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Sustainable entrepreneurship in the MENA region: the role of
incubators

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ABSTRACT

Each country wants to improve its socioeconomic wealth, and what better way to do that than through entrepreneurship, which is a catalysator of positive change, innovation and improvement. However, entrepreneurs in developing world face many obstacles on their way to establishing and growing a business and this is where business incubators come into focus. Since entrepreneurs in developing countries do not have enough resources and knowledge to overcome the challenges they face, they will need incubators to provide for them an enabling environment where they can develop their ideas; their business capabilities, which are often underdeveloped in developing countries; link them with potential partners, customers, suppliers; and lastly help them with funding, which is more difficult to obtain in these regions. For this reason it is necessary to see what are business incubators currently doing in developing regions and one such region is MENA (Middle East North Africa). It is also necessary to see how these incubators can improve, and what would be the perfect incubator, towards which they could strive.

Another important aspect of entrepreneurship in developing countries is sustainable, youth and women entrepreneurship. Women and youth are often discouraged from becoming entrepreneurs in these countries and therefore, having incubators that specifically support and create an environment where they can develop their business skills and ideas would be of great significance. One of the biggest challenges for MENA region is youth unemployment, with one in four young people unable to secure a job. Young women are affected the most, in many countries of MENA female youth unemployment rates exceed 40%. Women also represent an untapped entrepreneurial source as most of the entrepreneurs in these countries are male. In Egypt specifically, men account for 86% of entrepreneurs. Therefore it is necessary to see what efforts are incubators currently

putting in to stimulate women and youth entrepreneurship and is it enough. Both women and youth could bring different ideas and innovations to the market which is another reason for having them more involved in entrepreneurial practices.

Sustainable entrepreneurship, as a way to develop sustainable value – that is shareholder wealth that at the same time leads us to a more sustainable world is also a huge opportunity and should be encouraged as well. Sustainable entrepreneurship is of great significance because it can bring necessary transformations to the way the business are operating today, including changes to products, processes of firms, both of which are currently unsustainable and have detrimental environmental impact in capitalistic society. Encouraging entrepreneurs to look for innovations in clean technologies and finding disruptive innovations could help not only them and other firms in their region but can lead to a better and cleaner world as well. Because of the raising pollution in the world these innovations cannot come soon enough. For this reason it is necessary to see to what extent do incubators support these firms, ideas, innovations and which incubators are more likely to support them.

The objective of this thesis is to see how incubators are currently performing in MENA region, what are the services they are offering, to whom they are offering them (what criteria they are using when selecting entrepreneurial ventures), what is their mission in order to make conclusions about which incubation models are currently used in MENA region and which model is more likely to be used by different sponsors (government, NGO and private). I also looked at what are the problems faced by entrepreneurs in MENA region and specifically in Egypt, as an example, in order to see whether incubation models used are appropriate or not and what problems they are solving. I also looked at whether they are supporting women and youth entrepreneurs and are they specifically targeting them. Finally, I observed to what extent are incubators supporting sustainable

entrepreneurship and projects such as clean tech, etc., and whether that is their primary objective. To conclude, I also looked at the possibility of having a perfect incubator for MENA, and in general institutionally void environments, and if there is such an incubation model, what it would be.

In order to make these conclusion I have taken into account 8 different incubators from MENA region (specifically 3 are from Egypt, 2 from Tunisia and 1 from Jordan, Lebanon and Saudi Arabia) which I have intentionally chosen, in order to take into account most relevant incubators of this region and also I did this so I could have incubators with different sponsors (government, NGO, universities and private). I used a qualitative approach in my research given the small number of incubators that exist in this region and because I wanted to analyze them more closely and understand them better. This could not be achieved using quantitative approach. For the purposes of this thesis I analyzed and researched each of them individually and then did cross-case comparison.

The results of analysis suggest that there is a need for two incubation models, each of them targeting entrepreneurial ventures at different stage, nascent or seed stage. That is one incubation model which helps incubators by providing entrepreneurs with necessary business skills, and that helps them develop their idea more fully and one which helps them with networking, entering the market and which will more often look for equity stakes in exchange for these services. Finally, the incubators analyzed do support sustainable entrepreneurial ideas but do not specifically target them except for one. Women and youth are encouraged to become entrepreneurs but with only one incubator specifically targeting entrepreneurial ventures that employ women and youth, leading to a conclusion that there are still strides to be made by incubators in these regions in order to lift employment rates of both women and youth to a sustainable level in these regions. The

unemployment rate currently for both youth and women in MENA region is around 25%. Although there is support for sustainable projects, for this as well it can be said that further efforts are welcome because as stated Hart and Milstein firms who do not undertake and lead the development of clean technologies won't have a place in the future economy.

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1 INTRODUCTION

In this paper I will build on the foundation set by Boris Mrkajic in his paper Business Incubation Models and Institutionally Void Environments and further explore incubation models in institutionally void environments. By using qualitative approach on case studies from a sample of business incubators in MENA region I explore the necessity of two business incubation models and look whether Boris' conclusions about incubators in developing countries will hold true now for whole MENA region as well, as opposed to just Egypt. I also look at the impact that different sponsor of incubator will have on incubators' mission and which startups it supports, based on the criteria it uses. Finally, I will look whether the incubators support sustainable entrepreneurship, female, youth entrepreneurs and to which extent. I will look closely at each incubator to see what kind of sustainable entrepreneurship they are supporting, how they are doing it and what are.

The objective of this thesis is to see how incubators are currently performing in MENA region, what are the services they are offering, to whom they are offering them (what criteria they are using when selecting entrepreneurial ventures), what is their mission in order to make conclusions about which incubation models are currently used in MENA region and which model is more likely to be used by different sponsors (government, NGO and private). I will also look at what are the problems faced by entrepreneurs in MENA region and specifically in Egypt as an example in order to see whether incubation models used are appropriate or not and what problems they are solving. I will also look at whether they are supporting women and youth entrepreneurs and are they specifically targeting them. Finally, I will look at to what extent are incubators supporting

sustainable entrepreneurship and projects such as clean tech, etc., and whether that is their primary objective. To conclude, I will also look at the possibility of having a perfect incubator for MENA, and in general institutionally void environments, and if there is such an incubation model, what it would be.

1.1 Structure

- In chapter 2 I will look at the reasons why entrepreneurship is beneficial and how it is even more important for developing countries. I will also look at what are business incubators, how they are helping entrepreneurs in starting their business, how they have developed and what will be their role in developing countries. I will also look at what is sustainable value, how it can be achieved and why it is important for our future.
- In chapter 3 I will look at MENA region as an example of developing region and specifically Egypt as a part of it to better understand the institutional environment. I will look at the challenges that entrepreneurs face in Egypt and why it is harder to start your own business in this region.
- In chapter 4 I will take a look at some specific cases of business incubators in Egypt and MENA region, describe how I selected them and how I analyzed them in order to better understand incubation models in developing countries.
- Chapter 5 will describe more in depth the incubator cases I have selected. It will describe at what stage do the incubators choose entrepreneurial ventures. I will also go over what are the services they provide to incubated ventures, what is their mission and what impact different sponsors will have on their mission. I will also look at what is the support that

incubators are providing to women, youth entrepreneurs and to what extent they are supporting sustainable entrepreneurship.

- In chapter 6 I will compare my findings to those of Mrkajic's and conclude whether they are true for other developing regions as well and not just Egypt, which was the environment previously analyzed by Mrkajic. I will also look at whether there is a perfect incubation model that can be used in developing countries.

2 ENTREPRENEURSHIP, THE ROLE OF INCUBATORS AND SUSTAINABLE VALUE

2.1 Entrepreneurship and role of incubators

Entrepreneur is someone who perceives an opportunity and creates an organization to pursue it (Piva, E., 2017). Entrepreneurship therefore is the process of: business opportunity recognition, opportunity assessment, business planning, and finally exploitation of the new opportunity. Entrepreneurship is of great significance because it helps in solving issues and needs that exist on the market, and does so with practical solutions and by complementing existing or creating new products (POK, Business and Management). Entrepreneurial process starts with business ideas that can have an impact on environment and results in entrepreneurial venture.

Rate of adults which are active as entrepreneurs ranges between 2.9 and 39% across countries. The highest rates of entrepreneurship are found in developing countries (POK, Business and Management). The primary reason for this is that in developing countries entrepreneurs face more strident challenges on their way to the market.

Innovation, as a commercial implementation and exploitation of an invention, is a key output of entrepreneurial activity (POK, Business and Management). Due to this fact as well as that:

- Owner-managers of small ventures run the majority of businesses in most countries and create many jobs
- Small ventures often provide specialized goods and services that are ignored by the largest firms

- Entrepreneurial entry and exit spurs the development of the economic system,

governments all over the world are trying to create policies and create an ecosystem that promotes and sustains entrepreneurship (Piva.E, 2017).

