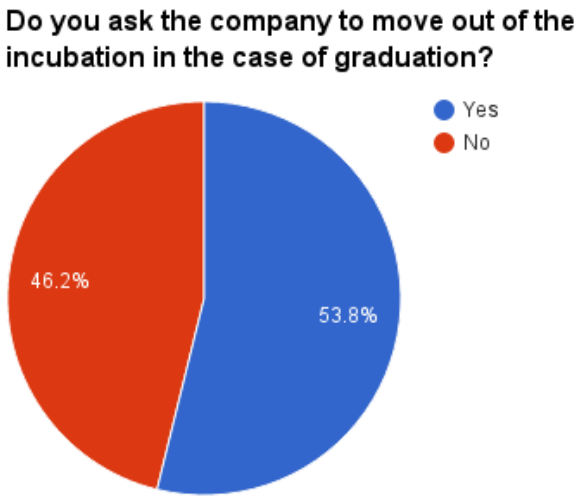


Figure 31 Do you ask the company to move out of the incubation in the case of graduation?

Figure 32 indicates if participants would graduate an incubated company when it reaches the full term of the incubation period time. 76.9% of participants graduate the incubation when it reaches the period, while 23.1% don't graduate it.

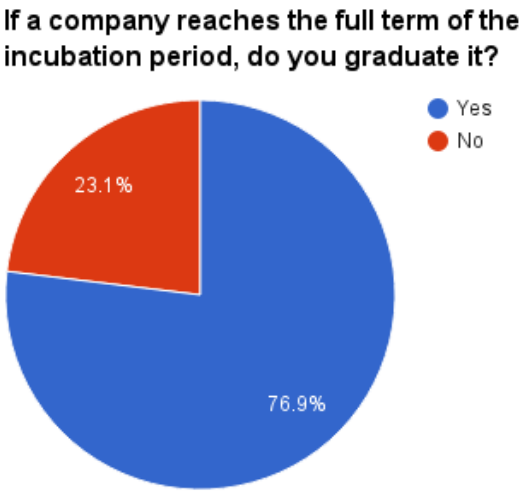


Figure 32 If a company reaches the full term of the incubation period, do you graduate it?

Figure 33 shows the participants percentage that think the beneficiaries would understand the mission of the incubator/accelerator. The majority of participants who represents 92.3% think the beneficiaries understand the mission, while only 7.7% don't think that way.

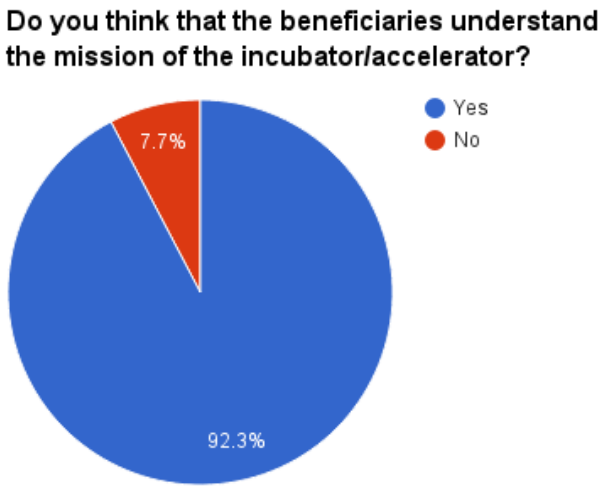


Figure 33 Do you think that the beneficiaries understand the mission of the incubator/accelerator?

Figure 34 refers to the participants who would think that donors support the mission of the incubator/accelerator. The majority of participants who represents 92.3% think that donors support mission by funding and other financial affairs, while only 7.7% don't think that donors would.

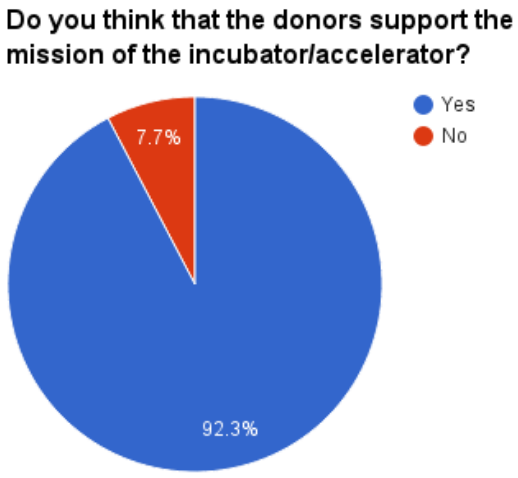


Figure 34 Do you think that donors support the mission of the incubator/accelerator?

Figure 35 indicates participants' thoughts about government support of the mission of the incubator/accelerator. 23.1% of participants think the government support the mission of incubator/accelerator, while 76.9% think government don't.

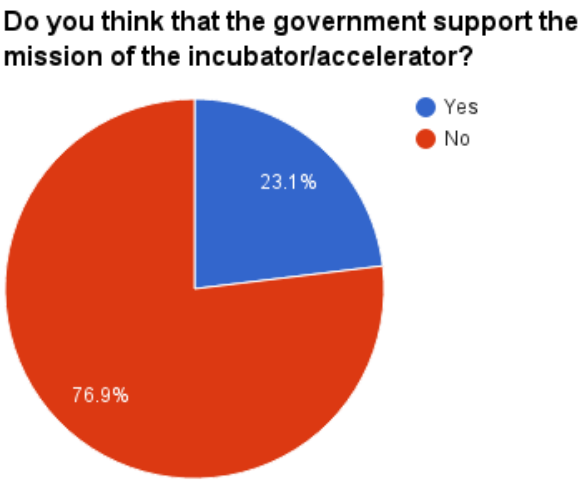


Figure 35 Do you think that the government support the mission of the incubator/accelerator?

Figure 36 shows if participants would believe that the existence of policies and produces and it applicability. 46.2% of participants answered with yes, it's applicable and existed, while 53.8% answered with no it's not existed.

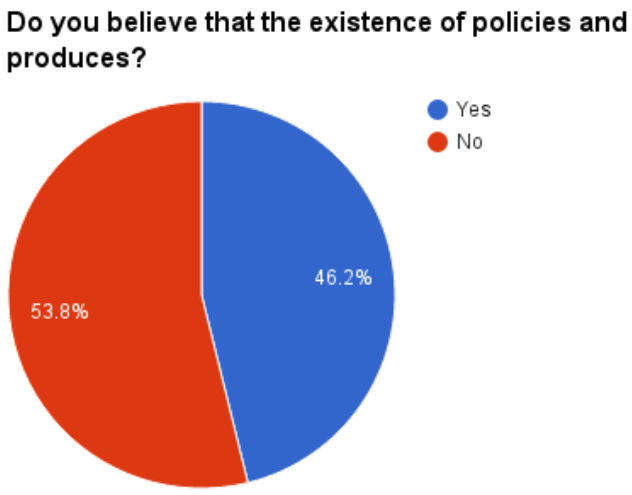


Figure 36 Do you believe that the existence of policies and produces?

Figure 37 indicates the participants' thoughts about a government role and the existence of framework for the national incubators/accelerators. 23.1% of the participants think that there is a government role and framework to establish a national incubators/accelerators, while 76.9% don't think there is neither a role nor a framework for that affair.

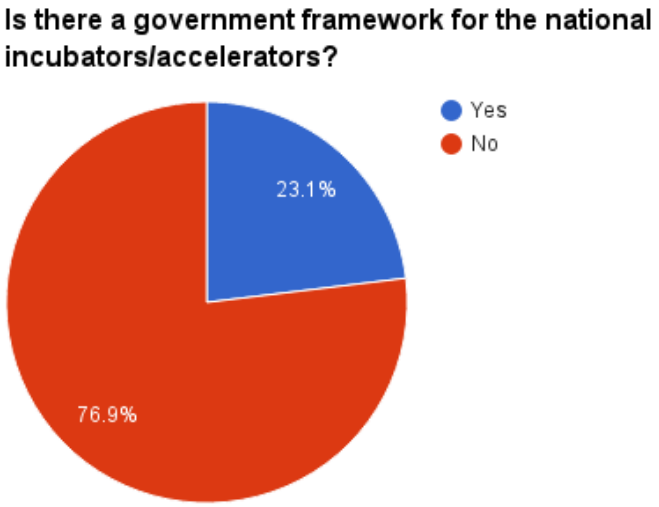


Figure 37 Is there a government framework for the national incubators/accelerators?

Figure 38 shows the participants' thoughts about believing that government taxation policy is helping the incubators/accelerators. Only 15.4% of the participants think that policy is helping, while the majority of the participants don't think I would help.

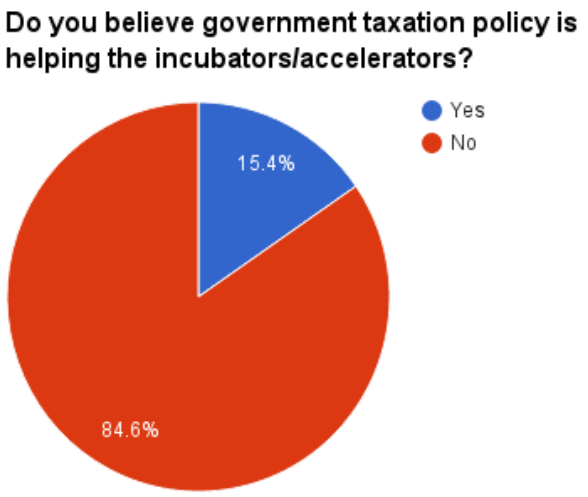


Figure 38 Do you believe government taxation policy is helping the incubators/accelerators?

Figure 39 shows if the participants' thoughts about the existence of good cooperation between the incubator and the academic sector when needed. 76.9% of the participants think it's good when needed, while 23.1% don't think it's good.

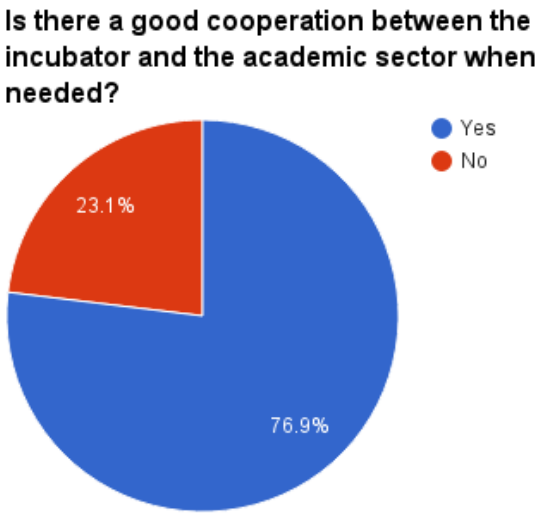


Figure 39 Is there a good cooperation between the incubator and the academic sector when needed?

Figure 40 indicates the participants' thoughts of how easy and clear it's to follow the intellectual property registration. 61.5% of the participants think it's clear and easy to register the intellectual property, while the 38.5% think it's not clear or easy to do that.

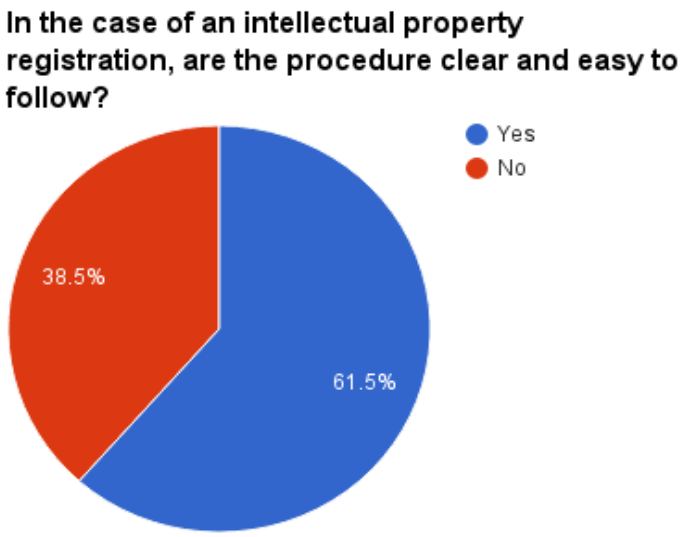


Figure 40 In the case of an intellectual property registration, are the procedure clear and easy to follow?

Figure 41 shows the participants' thoughts about the ICT sector capability of supporting the incubation/acceleration process. 61.5% of participants are strongly agreed with the capability of ICT sector, while 30.8% are agreed, and 7.7% of participants aren't agreed and think against the ICT sector capability.

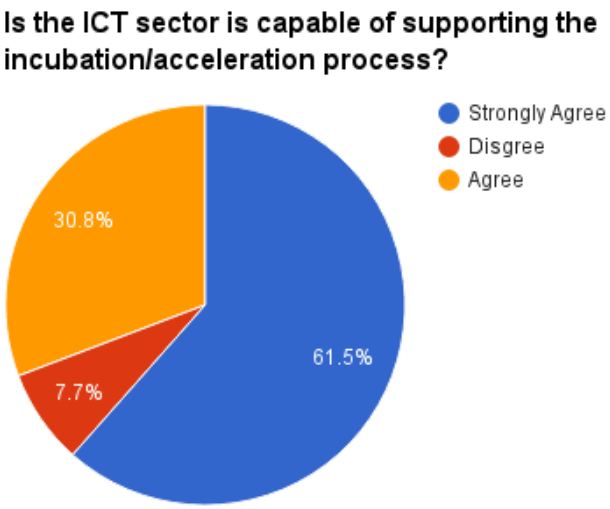


Figure 41 Is the ICT sector is capable of supporting the incubation/acceleration process?

Figure 42 shows the participants' thoughts about the mandatory of reducing ICT services' price for the incubator/accelerator. 61.5% of the participants are strongly agreed with reducing price for the incubator/accelerator, while the 38.5% of participants are agreed.

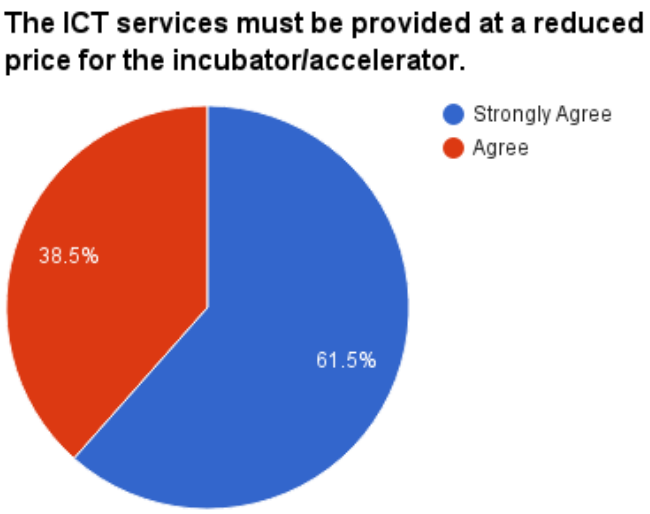


Figure 42 The ICT services must be provided at a reduced price for the incubator/ accelerator?

Figure 43 indicates the participants' thoughts about the mandatory of providing ICT services –by the incubator- to the private ICT sector as long as it does not affect the IT ecosystem. 46.2% of the participants are strongly agreed with the idea of providing the services to the private ICT sector, while the 38.5% of the participants are agreed with the idea, the rest participants who represents 15.4% don't know if the incubator must be able to provide ICT services or not.

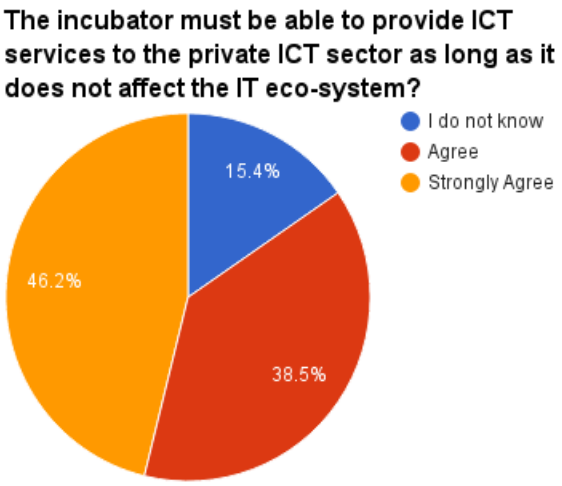


Figure 43 The incubator must be able to provide ICT services to the private ICT sector as long as it does not affect the IT ecosystem?

Figure 44 shows the participants percentage of necessity of helping the incubator's work -by Start-ups graduated- after the graduation. 38.5% of the participants are strongly agreed with helping incubator's work, meanwhile 46.2% of the participants are agreed, and the other participants are disagreed with the idea of helping of helping the incubator's work with 7.7% percentage of disagree and 7.7% of strongly disagreed participants.

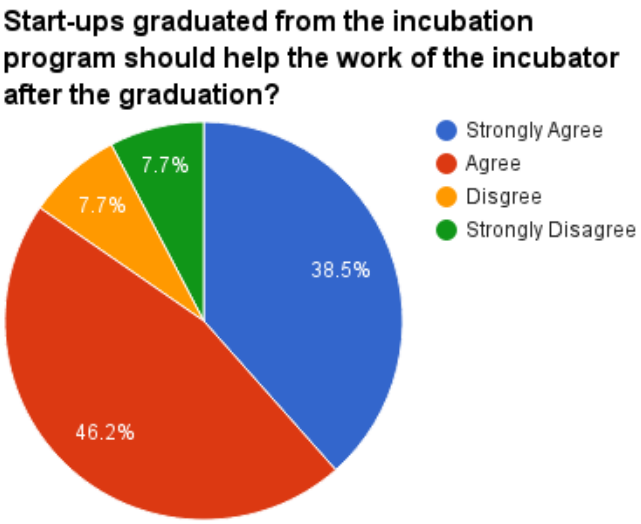


Figure 44 Start-ups graduated from the incubation program should help the work of the incubator after the graduation?

Figure 45 refers to the participants' percentage of the mandatory of having mechanisms to calculate the incubated company financial success. 61.5% of the participants are strongly agreed with having such mechanisms and 38.5% are agreed.

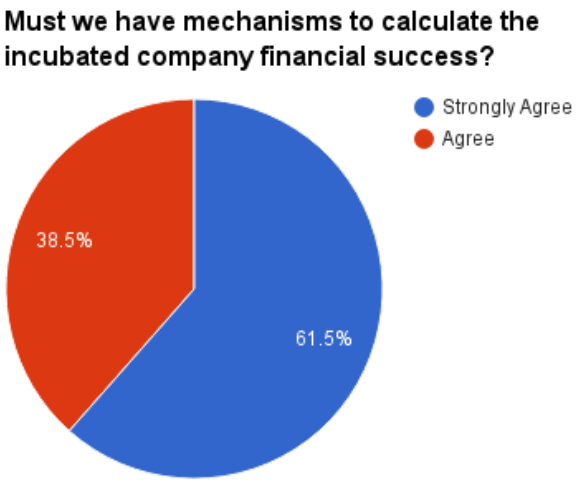


Figure 45 Must we have mechanisms to calculate the incubated company financial success?