For all these reasons entrepreneurship is even that more important in developing countries, where it is the catalyst of development. Innovative entrepreneurs are more important here, where the potential margin for positive change is greater and where opportunities for new innovative businesses is even better. However, entrepreneurs face harsh challenges in developing countries, while at the same time, this is a context where becoming an entrepreneur may be particularly rewarding. The challenges, in general, are that first of all education may be more difficult to attain and certain dimensions of capital may be less defined than in developed countries. Both informal and formal funding may be scarce and more difficult to obtain (POK, Business and Management).

There also advantages for becoming an entrepreneur in a developing country. First of all, having several existing businesses in the market is far from the efficient frontier. Moreover, these existing businesses may not be able to cover a wide range of problems and needs that exist in the local environment. This gap which exists is opportunity for local innovative entrepreneurs, to find their market. Another advantage for entrepreneurs is the recent and rapid emergence of information and communication technologies in developing countries. Percentage of active Internet and mobile users is growing considerable in these countries, from day to day. The development of ICT has drastically reduced the cost of accessing and spreading information (POK, Business and Management). Information Communication Technologies impact all the factors that support entrepreneurial success. First, ICTs improve Human Capital by giving innovators from developing countries access to scientific or business know-how from all around the world, easily. ICTs also give a better access to finance, and one great example of that is crowdfunding. Crowdfunding

enables entrepreneurs to raise significant capital that they would not be able to get otherwise due to it coming from many different people often from different countries. The benefit is twofold because people who crowdfund are also customers who otherwise may not be able to get to the product. Crowdfunding also signals the value of the startup and can therefore lead to finding partners, sales, investments. Third, ICTs make access to complementary assets easier for entrepreneurs in developing countries. Thanks to ICTs complementary assets can be obtained not only from local companies but from international as well. Lastly, ICTs enhance social capital of entrepreneurs. ICTs help entrepreneurs in networking with their close environment and with their distant as well. (POK, Business and Management)

The last opportunity that developing countries offer to their entrepreneurs is frugal innovation. Frugal innovation typically consists of producing cheaper, simplified, versions of existing sophisticated products. It is an innovation that decreases the usage of scarce resources and costs of production, which leads to lower product price. These innovations deliver more value to its customers at lower costs, which allows lower-income groups to access products that otherwise would be unreachable. This leads to a larger market that innovators can address. Frugal innovations are not a result of technical inventions but rather are a match between existing technologies, local resources and local needs. Local entrepreneurs have a couple of advantages when it comes to frugal innovations. Local entrepreneurs know well the local environment and frequently interact with it which allows to be the first to recognize the existing opportunity. Also local entrepreneurs in developing countries usually possess know-how in areas where frugal innovations take place, such as craftsmanship and agriculture. (POK, Business and Management)

Also important for developing countries and in general is social entrepreneurship. Social entrepreneurship is embarking on a business venture in order to find solutions for social problems.

Social entrepreneurs therefore are people who find innovative solutions to society's most persistent social problems. (Business Sweden Dubai, 2015)

2.2 The start of incubators

Business incubators have emerged during 1950s using a Japanese model of forming and organizing new companies who supported development of family start-ups (Ilić M., 2006). First incubator was found in 1959 in Batavia, New York in facilities of departed incubator station for the needs of local poultry grower, who abandoned this area and moved to cheaper alternative locations because of high costs (Take of your startup with business incubator, 2015). Joseph Mancuso, known at as the founder of business incubators, came to idea to empty the building who had telephone connection, heat and workspace and offer it to small entrepreneurs as a place to start their business with minimal rental fees. On the annual business meeting of "National association for business incubators" held in 1994, Mancuso explained that name incubator came from his statement for local news paper who he gave at the time saying: "I don't know how to call it, we used it for incubation of chickens, and now we will I assume use it for incubation of businesses (Ilić M., 2006).

During the last two decades of the XX century many incubators have formed in the countries of EU , as well in other developed countries of the world. Since the beginning of 90s till 2001 over 3000 business incubators have been formed in the world of different kinds and orientation, and now there's over 4000 of them. In developed countries of the world the success of ventures formed with the help of incubators is 85% (Ilić M., 2006).

Incubators play an important role in developing countries as they help entrepreneurs overcome significant challenges existing in their environment. Business incubator is a property-based venture which provides entrepreneurs and start-ups with

- physical facilities
- financial advice support
- opportunities for networking
- other technical and business services.

Incubators therefore have an objective of supporting entrepreneurs and help them in commercializing their own technologies and innovations. (Piva, E., 2017)

2.3 Incubators

Incubators are established, dispersed organizations that support entrepreneurship.

According to The National Business Incubation Association (NBIA) incubators are a ‘catalyst tool for either regional or national economic development. NBIA categorizes their members’ incubators by the following five incubator types: academic institutions; non-profit development corporations; for-profit property development ventures; venture capital firms, and combination of the above’.

According to the resource dependence theory incubators act as intermediaries between incubated entrepreneurial ventures and their environment. As intermediaries they can influence entrepreneurial ventures in two ways. First they can represent a buffer mechanism, offering resources needed and in this way they protect the firm from external threats. This allows the incubated ventures to focus on development of its competences, products, services, resources etc. Incubators may also help incubates develop connections with their environment when needed and

can also help them align their company to the environment norms. In this way entrepreneurs can get access to resources they need but do not possess, because of their scarcity or high costs. (Mrkajic, 2017)

It is also important to note that the mechanisms through which incubator supports incubated ventures are defined by incubation model and these services are dependent on the environment.

2.3.1 Incubators in institutionally void countries

As Boris Mrkajic (2017) notes based on the literature on institutional voids we can propose that countries characterized by institutional gaps require more complex incubation models. As defined by institutional voids are failures and refer to non- or sub- performance on the basis of factors that prevent organizations and individuals in fulfilling their functions, This environments require more complex incubation models because the availability of public goods (e.g. fundamental knowledge) and collective goods (e.g. know-how and applied knowledge), which are critical to the early stages of entrepreneurial ventures, is largely affected by these institutional voids. These institutional voids are created by governmental failures and create negative externalities for entrepreneurial ventures, which are more damaging in developing countries. Therefore we can see that there is a need for business incubation in very early stage of entrepreneurial life cycle, much earlier than it is needed in more institutionally advanced countries. (Mrkajic, 2017)

What has been proposed by Boris Mrkajic (2017) is that there are two incubation models which are needed. One incubation model should be tailored to the needs of entrepreneurial ventures in *nascent or pre-birth stage*, while the other incubation model should help ventures in *seed or start-up stage*. The two incubator models are complimentary with the second incubator model being

more modern and is used more in developed countries. The first model has more value for the ventures in developing countries, that is institutionally void environments.

Sponsors also have an impact on incubation models and nature of incubator's activities. Mrkajic (2017) also argues that governmental, NGO sponsored and academic incubators will support ventures in nascent or pre birth stage. Additionally, private incubators will support more mature companies, which are closer to entering the market. Incubators will use different models because of their goals which in case of governmental, NGO sponsored and academic incubators are non-profit and they have a strong interest in spreading entrepreneurial efforts and would like to see more people choosing this career path, because of benefits that it would bring to the socioeconomic wealth. Moreover private incubators have profit maximization strategies and have a strong interest in aiding only the most financially promising ventures and advanced new business ventures. They are not looking to help entrepreneurial ventures that in turn can bring them some profits.

2.3.2 Development of incubators

Resource based view suggests that incubators are institutions that possess resources complementary to the resources of incubates, and which they can share without acquiring substantial costs. Incubation model is then an array of mechanisms incubator uses to support the incubated firm.

How incubators have developed can be divided into several phases. During 1960s-1980s incubators have had a simpler value proposition which consisted of infrastructure offering and leveraging on economies of scale which was achieved through sharing with incubatees. This helped incubators reach a decrease in operating costs and effort they needed to manage complementary activities which then allowed incubatees to focus on their core activities. However

these first incubators didn't help ventures in acquiring capabilities that they were missing. While entrepreneurs possessed technical skills they generally lacked business skills needed to adapt to their new role in organization and to respond to the changing market. In the second phase of incubators' evolution (1980s-1990s) incubators recognized the need to introduce knowledge-based and learning services and incubators became and were also used by the government as an economic development tool to promote creation of new technology-based companies. In the third phase, most recent one, starting from 2000s incubators have been focused on connecting the entrepreneurial ventures with external stakeholders. Incubators during this phase are providing networking opportunities and are giving access to the resources which otherwise would be out of reach for new venture. During this phase private companies recognize the profit opportunity of being an incubator, however their focus is primarily on ventures whose business ideas are close or already are on the market. This has put infrastructural and to some degree business development support in the background. (Mrkajic, 2017)

Although recent studies suggest that the latest incubation model, with bridging over buffering role, is established and will prevail, these studies have taken into account only the developed countries and have not taken into account how institutionally developed is the environment.

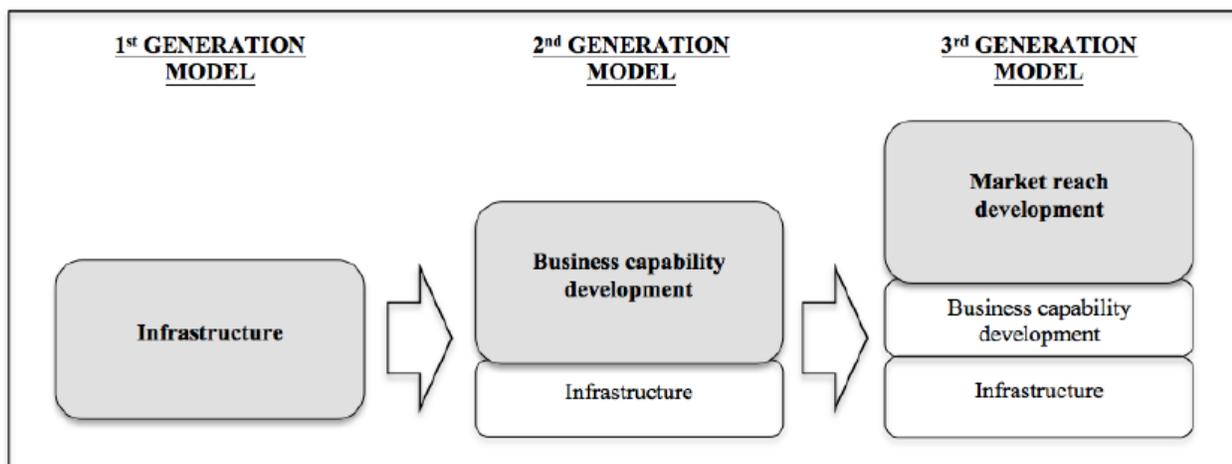


Figure 1. Evolution of incubation models in developed countries (Bruneel, 2012)

2.3.3 Business incubators in developing countries

Governments in developing countries have had trouble with introducing business incubator in the previous decades. Only since recently have they had success while also managing to introduce private incubators as well. However their success rate is still not great. The reason for this slow progress could be attributed to institutional voids which exist in developing countries. Institutional voids, create more severe challenges for new companies, whose limits and liabilities are even more amplified in this context. Institutional voids present in these countries impact legitimacy, education and access to resources, all of which are essential for entrepreneurial ventures. Therefore we must see whether the established model for business incubators is adequate for institutionally void environments. (Mrkajic, 2017)

The existing incubator model which is focused on market reach and advance venture development is most likely not sufficient to address these ventures. These voids result in negative externalities for entrepreneurs. Currently theory on incubators in developing countries still needs to be firmly established and the research of most of these studies has been mostly focused on how they can enhance economic development rather than what is their role in entrepreneurship ecosystem. Based on various studies it was concluded that incubators can help in filling institutional voids present. For him incubators are intermediaries between ventures and the environment. These authors suggest that depending on the level of advancement of commercial institutional environment, incubator will provide services focused on business capability development or on market

infrastructure development. Intensified institutional voids will lead incubators to focus on market infrastructure development services. (Mrkajic, 2017)

Sponsors is an institution that helps incubators by providing key resources such as funding, infrastructural support, administrative services, connections. Additionally, sponsors are instrumental to the objectives established by the incubators.

2.4 Sustainable value

Global sustainability has been defined by World Commission on Environment and Development (1987) as the ability to “meet the needs of the present without compromising the ability of future generations to meet their needs.” In a like manner sustainable development is defined by Gladwin and others (1995) as “a process of achieving human development . . . in an inclusive, connected, equitable, prudent, and secure manner.” Sustainable enterprise, therefore is an enterprise that contributes to sustainable development by delivering simultaneously economic, social, and environmental benefits—and these are called the triple bottom line. While there is agreement on this general terminology, managers disagree on the implications that they have on the enterprise-level sustainability. Some managers consider sustainability as something that’s morally mandatory while for others it’s a legal requirement. On the other hand some perceive it as a cost of doing business – needed to maintain legitimacy and a right to operate. A few firms have begun to frame sustainability as a business opportunity, offering opportunities for lowering cost and risk, or even growing revenues and market share through innovation. Still, for the most firms, the pursuit of enterprise sustainability is difficult to align with objective of increasing shareholder value. Firms have come to a conclusion that running a sustainable business will require of firms to lower their profits and shareholder value in favor of the public good (Friedman 1970). A way to overcome this problem is for managers to link enterprise sustainability with shareholder value. The challenges that exist when it comes to creating sustainable value can help lead to strategies and practices that will create more sustainable world, and simultaneously will increase shareholder value (Hart and Milstein 2003).

Shareholder value according to Stuart Hart and Mark Milstein (2003) can be defined as a multidimensional construct, and it can be illustrated with the following figure.

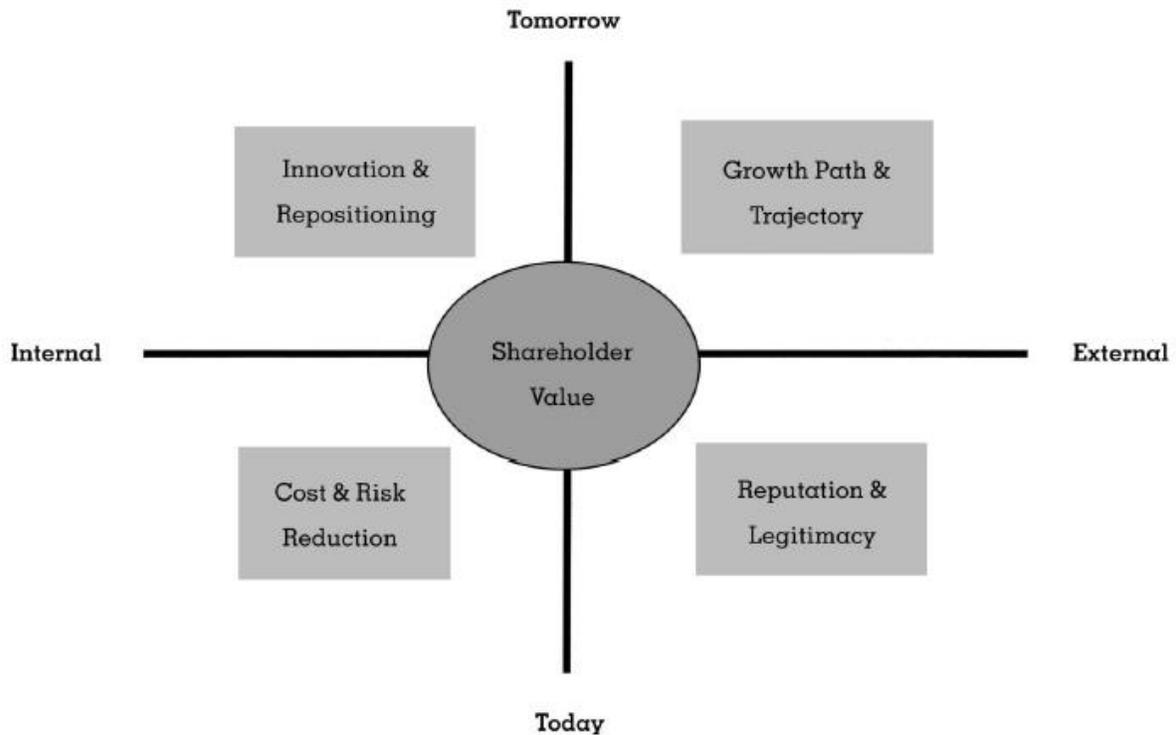


FIGURE 1
Key Dimensions of Shareholder Value

The vertical axis represents the need of the firm to manage today's business while at the same time creating tomorrow's technology and markets. This axis recognizes the tension between the need to achieve short-term results while also having an outlook for the long-term goals of the firm. The horizontal axis recognizes the need of the firm to grow and protect its internal capabilities and resources while also capturing new knowledge and perspectives from the outside. Combining these two axes creates four different dimensions of performance needed to create shareholder value. The lower left quadrant focuses on near-term and internal aspects of performance: cost and risk reduction. Unless the firm can operate efficiently and reduce its risk consistent with returns,

shareholder value will be eroded. The lower-right quadrant focuses on performance dimensions that are near-term in nature now includes important stakeholders in the firm's environment, most importantly, suppliers and customers in the immediate value chain, as well as regulators, communities, NGOs, and the media. Inclusion of these stakeholder's interest can lead firm to a differentiated position, leading to greater reputation and legitimacy which will further increase stakeholder's value (Hart and Milstein 2003).