Summary

1. The Palestinian incubators are still young and face the lack of financial and managerial sustainability due to the shortage of work experience years in the field.
2. The majority of decision makers -who participated on the questionnaire- need to gain more and more about managing and operating Palestinian incubator, the statistics show that the distribution of knowledge is obviously reaches normal level due to lack of gained incubation-related work experience.
3. The statistics show that ICT sector is obviously capable to support and develop growing incubations programs in Palestine.
4. There is an agreement between the stakeholder's representative on the applicability of the Practitioner's toolkit in the incubation sector, and the preferable solution to implement the incubation practitioner's toolkit is to establish an independent commission constituted from the government, private sector and incubators.

5. The most preferable timeframe to design, apply and enforce a working practitioner's toolkit for Palestine is to be ranging from 0-5 years according to this participants' statistics results.
6. The implementation of the practitioner's toolkit should start with a selective approach (exceptionalism) heading incrementally toward the more comprehensive Universalist approach.

7. The practitioner's toolkit should also focus on the skills and product as one-formed-entity by improved implementation of the services of the Palestinian incubators.

8. The main barrier to the practitioner's toolkit in the Palestinian incubation sector is the lack of financial and governmental support capacity.

Chapter 6 Proposed Incubation and Acceleration Practitioner's Toolkit for Palestine

This Chapter details the proposed incubation and acceleration practitioner's toolkit for Palestine. We propose that all Palestinian incubators must answer the following questions and criteria which is necessary to meet the global success criteria. Those requirements are the minmum and must be revised every few years to introduce further conditions and items.

Does your incubation program have a written marketing plan?

The incubator/accelerator should consider developing a written marketing plan for the incubation program. Having a plan for marketing your program to stakeholders, potential clients, prospective service providers and others helps ensure they are aware of your program, its services and its successes. Once it has developed a marketing plan, it should review it at least annually to ensure that it is continuing to market the incubator program most effectively.

Incubator marketing plans universally range from one- or two-page checklists to 20-page documents packed with charts and tables. It's not important how long or detailed your plan is; what matters is that you have a usable document that outlines your marketing goals.

Most incubator marketing plans have some elements in common:

- An executive summary (usually for longer and more complex plans)
- A statement of the incubator's overall business goal or vision
- A description of the incubation program and its current services
- A description of the overall market and the incubator's role in that market
- An analysis of what the incubator does well and where it can improve
- A list of specific marketing goals and strategies to achieve them
- A timeline of marketing activities, often with responsibilities assigned
- An estimate of the expected costs associated with each strategy or activity
- Some ways to measure the success of marketing activities[1]

[1] Adapted from Colbert, Corinne, A Practical Guide to Business Incubator Marketing, NBIA Publications, 2007, p. 28.

If your program is not financially sustainable, do you have a plan to achieve self-sustainability?

Having a financially sustainable incubation program helps ensure that you have sufficient revenue to continue offering quality programs and services to clients. A basic principle of business incubation is that the program be a "dynamic model of a sustainable, efficient business operation." You are well on that path, but you also need to review your budget sustainability plan periodically to make sure that your funding sources are stable and secure.

Does your incubation program have written goals and objectives?

Having written goals and objectives helps ensure that your program is on a clear path for achieving its mission. An incubation program that tries to pursue too many or conflicting goals can get off track and fail to accomplish what it's intended to do. Usually, an incubator's goals and objectives are part of a larger strategic plan, which provides a clear picture of quantifiable goals, objectives, and tasks within a given time frame, and keeps an incubator focused on its fundamental purpose. Even though you have written goals and objectives, you should review them periodically to make sure that they still make sense, given any significant changes in your mission and/or the business environment.

Does your incubation program have a written mission statement that is current, clear and appropriate?

A mission statement helps guide an incubation program's activities and development and serves as a point of reference for creating and achieving goals and staying on task. It should describe an organization's fundamental purpose clearly and succinctly. Having the mission statement in writing - easily accessible to staff and board members - makes it easier to keep mission at the center of discussions about new goals, programs, or services. Conflicts with the mission could indicate the need to rethink the new idea or, on occasion, to revise the mission statement. Ideally a mission statement is a stable document, but significant changes in the environment could indicate a need to revise it.

Does your business incubator have an advisory/governing board?

The difference between a thriving incubator and one that struggles to keep its head above water sometimes comes down to the effectiveness of its board. In addition to obligations and hiring the incubator manager, an incubator board helps the staff think strategically and set broad policy that will ensure the incubator attains its goals and objectives. A major part of a board of directors' work is long-range planning - strategizing about everything from the incubator's values and mission to its budget, capital campaigns, and organizational charts. An effective board focuses its attention on policy and setting a work plan for the incubator. A board of directors that's highly involved at the strategic level can make a significant difference in the incubator's performance.

Board members also can help out by hosting visitors, networking with stakeholders, and making presentations - demands that can divert the manager's time away from assisting clients. Sometimes, board members play a direct role in growing successful companies by offering legal or financial expertise, participating on advisory boards, or making investments. However, they must understand that in these roles they are serving as volunteers under the direction of the incubator manager, not as a member of the incubator's governing body. Be sure to use bylaws, orientation manuals, and one-on-one meetings to emphasize their duties as policymakers, not managers.

Chapter 7 Conclusions and recommendations

The Palestine economy has a high un-employability, a lack of appropriate skills and misappropriates distribution of skills and opportunity. On the other hand, the technological knowledge based global economy is open, borderless and encouraging for the Palestinian young entrepreneurs [1,2,3]. This issue has encouraged the establishing of technological incubators which has emerged in the last few decade and is expected to continue to encourage the market growth. Incubation practitioner's toolkit is a suitable solution to provide necessary benchmarking for the Palestinian incubators. This has been applied in the EU and has proven successful in providing clear indicators about the health of the incubators financially, sustainability-wise and management-wise.

The research contributes to identify, evaluate, and rank factors that influence the best practices for the incubators and accelerators in Palestine which can form a Palestinian Practitioner's toolkit for incubators.

The research used literature review, focus group results, structured interview to carry out quantitative and qualitative methods to investigate the research problem.

The research results can be summarized as follows:

1- The Palestinian economy suffers from high low employability due to skills gap and misappropriate skills distribution.
2- The Palestinian technological incubators can help create jobs and markets for young Palestinian entrepreneurs.
3- The Palestinian incubators are still young and lack the necessary financial and management sustainability and transparency.
4- The is almost no Palestinian laws related to organizing the work of incubations and accelerators or otherwise.

5- The majority of decision makers want to know more about the management and operation of the incubators in Palestine and their view of their knowledge is normally distributed.
6- There is an agreement between the stakeholder's representative on the applicability of the Practitioner's toolkit in the incubation sector.
7- The best way to implement the incubation practitioner's toolkit is form an independent body constituted from the government, private sector and incubators.
8- The main goal of the practitioner's toolkit must be: improving quality of the product/services provided for the young entrepreneurs.
9- The implementation of the practitioner's toolkit will improve the services of the Palestinian incubators and help achieve greater transparency and financial sustainability.
10- The main barrier to the practitioner's toolkit in the Palestinian incubation sector is the lack of financial and governmental capacity.
11- One of the major advantages of the practitioner's toolkit is to improve the quality of higher and essential education and improve its outcomes and planning process.
12- The most realistic timeframe to design, apply and enforce a working practitioner's toolkit for Palestine to be 0-5 years according to this research results.
13- The most appropriate model is to a mixed approach between the donors, returning fees and private sector to ensure the financial sustainability of the incubators.
14- The implementation of the practitioner's toolkit should start with a selective approach (exceptionalism) and move incrementally toward the more comprehensive universalist approach.
15- The practitioner's toolkit should also focus on the skills and product as a package.

In addition, this research recommends the establishment of a national incubation and entrepreneurs system. The research develops the practitioner's toolkit planning for the national incubation and entrepreneurs system with the appropriate vision, mission, strategic goals, action plan and logical framework.

In summary, this research demonstrates the practitioner's toolkit is an applicable and appropriate system for the Palestinian incubation market and it has established a clear and specific way to implement it.

References

[1] "Palestinian Central Bureau of Statistics (PCBS), Labour Force Participation, Employment, Unemployment and Average Daily Wage in NIS for Wage Employees in the Palestinian Territory by Governorate (ILO Standards), January - March, 2015." [Online]. Available: http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/Labor%20Force%20Annual.htm. [Accessed: 31-Mar-2016].

[2] World Bank estimates., "Economic Monitoring Report to the Ad Hoc Liaison Committee, World Bank," May 2015.

[3] L. A. Molnar, "Business incubation works. Ed. Natalie Wiley. NBIA Publ.," 1997. "Entrepreneur Ency." .

[4] H. M. Al-Mubaraki and M. Busler, "Business Incubators Findings from a Worldwide Survey, and Guidance for the GCC States," Global Business Review, vol. 11, no. 1, pp. 1–20, Jan. 2010.

[5] C. Volkmann, "Entrepreneurial studies in higher education," Higher Education in Europe, vol. 29, no. 2, pp. 177–185, Jul. 2004.

[6] J. P. Pappas, The University's Role in Economic Development: From Research to Outreach. Jossey-Bass, 1997.

[7] Technology Incubators: Nurturing Small Firms. OECD, 1997.

[8] R. Aernoudt, "Incubators: Tool for Entrepreneurship?," Small Business Economics, vol. 23, no. 2, pp. 127–135, Sep. 2004.

[9] M. von Zedtwitz, "Classification and management of incubators: aligning strategic objectives and competitive scope for new business facilitation," International Journal of Entrepreneurship and Innovation Management, vol. 3, no. 1–2, pp. 176–196, Jan. 2003.