When it comes to the upper left quadrant, firm should not only take care of today's performance but should also generate products and services for the future. Internally, this means developing or acquiring the skills, competencies, and technologies that are innovative and that reposition the firm for future growth. The creation of shareholder value therefore depends on firm's capabilities to destroy today's capabilities for the sake of innovations for the future. Lastly, the upper right quadrant focuses on firm's future performance while taking into account stakeholders in firm's environment. Trustable expectations for firm's future growth are key for generating shareholder value and this depends on firm's ability to articulate clearly what its future growth path and trajectory will be. (Hart and Milstein 2003)

In order to maximize shareholder's value over time, firm must perform well in all four quadrants simultaneously and constantly. Performing in only a couple of these quadrants will lead to suboptimal performance of the firm or even failure. Firms like Kodak and Xerox, which failed to adequately invest in digital technology, illustrate how overemphasis on today's business (to the exclusion of tomorrow's technology and markets) may generate wealth for a time but will eventually erode shareholder value as competitors enter with superior products and services. Similarly, the recent experience of many Internet companies stands as testimony to how preoccupation with tomorrow's business (to the exclusion of performing today) may be exciting

and challenging, but short-lived. Finally, companies such as Monsanto, which failed to adequately address stakeholder concerns over genetically modified food, demonstrate that overemphasis on the internal aspects of the firm may enable short-term execution but will ultimately blind the firm to the external perspectives that are so important to legitimacy and competitive imagination. (Hart and Milstein 2003)

2.4.1 Global drivers of sustainability

Similarly to creating shareholder value, sustainable development is also a multidimensional challenge. There are four set of drivers related to global sustainability. First set of drivers is concerned with growing industrialization, with its material consumption, pollution and waste generation. Industrial activity has had great effect on global environment, particularly on climate, biodiversity and ecosystem function, and this effect may be irreversible. Along with industrialization's economic benefits have come significant pollution burdens as well as increased consumption of rare resources and fossil fuels.

Resource efficiency and pollution prevention are therefore crucial for sustainable development. Second set of drivers is related to generation and interconnection of civil society stakeholders. This is due to the fact that NGOs and other civil society groups have stepped into the role of monitors as well as enforcers of social and environmental standards. The spread of internet has allowed these groups to communicate more with each other. These internet connected coalitions of NGOs have made it difficult for companies, governments and any large institutions to operate secretly. Sustainable development therefore stimulates firms to operate in a transparent, responsive way, due to well informed, active stakeholder base. (Hart and Milstein 2003)

Third set of drivers is related to emerging technologies that may create solutions that would make basis of current material and energy-intensive industries obsolete. Nanotechnology, renewable energy and genomics are few technologies that could reduce the impact that current industry and human in general have on our planet. Innovation and technological change are therefore key for reducing the impact that industrialization has on planet, and therefore are key for sustainable development. (Hart and Milstein 2003)

Fourth set of drivers is related to problems of increased population, poverty and inequity associated with globalization. Today, for example, over 4 billion people survive on less than \$1500 per year, the minimum income needed to avoid serious deprivation. Social development and wealth creation on a massive scale, especially among the world's poorest 4 billion are essential for sustainable development. (Hart and Milstein 2003)

In summary, global sustainable development is multidimensional concept that cannot be solved by any single corporate action. In order for firms to create sustainable value, they have to address all 4 drivers of it. Therefore firms can create value by reducing their consumption of materials and their pollution, by operating with greater transparency and responsiveness. Third, companies can create value by developing disruptive technologies, which could reduce the negative impact that industries have on the environment. Finally, firms can create value by satisfying the needs of the poorest people by creating shared wealth. (Hart and Milstein 2003)

For each of four drivers of sustainable development we have corresponding strategies and practices, which together fit each into one of four quadrants shareholder value, which is now sustainable value.

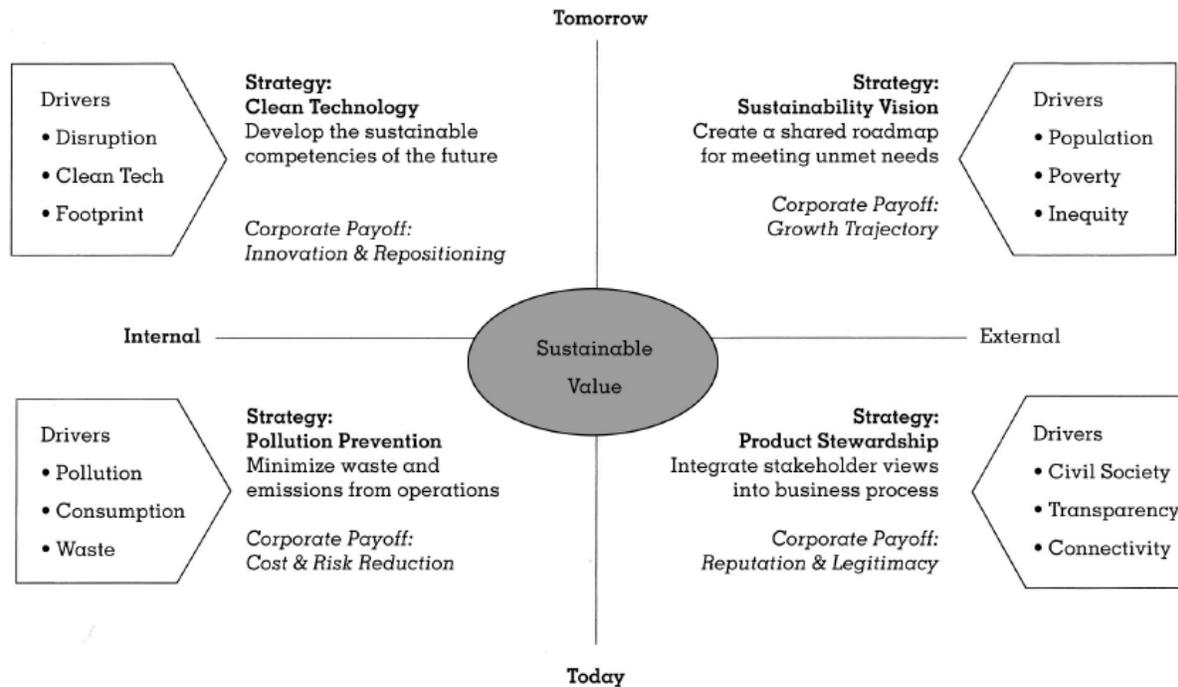


FIGURE 2
Sustainable Value Framework

Increasing profits and reducing risk by preventing pollution

Problems of material consumption, waste and pollution that come with industrialization are opportunities for firms to develop skills and capabilities in pollution prevention and eco-efficiency. With pollution prevention, firms want to reduce the waste and emissions coming from their current operations. Less waste means better utilization of materials which in term leads to lower costs of materials and waste disposal. In order to have effective pollution prevention firm’s employees must be involved and firms needs to have well-develop capabilities in continuous improvement and quality management. Environmental management systems, such as ISO, developed on total quality principle will help firms to develop systematic processes that help in removing waste and lower risks in firms operations. A good example of application of this principle is 3M’s Pollution Prevention Pays (3P) which has helped 3M reduce its emissions by 50% and saved them over \$500

million through lower raw material, compliance, disposal and liability costs. Therefore pollution prevention helps managers to increase their shareholder value, and is sustainable as well. (Hart and Milstein 2003)

Enhancing Reputation and Legitimacy through Product Stewardship

While pollution prevention focuses on internal operations product stewardship extends beyond organizational boundaries to include entire product life cycle. Product stewardship therefore involves continuous interaction with external parties such as suppliers, customers, regulators, non-governmental organizations and media. (Hart and Milstein 2003)

As noted by Northwest Product Stewardship Council, “Product Stewardship is an environmental management strategy that means whoever designs, produces, sells, or uses a product takes responsibility for minimizing the product's environmental impact throughout all stages of the products' life cycle, including end of life management. The greatest responsibility lies with whoever has the most ability to affect the full life cycle environmental impacts of the product. This is most often the producer of the product, though all within the product chain of commerce have roles.”

Product stewardship results in both lower environmental impacts across the value chain and enhances legitimacy and reputation of company by involving stakeholders in goal of being sustainable. By constructively engaging stakeholders, firms increase external confidence in their intentions and activities. There are many ways to increase shareholder value through product stewardship. One of them is cause-related marketing which would lead to customers associating their purchase with products that have positive social and environmental benefits. Using industrial ecology firm can transform wastes from one operation into inputs for another. Using an old product

in order to create a new one is called ER3(standing for Environmentally Redesigned, Restructured and Reused). Some firms such as Weyerhaeuser and Shell have increased shareholder engagement, using hall-style meetings, Internet based comment boxes, and other tools giving opportunity for stakeholders to articulate their opinions about firm's operations. (Hart and Milstein 2003)

The company Nike serves as a recent, salient example of the value of product stewardship. Faced with growing backlash in the late 1990s regarding its labor and environmental practices, the company turned to product-stewardship strategies to recover its reputation and preserve its right to operate. The company enacted a worldwide monitoring program for all contract factories, using both internal and third-party auditors such as Price Waterhouse Coopers. Nike also became a charter member of the Fair Labor Association (FLA), a non-profit group that evolved out of an anti-sweatshop coalition of unions, human rights groups, and businesses. Additionally, Nike helped found the Global Alliance, a partnership among the International Youth Foundation, the MacArthur Foundation, and the World Bank dedicated to improving workers' lives in emerging economies. (Hart and Milstein 2003)

Stuart and Heart further note (2003, p.6)“Aside from taking action on the labor (social) front, Nike also took action environmentally. Footwear designers started evaluating their new prototypes against a product-stewardship scorecard, using life-cycle analysis. Nike also launched the Reuse a Shoe Project to downcycle old, unwanted footwear. Nike retailers collected shoes and shipped them back to the company where they ground and separated the materials. Through partnerships with sports surfacing companies, the outsole rubber and midsole foam were turned into artificial athletic surfaces. Profits from this business generated income for the Nike Foundation and the funding of sport surface donations.”

Nike case shows us that firms use product stewardship to demonstrate that stakeholders opinions matter and can be influential to firm's actions. Product stewardship as pollution prevention is centered on improving the product which then results in improved relations, legitimacy and reputation.

Accelerating Innovation and Repositioning through clean technology

Clean technology is related to drastic improvements that goes beyond standard routines and knowledge. Disruptive technologies such as biomimicry, information technology, nanotechnology and renewable energy are an opportunity for firms to reposition themselves around more sustainable technology. In this way firms would not only reduce the negative impact that they have on their environment but would address sustainability challenge directly and with their new technology would fight to solve some social and environmental problems. This would then help not only them but other firms as well who could learn from them or could even buy new technology from them, which would further increase innovators profits. (Hart and Milstein 2003)

Many firms are working on developing clean technologies that will be the drivers of firm's future economic growth. and Milstein note (2003, p. 7) "BP and Shell are ramping up investments in solar, wind, and other renewable technologies that might ultimately replace their core petroleum businesses. In the automotive sector, Toyota and Honda have already entered the market with hybrid power systems in their vehicles, which dramatically increase fuel efficiency. They also launched a market experiment in fuel cell vehicles in Japan at the end of 2002. Also in 2002, General Motors launched the AUTOonomy project—a bold \$1 billion initiative to reinvent the automobile around hydrogen fuel cell technology. "While many carmakers talk of a transition to

alternative power taking 20–30 years, GM, Toyota, and Honda are committed to making it a commercial reality within a decade. Additionally, firms such as General Electric, Honeywell, and United Technologies are investing in technologies that would lead to the development of small-scale, widely distributed energy systems that could make centralized coal-fired and nuclear power plants obsolete. (Hart and Milstein 2003)

Bigger companies, however, are more likely to go with pollution prevention and product stewardship than with strategies in clean technology. Reason for that is that investments in clean technologies take time to pay off. Also big companies are more rigid and have standardized procedures which suppress formation of new innovations. Firms that do pursue clean technology solution establish organization structures that support innovations, and these are the firms that will lead future economic growth. There is clear evidence that firms who do not undertake and lead the development of clean technologies won't have a place in the future economy. (Hart and Milstein 2003)

Defining firm's growth path and trajectory through sustainability vision

The existing and growing gap between rich and poor, and the unmet needs of people at the bottom of the economy are an opportunity for firms to define a trajectory that will lead to future growth. Having more inclusive form of capitalism where firms would have a dialogue with these people and collaborate with them could lead to new paths of economic growth and would open up new markets. (Hart and Milstein 2003)

The Grameen Bank in Bangladesh is one of the best known example of how having a sustainability vision can create new pathways to growth for firms. Muhammad Yunas, previously professor, had a vision of giving microcredits to the poorest people in the market. The reason why bankers avoided lending to poor customers was because they assumed that they were lazy, lacking competences and so they served wealthier customers. However Yunas discovered that the poor were, for the most part, the opposite - energetic, motivated, and knew exactly what they needed to move themselves forward—gain access to small amounts of credit to start or expand small enterprises—and built his enterprise to serve this need. By the late 1990s, Grameen Bank was providing microcredits in more than 40,000 villages, better than half the total number in Bangladesh. (Hart and Milstein 2003)

The vision of Grameen Bank has led even financial giants such as Citigroup to entering into domain of microlending, and has lead to a global explosion of institutional interest in microlending over the past decade. Firms have learned that listening to the voices of poor could be the source of creativity and innovation. Companies such as Hindustan Lever Ltd., a subsidiary of Unilever PLC, and Hewlett-Packard have both in different ways started market development in rural poor India. HLL has through product development dedicated specifically to the unique need of rural poor in India and through use of the very best science and technology created affordable shampoos and soaps for this big new market. Today, more than half of HLL's revenues are coming from customers which are at the bottom of economic pyramid. (Hart and Milstein 2003)

Hewlett-Packard used World e-Inclusion initiative to help the isolated and disconnected, as it saw information poverty as the biggest roadblock to sustainable development. As a part of this strategy HP created a R&D lab in rural India for the purpose of understanding the needs of rural poor. Through Internet kiosks, wireless infrastructure and R&D focused on cost reduction, HP and other

companies have made it possible for even the poorest to be connected by reducing the costs. (Hart and Milstein 2003)

However, even though these companies have been successful at serving these markets most companies still consider that the poor market have no value opportunities and continue to ignore them. In order for companies to be able to meet the needs of the poorest they need to communicate with stakeholders they previously considered unimportant (e.g. NGOs, rural villagers, etc.), to see what needs exist and how firm's competences can be used to meet them. This in turn could lead to development of innovative technologies, products and services that not only meet the needs of the poorest but could lead to growth of firm in other markets as well. (Hart and Milstein 2003)

2.4.2 Toward Sustainable value

The challenge of global sustainability as previously mentioned is complex, multidimensional and emergent. In order to move toward sustainability firms need to not only minimize their waste (pollution prevention) but should look for new technologies, either outside or to develop them, that would be more efficient and with them they would take on this challenge more proactively. Firms also need to take into account their stakeholders and interact with them about current products (product stewardship) and about future solutions that would help solve social and environmental problems (sustainability vision). (Hart and Milstein 2003)

These strategies combined could then lead to lower costs and risks; they could enhance reputation and legitimacy of firm; accelerate innovation and repositioning; and more clearly define growth path and trajectory – which are all crucial for creation of shareholder value. The following steps are recommended by Hart and Milstein for pursuit of sustainable vision: diagnosis, opportunity assessment and implementation (design of projects and experiments). (Hart and Milstein 2003)

Diagnosis

Sustainable value framework, could be a simple but useful diagnostic tool, through which company could evaluate its activity in each of the four quadrants. In this way company could see how balanced its portfolio is, and in case of imbalance could see where its missed opportunities and weaknesses are. Currently most incumbent firms do not recognize the full range of sustainability opportunities that are available. Most firms focus their attention on bottom half of the matrix – short term solutions concerning existing products and stakeholder groups. Programs in pollution prevention and product stewardship are well institutionalized and have saved companies hundreds of millions of dollars over the past decade. Crises of big companies, that failed to successfully engage the view of stakeholders, have lead to a growing number of firms to explore strategies for product stewardship. (Hart and Milstein 2003)

Opportunity assessment

Only a few established companies have begun to exploit opportunities associated with the upper half of the model – part focused on building new capabilities and markets. Most of the clean technologies that are being developed are done so by small companies, which often do not have enough financial resources to do this successfully. Young enterprises search for clean technologies as a way to leapfrog existing competitors and claim underserved market space, while most large companies have avoided this options. (Hart and Milstein 2003)

However, some large companies may be better positioned than others to pursue clean technologies and bottom-of-the-pyramid markets – they may be good in acquiring new skills, working with unconventional partners, incubating disruptive technologies, creatively destroying existing product portfolios, etc. Firms with this capabilities could have a great advantage if proactively

seeking these solutions compared to firms who would defend against these innovations. (Hart and Milstein 2003)

Implementation

In order to implement these sustainability strategies it is necessary to organize possible actions into projects and business experiments. Considering the nature of clean technology and bottom-of-the-pyramid markets for a firm it is much safer to have many small experiments than to have a single big investment. These experiments must be evaluated with different metrics because they will not meet the short-term revenue and profitability targets associated with business expansion projects.

In order for this experiments to go well Hart and Milstein suggest using a real-options approach, rather than the more conventional discounted cash-flows. Real-options thinking introduces the logic of the private equity market into the firm, with an expected payoff in the 5–7 year time frame, rather than the excessively short-term logic associated with conventional capital budgeting or the excessively long-term logic associated with traditional R&D.⁶⁹ They also recommend creating a separate pool of investment capital to fund these initiatives and a separate organizational entity to house the business experiments aimed at opening up new markets. Without an early protection, the logic of short-term performance in today's businesses will guarantee failure. (Hart and Milstein 2003)

2.4.3 Opportunity of sustainable value

The opportunity to create sustainable value – shareholder wealth that at the same time drives us to a more sustainable world is big, but firms have yet to fully seize it. In sustainable-value framework we can see what the characteristics and opportunities are associated with sustainable development. Even though the framework is simple, the tasks needed to achieve these strategies are complex and challenging, suggesting that only a few firms will be able to carry out activities in all four quadrants simultaneously. To conclude, incremental improvements of business may be more easily attainable but they neglect the opportunities associated with clean technology and opportunities of underserved markets at the bottom of economic pyramid. These opportunities may be one of the most under-appreciated alleys of future growth. (Hart and Milstein 2003)

3 ENTREPRENEURSHIP IN THE MENA REGION

3.1 Middle East and North Africa (MENA) and Egypt

As defined by Staff (2007), the Middle East and North Africa (MENA) is a region that consists of 22 countries in the Middle East and North Africa. The MENA region accounts for approximately 6% of the world's population, 60% of the world's oil reserves and 45% of the world's natural gas reserves. The countries which are typically included in the MENA region are: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank, Gaza and Yemen. Ethiopia and Sudan are sometimes included as well.