[10] A. Bergek and C. Norrman, "Incubator best practice: A framework," Technovation, vol. 28, no. 1–2, pp. 20 – 28, 2008.

[11] E. G. Carayannis and M. von Zedtwitz, "Architecting gloCal (global–local), real-virtual incubator networks (G-RVINs) as catalysts and accelerators of entrepreneurship in transitioning and developing economies: lessons learned and best practices from current development and business incubation practices," Technovation, vol. 25, no. 2, pp. 95–110, Feb. 2005.

[12] "Incubating Succes." [Online]. Available: https://www.inbia.org/docs/default-source/research/download-report.pdf?sfvrsn=0. [Accessed: 03-Apr-2016].

[13] H. M. Al-Mubaraki and M. Busler, "Business incubation as an economic development strategy: a literature review," International Journal of Management, vol. 30, no. 1, p. 362, 2013.

[14] H. Al-Mubaraki and M. Busler, "The effect of business incubation in developing countries," European Journal of Business and Innovation Research, vol. 1, no. 1, pp. 19–25, 2013.

[15] A. Chandra, "Approaches to Business Incubation: A Comparative Study of the United States, China and Brazil," Social Science Research Network, Rochester, NY, SSRN Scholarly Paper ID 1077149, Nov. 2007.

[16] H. Al-Mubaraki, W. Al-Karaghouli, and M. Busler, "The creation of business incubators in supporting economic developments," in European, Mediterranean & Middle Eastern Conference on Information Systems, 2010, pp. 12–13.

[17] S. Akçomak, "Incubators as Tools for Entrepreneurship Promotion in Developing Countries," 2009.

[18] H. Al-Mubaraki and M. Busler, "Sustainable development through the inclusion of incubator: A SWOT analysis," World Sustainable Development Outlook, pp. 51–63, 2010.

[19] M. S. Lourenco, "Understanding Communication Network Development and Business Incubation: An Analysis of Three Incubators in Louisville, Kentucky," Social Science Research Network, Rochester, NY, SSRN Scholarly Paper ID 1513785, 2004.

[20] M. P. Rice, J. B. Matthews, and L. Kilcrease, Growing new ventures, creating new jobs. Quorum, 1995.

[21] KJ Smith Associates, "Business Plan for A Technology Incubator." University of Oregon, 2004.

[22] "Management of Business Incubators." Kaunas, Technologija, 2001.

[23] "Business and Technology Incubator." [Online]. Available: http://www.bti.ps/En/About.aspx?ID=1. [Accessed: 03-Apr-2016].

[24] M. Q. Patton and M. Cochran, "A guide to using qualitative research methodology," Medecins Sans Frontiers. Retrieved February, vol. 14, p. 2014, 2002.

[25] H. Xu, G. M. CHINNATHAMBI, D. Gell, K. L. Stanwood, and E. Colban, "Systems and methods for cooperative applications in communication systems," US20130165084 A1, 27-Jun-2013.

[26] A. L. Strauss, Qualitative analysis for social scientists. Cambridge University Press, 1987.

[27] B. S. Glaser and A. Strauss, "A.(1967). The discovery of grounded theory," Strategies for qualitative research. London: Weidenfeld and Nicolson, 1968.

[28] B. G. Glaser, Theoretical sensitivity: Advances in the methodology of grounded theory. Sociology Pr, 1978.

[29] J. Corbin and A. Strauss, Basics of qualitative research 3e. London: Sage, 2008.

[30] A. J. Onwuegbuzie, W. B. Dickinson, N. L. Leech, and A. G. Zoran, "A qualitative framework for collecting and analyzing data in focus group research," International journal of qualitative methods, vol. 8, no. 3, pp. 1–21, 2009.

[31] A. Y. Kolb and D. A. Kolb, "Experiential learning theory," in Encyclopedia of the Sciences of Learning, Springer, 2012, pp. 1215–1219.

[32] K. Ng and S. Hase, "Grounded suggestions for doing a grounded theory business research," Electronic Journal of Business Research Methods, vol. 6, no. 2, pp. 155–170, 2008.

[33] A. E. Kelly, R. A. Lesh, and J. Y. Baek, "Handbook of design research methods in education," New York: Routledge.(560 s). ISBN, vol. 805860584, pp. 111–130, 2008.

[34] D. Hiles and I. Cermak, "Qualitative research: Transparency and narrative oriented inquiry," in 10th European Congress of Psychology, Prague, CZ, July, 2007, pp. 3–6.

[35] Fellows, R., and Liu, A., (2007). Research methods for construction. Blackwell Science Ltd., Osney Mead, Oxford OX2 OEL, UK.

[36] Naoum, S.G., (2007), "Dissertation research and writing for construction student Reed educational and professional publishing Ltd.

[37] Sekaran, U. (2000) Research Methods for Business: A skill-building approach, 3rd edition. New York: John Wiley. Chapters 1 and 2.

[38] Chen, (2009). "Technology commercialization, incubator and venture capital, and new venture performance".Journal of Business Research 62 (2009) 93–103.

[39] P. Rice, (2002). " Co-production of business assistance in business incubator :An exploratory study". Journal of Business Venturing 17 (2002) 163–187.

[40] Al-Mubaraki, (2011). "The Development of Entrepreneurial Companies through Business Incubator Programs". Kuwait University, Kuwait.

[41] Lee, Chu, Ling,(2000). "The Critical Success Factors of Technology Incubators: An Empirical Study".

[42] McAdam and Marlow,(2007). "A preliminary investigation into networking activities within the university incubator". Department of HRM, De Montfort University, Leicester, UK.

[43] Hoffman and Kelley,(2012). " Analysis of Accelerator Companies: An Exploratory Case Study of Their Programs, Processes, and Early Results". Small Busainess Institute® Journal .2012, Vol. 8, No. 2, 54-70.

[44] Xin and Jianhui, (2000)."A fuzzy evaluation method on the business incubator." South China University of technology, P.R.China.

[45] Vermulen,(2000). "Business fixed investment: Evidence of financial accelerator in Europe". European Central Bank, 2000.

[46] Abd El-Naby, (2015). " Prioritizing Critical Success Factors for Incubated Information and Communications Technology Enterprises in Gaza Using Anaalytical Hierarchy Process (AHP)".Islamic university.Gaza.Palestine.

[47] Lin, Christopher and Lu, 2011). " Improving business incubator service performance in China: the role of networking resources and capabilities."

[48] L.Studdard,(2006). "The effectiveness of entrepreneurial firm's knowledge acquisition from a business incubator."

[49] B. Anderson,(2012). " The Gateway Innovation Center: exploring key elements of developing a business incubator." World Journal of Entrepreneurship, Management and Sustainable Development, Vol. 8 Iss: 4, pp.208 – 216.

[50] Abduh,(2007). "Investigating and classifying clients' satisfaction with business incubator services." Managing Service Quality: An International Journal, Vol. 17 Iss: 1, pp.74 – 91.

[51] Dahleez,(2009). "The Role of Business Incubators in Developing Entrepreneurship and Creating New Business Start-ups in Gaza Strip." Islamic university. Gaza. Palestine.

[52] Ahmad Z. S. & Xavier S. R., (2012). "Entrepreneurial Environments and Growth: Evidence from Malaysia GEM Data." , Journal of Chinese Entrepreneurship, Vol. 4 Iss: 1, pp.50 – 69.

[53] Hall,(2001). "Financial accelerator effects in UK business cycles". Bank of England 2001.

[54] E. Stiglitz and others,(2010). "The Financial Accelerator in an Evolving Credit Network.". Institute of Quantitative Methods and Economic Theory, Catholic University of Milan,Largo Gemelli 1, 20123 Milan, Italy.

[55] Paustian and others,(2013) ."Estimating Contract Indexation in a Financial Accelerator Model." Center for Latin American Monetary Studies (cemla).2013

[56] Huijgevoort,(2012). " The 'Business Accelerator': Just a Different Name for a Business Incubator?".

[57] Clarysee and others,(2015). " A look inside accelerators: Building business".

[58] Yen and others,(2012). " The Explosive Growth of Business Accelerators in Los Angeles in 2012." .Management of Technology .California Institute of Technology.America.

[59] Salido and others,(2010)."The Accelerator and Incubator Ecosystem in Europe."

[60] Tasic,(2013). " STARTUP ACCELERATORS: AN OVERVIEW OF THE CURRENT STATE OF THE ACCELERATION PHENOMENON". Universidad Complutense de Madrid.Spain.

[61] Kühl,(2014). "The financial accelerator and market-based debt instruments: a role for maturities?" Deutsche Bundesbank.No.08/2014.

[62] Coric,(2010)." The financial accelerator effect: Concepts and challenges" PhD thesis. University of Split. Faculty of economic. Split.