Mena region has historically- at least for the past 50 years-enjoyed a healthy stream of revenues from its abundant natural resources, namely, oil and recently natural gas. However, the current upsurge differs from the past periods of high energy prices. Now both governments and private-sector enterprises in the region are re-investing energy revenues into infrastructure and industry capital projects. (White B. J. ,2008)

Egypt is one of the Middle East North Africa (MENA) countries on which we will focus on in order to better understand incubation in developing countries. Egypt is an institutionally laggard environment, with an array of negative externalities for entrepreneurial ventures, which makes incubation that much more important in supporting the creation of new ventures. Egypt is also interesting because it has a big market along with plenty of place-specific assets that are potentially useful for innovative entrepreneurial ventures. Moreover business incubators are still in development in Egypt with different types of sponsorships which could help us better understand their role in the ecosystem. The percentage of individuals that have an interest of becoming

entrepreneurs is rising. However the local institutional environment is yet to develop sufficiently in order to support high rates of entrepreneurship. (Mrkajic, 2017)

First of all when it comes to the ease of doing business Egypt is as of June 2017 ranked as 128th out of 190 countries by World's Bank Doing Business list. Also Egypt has very complicated registration procedures which create serious barriers for upcoming entrepreneurs. Third, Egyptian banks do not often lend money to entrepreneurial ventures and instead focus lending to established companies which are much less of a risk to them. The reason for this attitude towards entrepreneurial ventures is the traditional education which does not empower young people to engage in entrepreneurial and innovative activities. Also in Egypt youth has difficulties when transitioning to work from education. All of these reasons as well as the unstable geopolitical situation lead to a big need for business incubators that could help solve some of the issues and help with institutional voids present. Most of the early governmental efforts however to create business incubators, which date back to 1990's, have not been successful. However, recently, with more stakeholders having entered the arena, there have been multiple cases of both non-profit and for-profit business incubators that are viable (Mrkajic, 2017). For this reason I will focus on business incubators in Egypt and other MENA countries to understand what is their role, how they alleviate the gaps in their environments and how they support upcoming entrepreneurs.

3.2 Entrepreneurship opportunity in Egypt

Economic growth and job creation are on top of Egypt's political and economic agenda. A large and young educated population is Egypt's potentially most valuable resource and it could be the driving force for needed economic expansion, but is also a risk factor if not given right opportunities to work. After 2011 revolution, Egyptians showed a higher interest in starting their own business. In 2012

3.6 million Egyptians were stage entrepreneurially active (Hattab, GEM Egypt 2012 Report, 2013).

And although Egyptians are embracing the opportunity of becoming entrepreneurs, studies have shown that they still face many challenges:

- Entrepreneurial skills are still untapped by the educational system
- Access to finance and microloans is scarce and challenging
- The legal frameworks in place hinder the establishment of new/small companies
- Entrepreneurial projects in Egypt are focused only on local market
- Rate of female entrepreneurship in Egypt is very low

To add to this, Egypt's economic performance is rated as weak in the World Economic Forum's Global Competitiveness Report, however there are growing interest and efforts to improve the business climate. Going towards future growth and decreased youth unemployment would also provide elements of stability in the European neighborhood. (Business Sweden Dubai, 2015)

It is widely agreed that Entrepreneurship is key in advancement of a developing countries such as Egypt. Demographic analysis of Egypt shows that 29% of Egyptians were between ages 15 and 29 years in 2013 (Policy Brief 003, 2013); a huge force that can be catalyst for the country's development, if used in right way. Also more youth are looking at entrepreneurship as an opportunity of employment, and Egypt's young population gives it entrepreneurial advantage. Egypt has also a large market – largest in MENA region, therefore there is sufficient room for growth and innovation. Also the challenges that Egypt faces can be overcome with multiple entrepreneurial ideas. (Business Sweden Dubai, 2015)

The ICT sector shows a great potential for entrepreneurship, and one such example is venture of Bey2ollak. They have a live traffic update application that has partnered with Vodafone Egypt and is used by 1 million Egyptians to guide them to the less jammed routes. Another example is DrBridge – as noted by Business Sweden Dubai (2015, p.6) it is a “healthcare online eco-system that bridges and connects clinic practice in order to deliver better medical quality and engage patients in their cases”. However, currently, more than 65% of entrepreneurial projects are focused in retail, trade, hotels, restaurants and manufacturing, while the technology and information sectors account for less than 2%. (Business Sweden Dubai, 2015)

The motivation of youth who have become entrepreneurs has mostly been self-employment. Around one third of youth entrepreneurs that have opened their own business have done so because they could not find wage work, demonstrating that high unemployment and difficult labor-market conditions do push a part of youth into entrepreneurship. Additionally, more than 50% of male entrepreneurs cited greater independence, compared to 36% of female entrepreneurs as a reason why they prefer self-employment. Also 9% of female entrepreneurs also pointed out that flexible hours, a reason that was more connected with youth female entrepreneurs, as a reason for self-employment. From the above, we can conclude that people in Egypt opt for entrepreneurship not only because they have innovative ideas, are creative, or have good business plans, but also as a replacement for employment, and for greater flexibility and independence.

However, there is a risk and challenge of entrepreneurial spirit dying out when business reality comes in. In these conditions it is incubators such as Endeavor Egypt that support entrepreneurs and help them achieve their vision. Endeavor Egypt finds, selects, supports and services high-impact mature entrepreneurs that have strong potential for growth and job creation. This

organization relies on wide network of mentors from both professional, academic and entrepreneurial world, who dedicate their time and knowledge to help entrepreneurs grow.

(Business Sweden Dubai, 2015)

3.3 Challenges of Entrepreneurship in Egypt

Challenges faced by entrepreneurs in Egypt, identified by Business Sweden through interviews done with relevant stakeholders are: Education(level of education at schools and entrepreneurship programs at universities), access to finance, legal regulatory framework, cultural mindsets and social norms, growth and scaling up, difficulty in reaching the market/internationalization and access to business information and knowledge. (Business Sweden Dubai, 2015)

3.3.1 Education

Egypt has a problem with the quality and reach of education, in general and particularly in rural and remote areas of the country, with about 17.2 millions of Egyptians being illiterate. For decades, public sector and state-owned enterprises were dominant and this resulted in dominant culture of working for the less-demanding and secure public sector and government was also responsible for placing every graduate of secondary schools or above into employment, either into civil service or public sector enterprises. It is because of the decades of dominant public sector that entrepreneurial spirit in Egypt was destroyed within the young generations of Egyptians. (Business Sweden Dubai, 2015)

Education system in Egypt has been assessed by national experts as weak in entrepreneurship area, at all levels of schooling, whilst in other countries entrepreneurship education has been made a priority. Therefore Egypt will have to see which methodologies it can use to allow younger

population to acquire entrepreneurial skills. Entrepreneurial education is important because it influences not the level of entrepreneurial activity but also the quality of businesses started.

Because entrepreneurship is a key driver for economies in developing countries it should be taught starting from primary and develop more with higher levels of education. Therefore it should not only be taught at university level as it is important to embed entrepreneurial spirit in younger educations, and this is especially true for the state in which is Egypt. Learning about entrepreneurship from young age, will help gaining all the knowledge needed to start an own company, including: basic economic understanding, knowledge of financial concepts, problem solving skills, and also knowledge about entrepreneurship and how it contributes to society. (Business Sweden Dubai, 2015)

Egypt is also underdeveloped when it comes to university incubators; with many opportunities in this field. The first and only university incubator so far has been AUC Venture Lab at the American University in Cairo, launched in 2013. “AUC Venture Lab incubates early-stage and growth-stage startups that are chosen through a selection process that judges the novelty of the idea, the team’s track record and cohesion, scalability and potential for commercialization, as well as the team’s tenacity and commitment to success. AUC Venture Lab offers workspace, funding, business trainings, networking events, mentorship, and access to faculty members, students and facilities of the American University in Cairo.” (Business Sweden Dubai, 2015)

Aside from university incubators, there has been a number of independent start-up incubators coming into entrepreneurship scene in Egypt, with the goal of helping innovative entrepreneurs, among which the most outstanding are: Flat6Labs, Delta Inspire, Start-up Egypt, Tamkeen,

Endeavour Egypt, Intiliaaqah Egypt, Nahdet Masr and government-run Aydy. We will take a look at some of these incubators later on to see how is it that they support entrepreneurship, and which entrepreneurs they support. (Business Sweden Dubai, 2015)

3.3.2 Access to Finance

One of the biggest challenges for entrepreneurship in Egypt is access to finance. It “has for long been one of the main problems that nascent as well as established entrepreneurs faced in Egypt” (Adly, 2014). With the researches done several topics were discovered to be the issue: few financing options, high investment risk, poor structure of investment climate, etc. It is important to mention that there exists Social Fund for Development, a governmental body mandated to work on developing small and micro-enterprises, planning, coordinating and promoting their expansion, and also assists them in financing and other services, and does all this in cooperation with government. The problem is that Social Fund for Development focuses on very small and micro sized start-ups that are very traditional and lack innovativeness. This implies that there exists a financing gap between small and medium sized start-ups, given that SFD, primarily supports smaller sized companies. According to Adly, 2014, restrained access to finance is reported to be the third top barrier to growth. Around 58% of entrepreneurs that Adly study has interviewed have said that access to finance was a major problem. Because the formal sources of finance for entrepreneurs in Egypt such as bank loans or special funds targeting MSMEs and young entrepreneurs, are not always feasible, they depend mostly on self-financing options. These options include business profits, private savings and credit from family and friends. The Adly study revealed that while 37% of entrepreneurs applied for a bank loan, only 42% of the received it. The

reasons why others didn't apply for the loans were that they could either not afford interest rates, couldn't meet collateral and guarantees, or believed that procedures were complex, costly and time-consuming. Additionally there are some misunderstandings among youth about how business financing works, which may stop them from applying for the credit. Also, the banks viewed business ideas of micro and small ventures as too risky to be financed. When it comes to rural areas of Egypt they are much less privileged than Cairo, Alexandria and major cities in Egypt. Youth in those areas do not have enough money to start their business, micro loans are not wide spread and they are only given by a small number of banks, they are poorly understood by some youth, they are really small loans, process is complex and there is also a risk involved when taking a loan. (Business Sweden Dubai, 2015)

It also important to take into account non-traditional sources of finance, such as venture capital and angel investors. Venture capitals and angel investors are confined to high-tech sectors, leaving behind traditional sectors such as tourism, industry and agriculture even though they are main sources of income in Egypt. Also their reach is limited because concept under which they operate isn't widely known and understood. Taking into account the problems of banking sector, the sector of non-traditional finance is crucial for development of entrepreneurship in Egypt. (Business Sweden Dubai, 2015)

3.3.3 Legal Regulatory Framework

Another problem that entrepreneurs have when starting their business in Egypt is that procedures are not simple. These complicated procedures and legal frameworks are among the main challenges and barriers to entering Egyptian market. As previously mentioned Doing Business Report (by the World Bank Group) ranked Egypt 113 in 2014 and 112 in 2015 in a pool of 189

countries. The government bureaucracy and long complex procedures either force entrepreneurs to work in informal way, or discourage them in starting their own business. Additionally the cost of closing a business is very high and the process could go up to one or two years. (Business Sweden Dubai, 2015)

3.3.4 Cultural mindset and social norms

Both cultural mindset and social norms are strong driving forces in Egypt. Traditionally, it was common for graduate students to be employed by the government as this was considered to be the most stable and guaranteed job on the market. Only recently in the past few decades have Egyptians changed their mindset and become open to working in private sector because of its higher wages and benefits. On the other hand, becoming an entrepreneur is not always accepted socially and culturally. Egyptians have resistance toward becoming entrepreneurs because of the argument that they could instead have a stable job where they could receive income each month. Also youth often consider entrepreneurship as a supplement to a regular job or as a retirement plan. As Business Sweden Dubai (2015, p.12-13) notes “Straying from the above path and quitting one’s job to start private business is not a very popular idea. A case in point is The Bakery Shop’s experience (The Bakery Shop is a concept fresh local bakery). When partners were discussing the idea with their families, they were faced by strong resistance and criticism upon explaining their business idea and their need to move away from their careers in promising multinational companies in order to pursue their business venture. Another example is Ahmed Abdoun, the

sports entrepreneur, who has faced similar challenges and disapprovals from family members when deciding to quit his sales and marketing management role in a multinational company for starting off his business in the sports industry. He was pressured to remain in his job for around one year until his business ‘picked up’, and it was ‘safe’ to leave his job. This is also true in light of the high unemployment rate that is prevalent in Egypt; people tend to be reluctant to leave their stable jobs in fear of not finding another job in case their business fails.”

3.3.5 Access to business knowledge, growth and internationalization

Entrepreneurs in Egypt do not receive formal entrepreneurship education or training by the government. They have no practical training for marketing activities, on how to write business plans, financial feasibility studies and management skills and therefore they feel the need for help and advice. To make the cause more difficult, access to information in Egypt is very limited. Finding data, trends and market information is challenging in Egypt due to poor bookkeeping in most sectors, inconsistency of data, or because the government shares very little information due to political reasons.

Entrepreneurs also face many obstacles to growth because of political instability, high risks of investments during turmoil, restrained access to finance, corruption, and difficulties it creates when going through the required procedure for expansion, restrained access to power (electricity and gas), and also because of weak networks of entrepreneurs and lack of proper platforms for partnering up and expanding. Additionally because of these challenges to grow internally entrepreneurs find it difficult to gain access to international markets and grow internationally. (Business Sweden Dubai, 2015)

3.4 Women and Entrepreneurship in Egypt

Although there have been efforts to promote Egyptian women to start their own businesses, unfortunately, their participation is still much lower than expected and the difference in engagement between two genders is significant. In 2012, men accounted for 86% of early-stage entrepreneurs in Egypt, while women were the remaining 14%. The reasons why men and women engage are also different – while men do it in order to pursue a market opportunity (not out of necessity), women seek opportunity for the opposite reasons, out of necessity not opportunity, they also seek entrepreneurship because of better working hours, so they could attend their families and homes. As stated in GEM 2008 “women in Egypt represent a large untapped source of entrepreneurial potential and an economic force if that potential is encouraged and supported more fully” (Hattab, 2008).

3.5 Entrepreneurship in other countries of MENA region

3.5.1 Jordan

Jordan is facing a similar situation with regards to Egypt, and based on the survey of Jordanian adults carried out by the Global Entrepreneurship Monitor (GEM), its reported that entrepreneurship rate in Jordan is lower than expected, with males much more likely to be involved in the entrepreneurial activity.

Jordan has also been dealing with unemployment rate that has consistently been around 13-14 percent even though there have been periods in which country has experienced significant economic growth. The most notable however is and the biggest challenge of Jordanian economy is the unemployment rate of 30.8 percent among 20-24 years old. It is important to note that 0-29

years old account for 68 percent of population further emphasizing the importance of unemployment among this age group. (Omet and others, 2015). Also when it comes to the ease of doing business, according to a report from The World Bank in 2015 Jordan ranked, 116th and 117th in years 2014 and 2015 respectively indicating that Jordan is falling behind in Ease of Doing Business rankings and that its still far away from establishing a strong regulatory system that promotes entrepreneurship. (Schiff, 2015)

Entrepreneurship as an option is becoming increasingly interesting among this age group and if further fostered it can lead to not only reduced poverty but increased economic growth and lower unemployment rates. However policy makers must promote quality entrepreneurial efforts and for this reason, having incubators that will foster entrepreneurship activity are of great significance.

3.5.2 Tunisia

Ever since the Jasmine revolution of 2011, the Tunisian ecosystem has experienced a great shift, with the number of startups constantly increasing (more than 500 startups after the revolution) and with more young people being introduced into entrepreneurial world. Tunisian banks also play a role in introducing young people into entrepreneurial world by sponsoring events, competitions, boot camps and workshops. (Snoussi, 2017)

However Tunisia still is in need for structural reforms, with entrepreneurs in Tunisia still experiencing many challenges on their way to opening and running their startup. The challenges that entrepreneurs face in Tunisia are first administrative burdens, then obtaining a loan can be difficult and hearing back on financing approval is slow and inefficient. However, the biggest obstacle that startups face are related to Tunisian dinar.

Tunisia operates with a closed currency, meaning that Tunisian dinar can only be exchanged and spent within Tunisia. This has resulted in startups having hard time with monetizing their products online, and operations such as purchasing software, paying freelancers that work abroad and publishing and selling apps on iTunes and Google Play are not possible without using complicated workarounds.

In order to manage this challenges seventy players, consisting of entrepreneurs, representatives of financial institutions are currently drafting and finalizing the “Startup Act”. This legislation proposes 22 measures that consist of new set of laws and policies that will encourage and support entrepreneurial ecosystem in Tunisia. (Razan, 2017).

In the meanwhile Tunisia could make good use of incubators focused on helping them going around or through the existing obstacles, most importantly helping firms that want to sell products online to foreign customers.

3.5.3 Lebanon

Lebanon was the leading country among those surveyed in Lebanon National Report for 2016 in innovative business startups. This report also shows that Lebanon is among the world’s leading entrepreneurial economies, ranking 4th out of 65 countries in terms of new firm enterprise, eight in terms total early-stage entrepreneurship and third when it comes to the ownership of established businesses.