[63] M.Kilcrease,(2011). "Multi-factor assessment of service delivery in business incubators: Perspectives from incubator tenants"Journal of Applied Management and Entrepreneurship; Apr 2011; 16, 2; ABI/INFORM Global pg. 80

[64] McAdam and Marlow,(2011). " Sense and sensibility: The role of business incubator client advisors in assisting high technology entrepreneurs to make sense of investment readiness status." Entrepreneurship & Regional Development Vol. 23, Nos. 7–8, September 2011, 449–468

Appendix I: Structured Interview (Arabic Version)

أكاديمية الإدارة والسياسة للدراسات العليا

Mnagement and Politics Academy For Postgraduats Studies

استبيان

أخي /أختي :

تحية طيبة وبعد:

يطيب لي ان اضع بين ايديكم استبانة حول مدى مطابقة الحاضنات/المسرعات لمعايير النجاح الأمريكية كما نص عليها تقرير "الممارسات المثالية للحاضنات التي تقود الى تمويل جديد ناجح" وذلك لاستكمال الحصول على درجة الماجستير تخصص قيادة وادارة من اكاديمية الادارة والسياسة للدراسات العليا بغزة . ولتحقيق هدف الدراسة تم تصميم استبانة مكونة من جزئين:

الجزء الاول: يشتمل على البيانات الشخصية...الخ

الجزء الثاني: يشتمل على محاور الدراسة الرئيسية المتمثلة بالتالي:

1. مدى توفر معايير القوة الادارية والمالية والفنية للحاضنات والمسرعات العاملة في قطاع غزة.
2. مدى توفر معايير جودة الخدمات المقدمة للشركات المحتضنة وامكانية قياس هذه المعايير.
3. مدى ملائمة عملية تقييم طلبات الاحتضان للممارسات المثالية
4. مدى ملائمة عملية التخريج وانهاء الاحتضان للممارسات المثالية.
5. مدى دعم الممولين والحكومات والجهات المعنية لعمل ونجاح برامج الحاضنة/المسرعة.
6. مدى جهوزية القطاع التكنولوجي لدعم عملية الاحتضان والتسريع.

لذا أرجو من سيادتكم قراءة كل فقرة بعناية ووضع علامة صح على كل اجابة وذلك من أجل الوصول إلى نتائج دقيقة وموضوعية وسيتم التعامل مع البيانات بسرية تامة، ونؤكد لكم بأن البيانات تستخدم لأغراض البحث العلمي.

وتفضلوا بقبول فائق الاحترام والتقدير

الباحث/محمد نجيب قنوع

المعلومات العامة

اسم الحاضنة:

الجهة الراعية:

عمر الحاضنة/المسرعة:

م.	الفقرة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
المحور الاول: مدى توفر معايير القوة الادارية والمالية والفنية للحاضنات والمسرعات العاملة في قطاع غزة.						
.1	هل لبرنا يع والاحتضان الذي تقوم طة تسويقية		لا			نعم
.2	هل برناه ع والاحتضان الخاص بك ستدامة المالية؟		لا			نعم
.3	اذا كان ب غير مستدام ماليا هل لديك قيق الاستدامة؟		لا			نعم
.4	هل لديك ي محدد لخطة الاستدامة		لا			نعم
.5	من الضروري إعداد أهداف بعيدة وقصيرة المدى لبرنامج الإحتضان والتسريع					
.6	هل تم اع الاهداف من الادارة العلي		لا			نعم
.7	يجب أن تكون الاهداف بعيدة وقصيرة المدى متاحة للممولين					
.8	يجب ان تكون الاهداف بعيدة وقصيرة المدى متاحة للمستفيدين					
.9	هل لدى رسالة مكتوبة واضحة وه		لا			نعم
.10	من الضروري إعداد الية واضحة لتحصيل الرسوم والإجارات من الخريجين ؟					

.11	هل هناك ـحة للتعامل مع المتأخرين عن السداد؟	لا					نعم
.12	هل للحاد ـن استشاري؟	لا					نعم
.13	هل للحاد ـرعة مجلس ادارة؟	لا					نعم
.14	هل لدى ـالمسرعة هيكلية ادارية و	لا					نعم
.15	يجب أن تكون الخلفيات المهنية لاعضاء المجلس الاستشاري متنوعة						
.16	من الضروري الاستعانة باستشاريين خارجيين؟						
.17	ماهي الخدمات التي تقدمها للمستفيدين؟						
.18	هل يتم ا البيانات الخاصة بالوظائف الحصول عليها	لا					نعم
.19	هل يتم بـ خاصة بالوظائف الجزئيا الحصول عليها	لا					نعم
.20	هل يتم ا البيانات الخاصة بالدخل ا	لا					نعم
.21	هل يتم ا ـدد براءات الاختراع لدى	لا					نعم

.22	هل يتم ا البيانات الخاصة بكمية الن المؤسسات غير ربحية	لا	نعم
.23	هل يتم ا البيانات الخاصة بكمية الن المؤسسات الربحية	لا	نعم
المحور الثاني: مدى توفر معايير جودة الخدمات المقدمة للشركات المحتضنة وامكانية قياس هذه المعايير.			
.24	هل توفر مكان مخصص لكل شر	لا	نعم
.25	ماهو متو ة التي تحتفظ بها الشركة بعد انتهاء الاحتضان؟	لا	نعم
.26	ماهي المساحة المخصصة لكل شركة		
.27	هل يتم ت المكان حسب عدد افراد ا حتضنة- عمر الشركة- المستفيدين من خدمات الشركة	لا	نعم
المحور الثالث: مدى ملائمة عملية تقييم طلبات الاحتضان للممارسات المثلى.			
.28	عند عملي لبات الاحتضان هل يتم ة على النجاح الريادي كجزء من عملية التقييم؟	لا	نعم
.29	هل يتم ا عتبار رغبة وقدرة الفريق على الاخذ بالنصيحة (المشاركة المعرفية) قدرتهم على الاندماج مع الجو الريادي داخل الخاضنة او المسرعة كجزء من عملية التقييم؟	لا	نعم
.30	كجزء مر لتقييم هل يتم الاخذ بالاعت الخدمات المقدمة من الحاضنة لاحتياجات الفريق المتقدم	لا	نعم

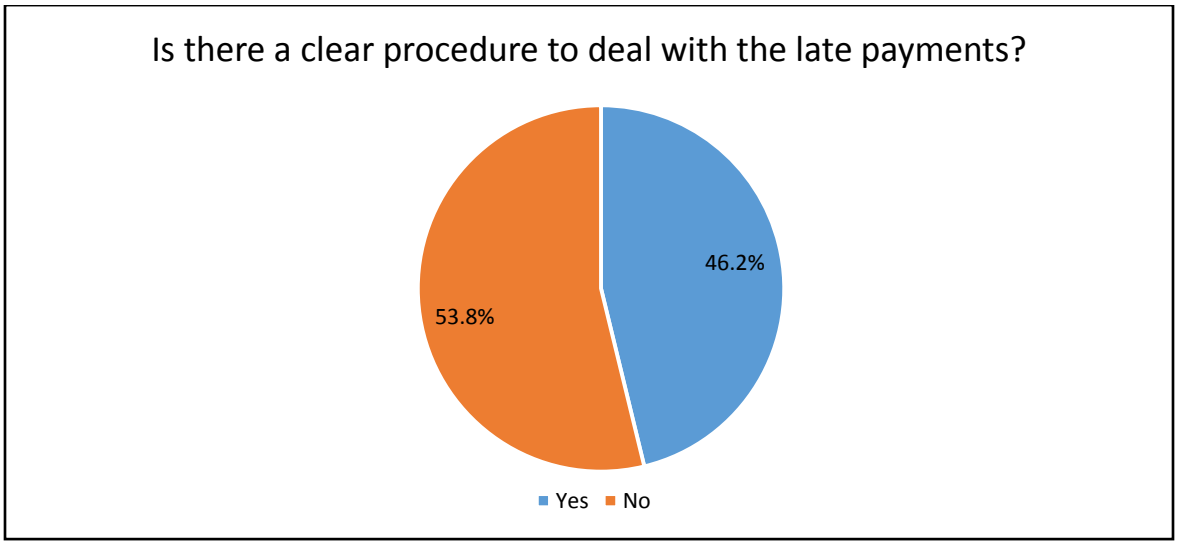
.31	كجزء مر لتقييم هل يتم توقيع التزام كة والحاضنة لتوفيير عوائد مادية و معرفية خلال فترة الاحتضان	لا	نعم
.32	كجزء مر لتقييم هل يتم الاخد بالاعذ بول الفريق المحتضن الالتزام لمدة خمس سنوات بمتطلبات بعد الانتهاء من فترة الاحتضان	لا	نعم
المحور الرابع:مدى ملائمة عملية التخريج وانهاء الاحتضان للمارسات المثلى.			
.33	هل توافق بارة التالية عند انتهاء فتر ان ومطابقة الفريق لشروط التخرج يتم تخريج الشركة؟	لا	نعم
.34	هل هناك اضحة لقياس مدى مطابـ المحتضنة لمتطلبات التخريج؟	لا	نعم
.35	في حالة كجزء من مرحلة التخريج للب من الشركة المحتضنة اخلاء المكان عندما ينهون متطلبات التخرج	لا	نعم
.36	في حالة دة القصوى للشركة المحـ يتم اخلاء المكان	لا	نعم
.37	حدد الفتر التي يتم من خلالها طلب ت التالية الميزانية، الخدمات المقدمة ، مدى النجاح، امثلة ناجحة	لا	نعم
المحور الخامس: مدى دعم الممولين والمستفيدين والحكومات والجهات المعنية لعمل ونجاح برامج الحاضنة/المسرعة.			
.38	هل يفهم ن مهمة برنامج الاحتضار	لا	نعم
.39	هل يفهم مهمة برنامج الاحتضان/	لا	نعم

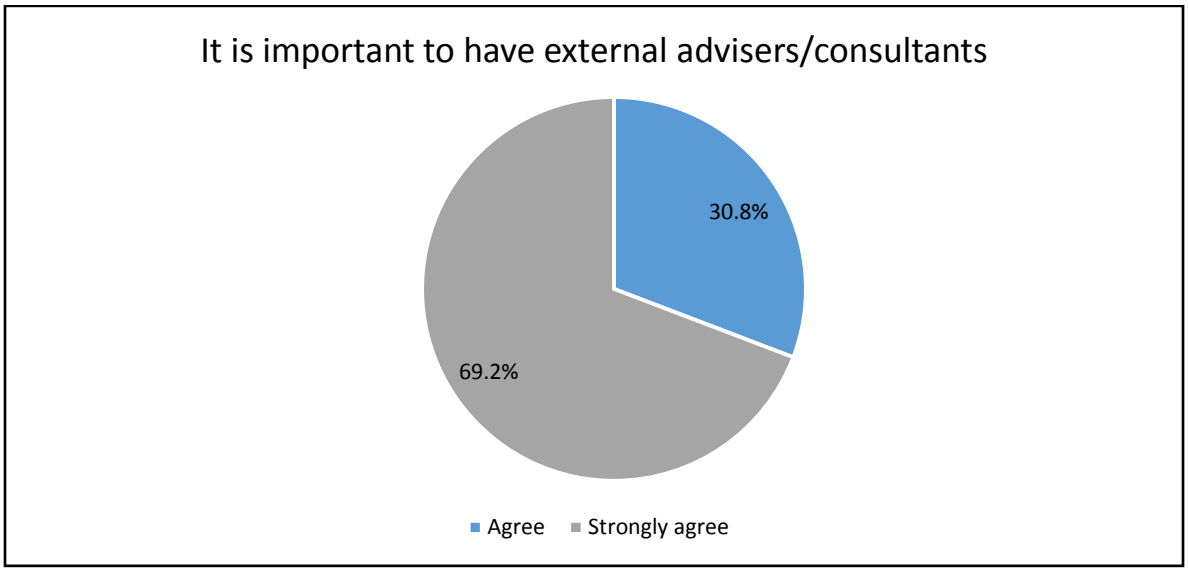
.40	ع	هل يدعم	ن مهمة برنامج الاحتضا	لا		نعم
.41		هل يدعم	مهمة برنامج الاحتضان	لا		نعم
.42		هل يدعم	مهمة الاحتضان والتسر	لا		نعم
.43		هل هناك	قبل الجهات الحكومية	لا		نعم
.44		هل السيا	وانين الحكومية تدعم مهه	لا		نعم
.45		هل هناك	ومي واضح لعملية التسر	لا		نعم
.46	يع من	هل السيا	نصادية الحكومية تسهل ء حيث اعفاءات ضريبية تسهيلات جمركية	لا		نعم
.47	استجابة	في حالة	ى التعاون مع الجامعات من قبل القطاع الاكاديمي	لا		نعم
.48		في حالة انجاز براءة اختراع الاجراءات الادارية سهلة وواضحة				
المحور السادس: مدى جهوزية القطاع التكنولوجي لدعم عملية الاحتضان والتسريع.						
.49		يجب أن يكون القطاع التكنولوجي قادرعلى توفير الخدمات اللوجستية				
.50		الخدمات التكنولوجية يجب أن يتم تقديمها باسعار ملائمة للحاضنة				
.51		يجب أن الحاضنة قادرة على توفير الخدمات التكنولوجية للشركات المحتضنة مع الاحتفاظ بالقيمة التنافسية				

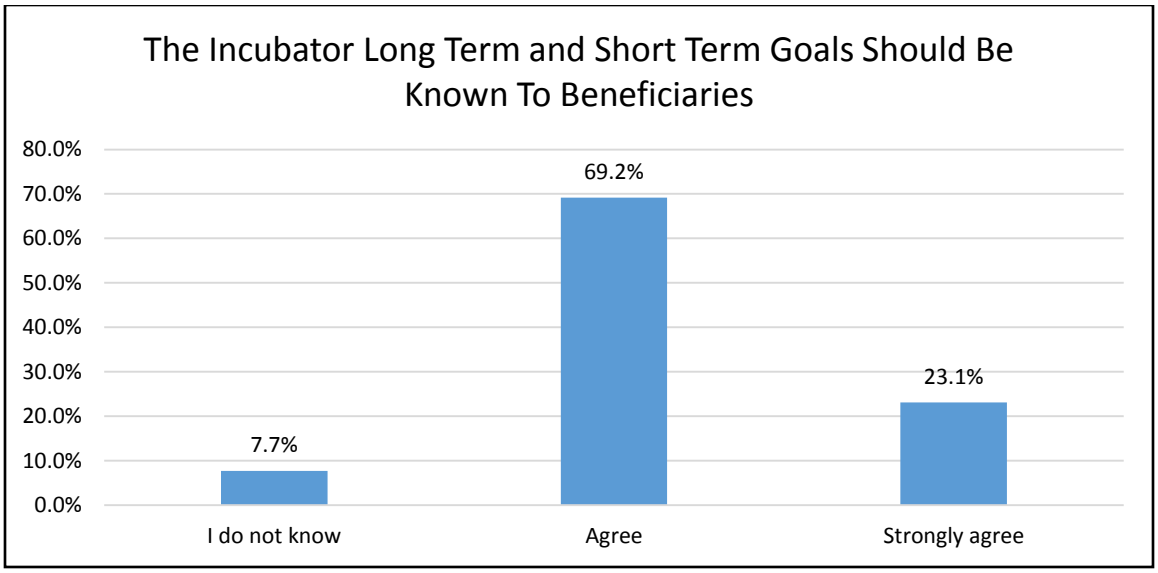
.52	الشركات الناشئة من خلال برنامج الاحتضان يجب أن تقوم بدعم عمل الحاضنة بعد انتهاء فترة الاحتضان والالتزام القانوني					
.53	يجب أن تكون هناك اليات ادارية لحساب مدى نجاح الشركة ماديا					

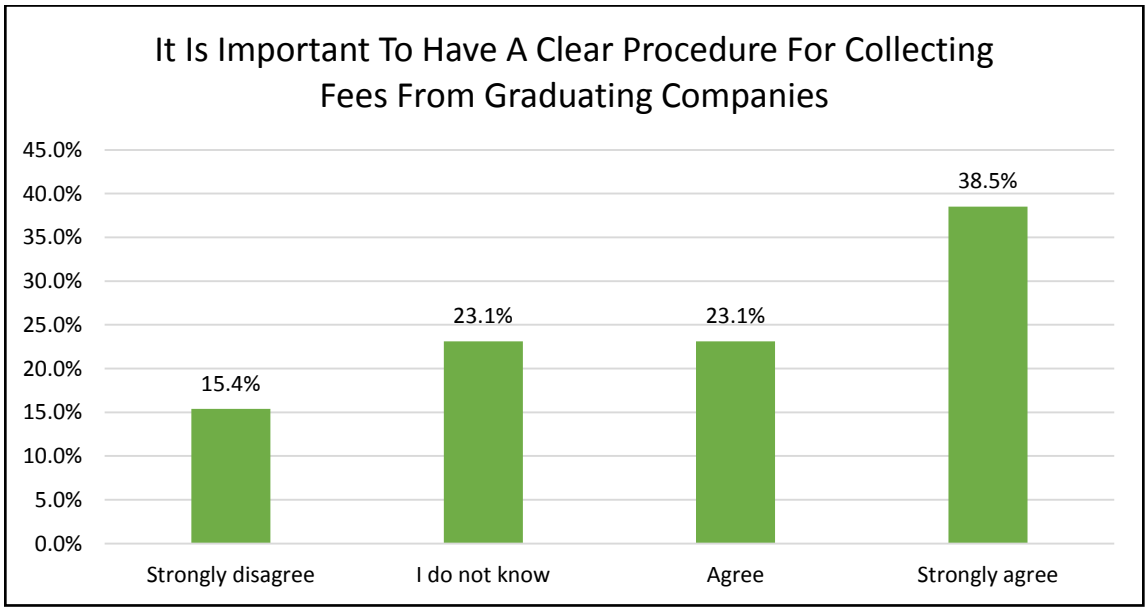
Appendix II

1. **The availability of administrative, financial and technical strength standards for incubators and accelerators operating in Gaza Strip**

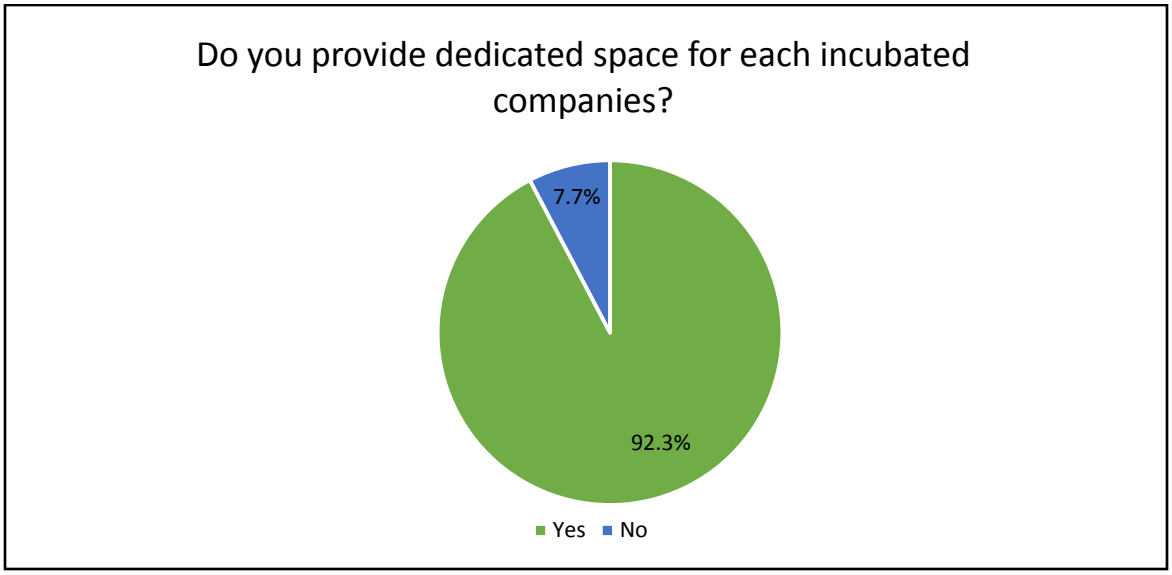


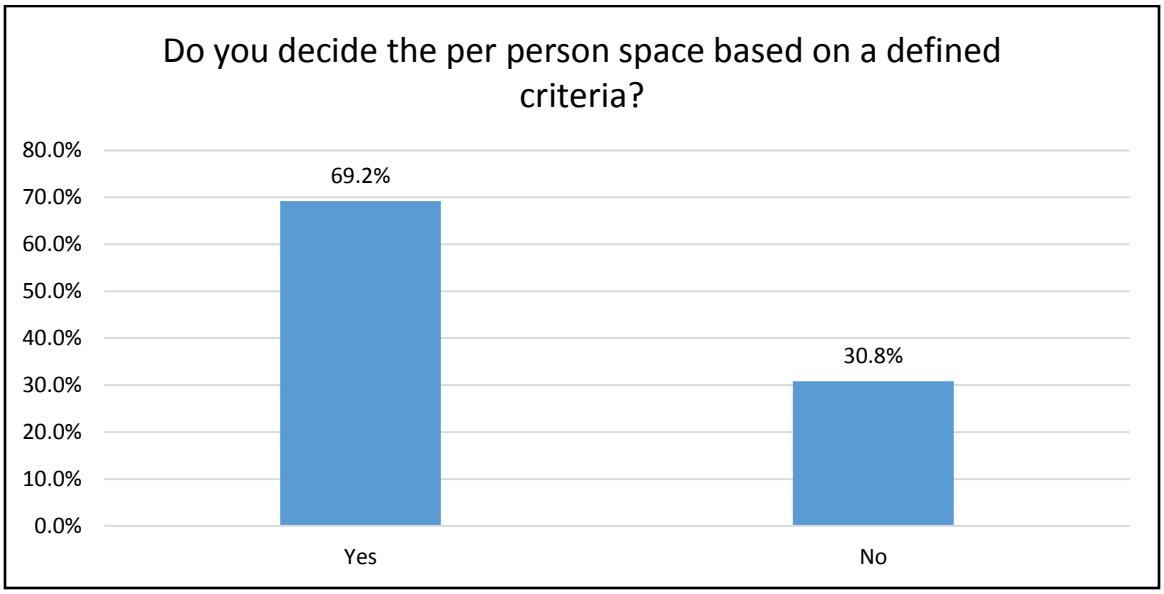



The Incubator Long Term and Short Term Goals Should Be Known To Beneficiaries
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
7.7%
69.2%
23.1%
I do not know
Agree
Strongly agree

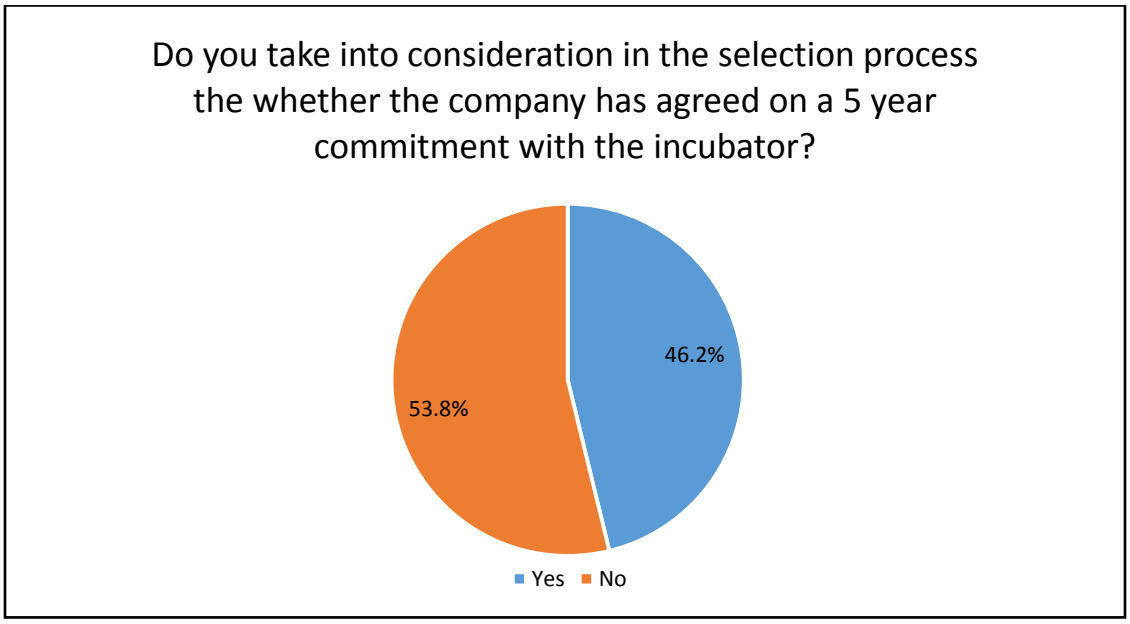

It Is Important To Have A Clear Procedure For Collecting Fees From Graduating Companies
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
15.4%
23.1%
23.1%
38.5%
Strongly disagree
I do not know
Agree
Strongly agree

2. **The availability of quality of services provided to companies incubated standards and the possibility of measuring these criteria**

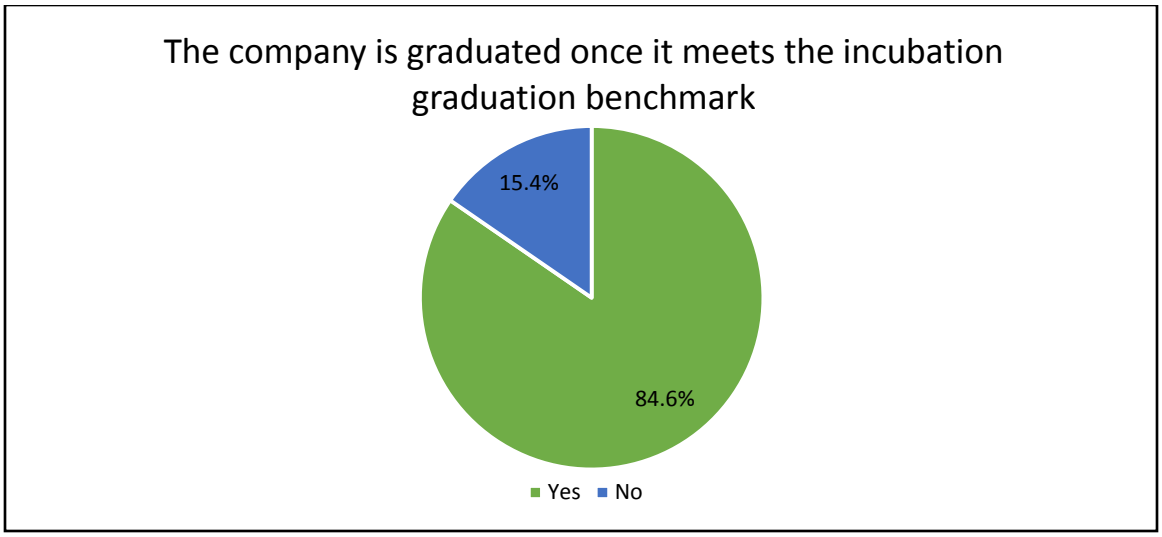


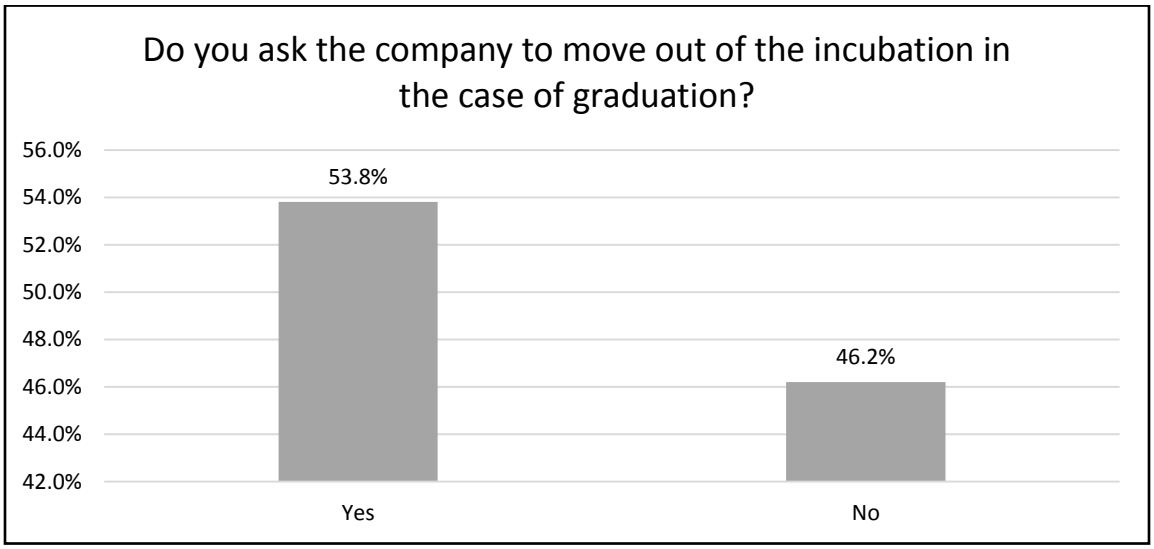


3. **The suitability of the process of assessing the optimal incubation practices requests**

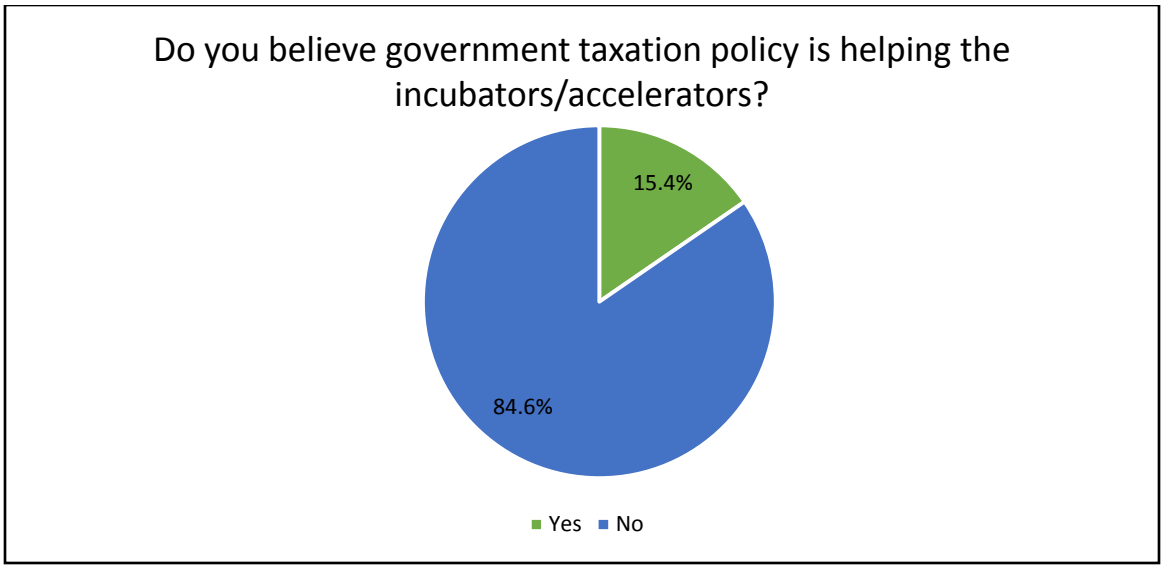


4. **The appropriateness of the graduation process and the end of the incubation best practices**

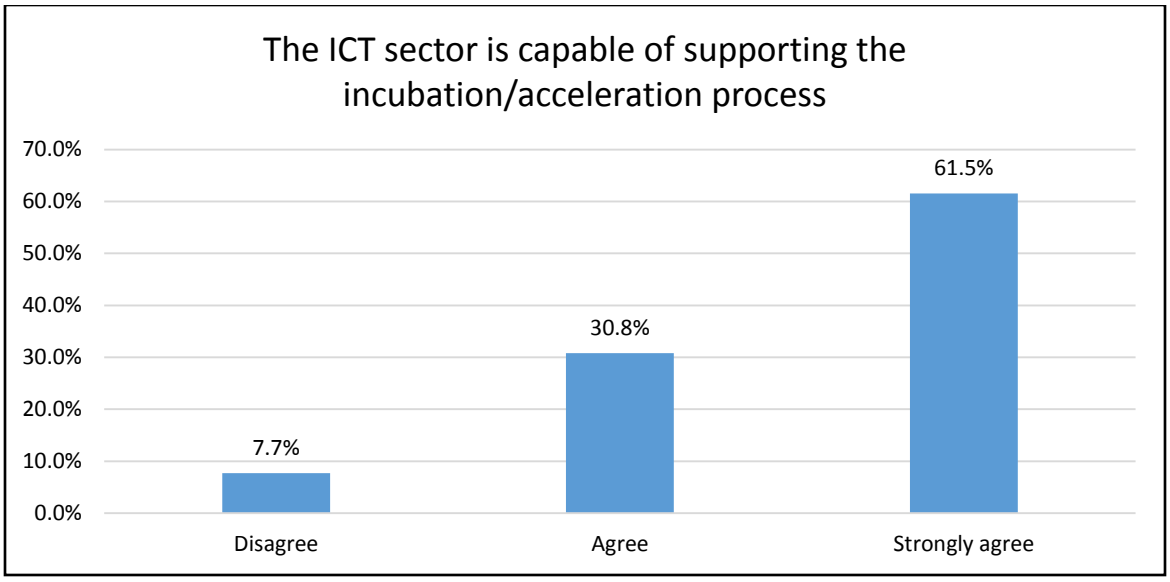


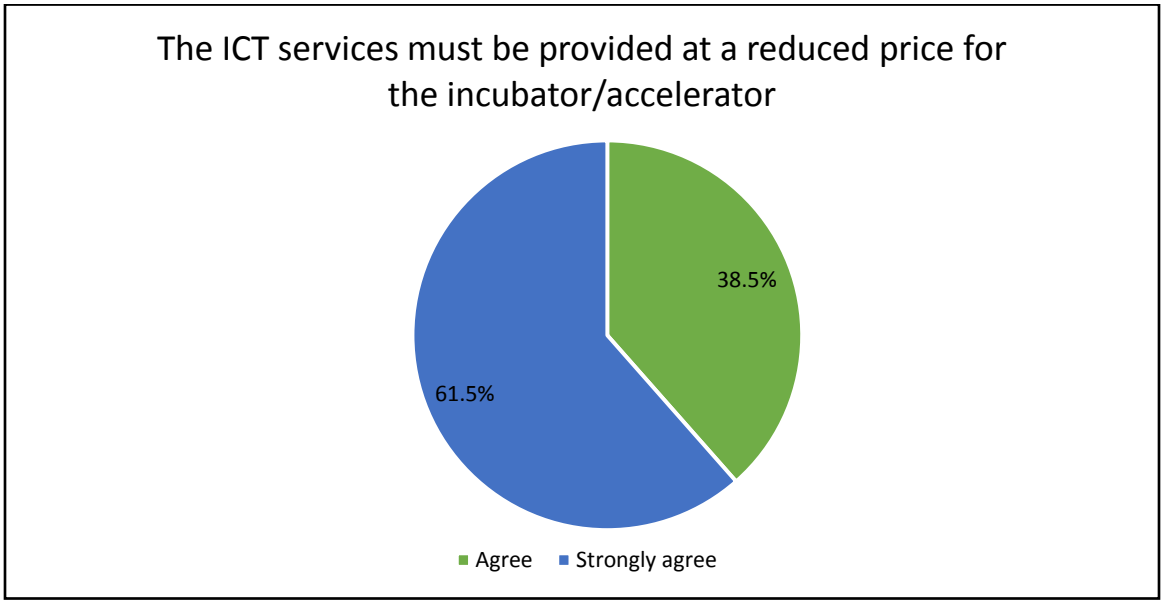


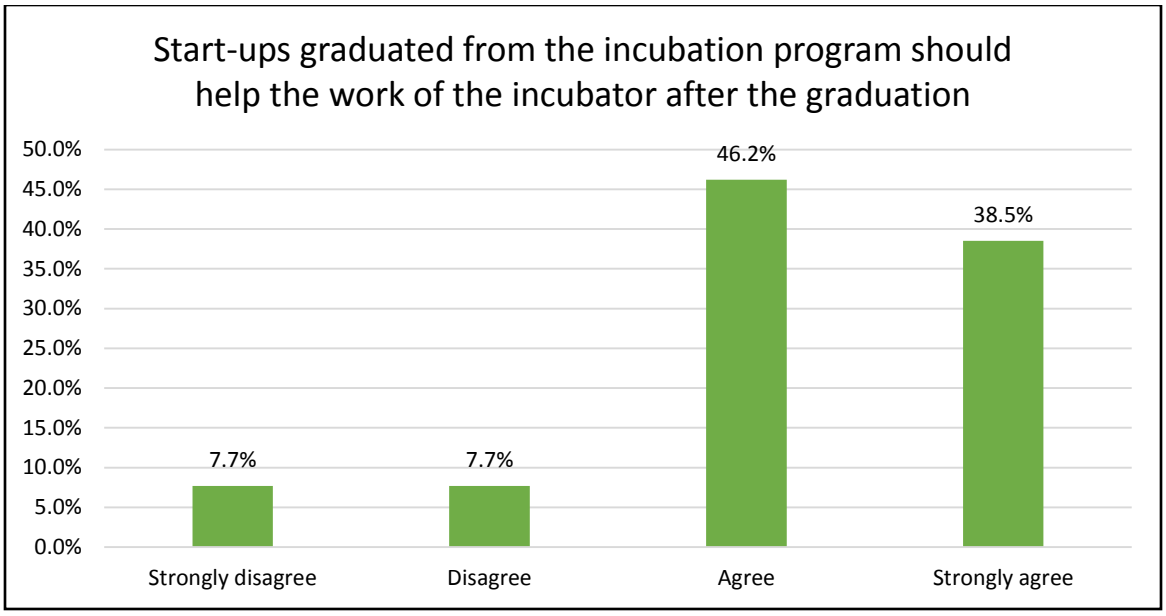
5. **over the support and transferred beneficiary governments and stakeholders to work and the success of the incubator / accelerated programs**



6. The readiness of the technology sector to support the incubation and acceleration process


The ICT sector is capable of supporting the incubation/acceleration process
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
7.7%
30.8%
61.5%
Disagree
Agree
Strongly agree


The ICT services must be provided at a reduced price for the incubator/accelerator
38.5%
61.5%
Agree
Strongly agree


Start-ups graduated from the incubation program should help the work of the incubator after the graduation
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
7.7%
7.7%
46.2%
38.5%
Strongly disagree
Disagree
Agree
Strongly agree