The results are also bright when we look at youth and younger adults. Two out of seven 25-44 were starting or running a new business in Lebanon in 2016. Also four out of ten questioned considered starting their own business within the next three years. Also women are taking a lead in Lebanon’s startup scene with sixteen percent of those surveyed saying they were involved in

early stage entrepreneurial activity, double the level that was recorded in Europe (six percent) and also more than in US (twelve percent). (Freifer, 2017)

Startups in Lebanon however now are facing challenges when it comes to funding. There is a gap that exists for startups that come out of accelerator to reach venture capital funding and this gap can be bridged by more early stage and seed funds. The problem that Lebanese startups are facing is that most of the VC play it safe and prefer low-risk later stage investment rather than funding seed stage and early startups. (Freifer, 2017) This suggests a need for incubators in Lebanon that would help startups with this, early stage funding.

3.5.4 Saudi Arabia

The number of organizations that support entrepreneurship in the Kingdom of Saudi Arabia, such as funds, coworking spaces, incubators and accelerators has almost tripled, going from 13 in the period of 2006-2010, to 36 in the period of 2011-2015. These support organizations are located in Saudi Arabia's four major cities: Riyadh (54 percent), Jeddah (29 percent), Eastern province (10 percent) and Makkah and Thuwal (8 percent).

These four cities can be looked at as a supporting entrepreneurial ecosystem within the country. Report of Wamda Research Lab (WRL) identifies organizations by type as following: funding organizations (30 percent), events (17 percent), business support (15 percent), incubators and accelerators (14 percent), university technology parks (12 percent), and coworking/fablabs (12 percent). This rise of non-governmental organizations and funding institutions is facilitating much needed access to mentorship, training, and capital for entrepreneurs.

For this funds it is common that most of them offer between \$ 0.1 million and \$ 2 million in the seed stage for around 10 to 20 percent equity stake. The largest funding for now is provided by

Saudi Armaco Energy Ventures, offering between \$ 5 to \$ 10 million over two to three rounds of financing.

Although there are several opportunistic sectors for startups in the Kingdom, entrepreneurs still face various challenges when starting their business. Entrepreneurs questioned in WRL report all agreed on three main challenges when starting up in Saudi Arabia. These are similar to the ones found in the region: regulations and bureaucracy, access to funding, and access to talent. In order to resolve these challenges entrepreneurs suggest for government to implement laws favoring entrepreneurship, then it is necessary to provide investment opportunities to early stage startups. Finally in order to resolve access to talent problem it is suggested that universities partner with startups and offer internship programs in order to promote entrepreneurship.

Even though these are significant challenges entrepreneurs face when entering Saudi Arabia market, the opportunity they have in front of them is great. Saudi Arabia is the biggest market in the region, with the highest income per capita in the region. It is also ranked third globally when it comes to smartphone penetration. This makes up for several lucrative industries for startups in KSA, with them being: media and ecommerce, healthcare, cleantech, and edtech. (Rahal, 2017)

4 MY CONTRIBUTION

As previously mentioned I selected MENA region and Egypt because of its institutionally laggard environment, where entrepreneurs face many challenges towards starting and growing its business, in order to explore which incubation models are needed for developing countries. Also I looked at how different sponsors will impact how incubators support entrepreneurs and what will their mission be.

4.1 Case study analysis

In order to create a conceptual framework of business incubation models in developing countries I used a qualitative approach in my empirical research. I used qualitative approach in order to more fully understand the types of incubators which exist in developing countries, how they are helping the startups, and also because the number of incubators found in MENA region is not great and most of which I found were privately sponsored.

4.1.1 Sample

For the purpose of this thesis I have examined 8 case studies of business incubators and their operations in MENA region. I used an intentional, non-random approach in the sampling of the cases, in order to include the most relevant incubators in this region. I also built a sample of business incubators so that there are different sponsors included (NGO, government, universities and private firms or individuals), in order to understand how different sponsors are relevant to

Incubator	Country of origin	Type	Sponsor	Scope	Women/sustainable entrepreneurship support	Age (years)	Incubation length (short - medium - long)
Incubator A - Cairo Angels	Egypt	Angel investment network	Private	General/Tech	Support women entrepreneurs	6	Medium
Incubator B - The Greek Campus	Egypt	Technology and innovation park	Private	Tech	No special support	4	Short
Incubator C - iPark	Jordan	Technology incubator	Government	General/Tech	Support startups with clean technology	15	Medium
Incubator D - B@Labs	Tunisia	Incubator	Private	Tech	Support startups with clean technology, and the ones with environmental projects	1	Long
Incubator E - SmartESA	Lebanon	Incubator and accelerator	University	General	No special support	22	Medium-Long
Incubator F - TIEC	Egypt	Incubator	Part Government	ICT/Tech	No special support	8	Medium
Incubator G - Badir	Saudi Arabia	Technology incubator	Government	Tech	Supports investments in environmental projects	10	Medium
Incubator H - Impact	Tunisia	Social business incubator	NGO	Social business	Support social*, women, youth entrepreneurship	8	Long

*Table 1.
Details about the incubators included in empirical analysis*

different incubation models. Also these incubators are heterogeneous in terms of services that they offer, their missions, as well as the stage of development at which they admit new incubatees. The incubators included can be found in Table 1, with some of basic information about them. I also tried to include as many incubators from different country as this region is diverse and different

countries have different cultures and levels of institutional voids. The sample comprises of 3 incubators from Egypt, as we have looked at Egypt more closely and we understand the best the problems which entrepreneurs face there, 2 from Tunisia, and 1 each from Jordan, Lebanon and Saudi Arabia. Also when looking at the table we can see that 3 of them are private, 3 are mostly sponsored by government, 1 is sponsored by a university and 1 is sponsored by an NGO. I also looked at whether they are actively supporting, women, youth, sustainable entrepreneurship. Also it was important to see for which industries they are providing support, and although many of them were flexible, they are still mostly providing support for tech industries.

4.1.2 Case study protocol

The data needed to research the above mentioned incubators was mostly collected through online press releases (regional news website Wamda), official websites of these incubators, social media (Twitter, Facebook, LinkedIn) as well as some official and non official reports on the incubators. I also looked at the way these incubators select incubatees for their programs, and have gone through their applications online to see what were the main criteria, to see what were the missions of different incubators and their goals. I also contacted some of the incubators through phone to remove some doubts and gain further information on: what services they are providing, what sectors they are helping and see who can apply for their programs.

I first investigated each case individually and then I did a cross-case comparison, as done previously by professor Boris Mrkajic, in order to highlight the differences between the incubators. Also I collected the information about the incubators to not inform what is the state of incubators in general in developing countries but to find critical observations of incubators in developing countries and see whether proposed Mrkajic model of incubators in developing countries will hold true when taking into account not only Egypt but entire MENA region.

5 RESULTS

Following the literature on business incubators, we can identify the most relevant characteristics of business incubation models. First important characteristic is *stage of intervention*, addressing who an incubator is set up to support, which helps to understand incubator's operations and effectiveness. Second we have *services provided*, that define what support incubator offers to incubatees and how this support is delivered. And the last most important feature of incubation models is *mission*, which defines objectives and explains why an incubator operates. These three characteristics of incubation models should match the needs of incubatees. The needs of entrepreneurs on the other hand depend on characteristics of institutional context, as different challenges will require different help for overcoming them. Therefore incubation models will need to match the characteristics of institutional context.

5.1 Stage of intervention

The stage at which incubators choose to incubate new firms is, as previously mentioned, the first most important characteristic of incubation models. In order to learn about stage of intervention, I contacted incubators and looked at their criteria for selecting incubatees, in order to see which entrepreneurial ventures they are looking at. This is in line with life cycle theory (McAdam and McAdam, 2008), where we can conclude that: if incubator is giving more attention to what are the market possibilities of entrepreneurial venture, and entrepreneurial idea in the selection process then, the incubator is putting more focus on seed stage, and in this case the goal of the incubator is to help incubatees achieve their market potential. On the other hand, if the incubator is looking at the composition of entrepreneurial team, their characteristics and motivations, then, the incubator is focusing on pre-seed stage of entrepreneurial development. When incubator is

focusing on entrepreneurial ventures in pre-seed/nascent stage, he is looking to help them in developing their business skills.

Table 2. Overview of the admission criteria								
Main admission criteria	Incubator A	Incubator B	Incubator C	Incubator D	Incubator E	Incubator F	Incubator G	Incubator H
Entrepreneurial team	✓		✓	✓	✓	✓	✓	
Market potential of the idea	✓*		✓*	✓*	✓	✓	✓	✓

Note: ✓ stands for the importance of criteria, while ✓* indicates that the criteria is more important compared to the others

Incubators E, F as well as some programs of Incubator G focus on entrepreneurial teams and development of founders (nascent stage), while Incubators A, C, D and H put emphasis on ideas and their market potential. For example, for the incubation services of Incubator C, only incubators with:

- Solid business plan and marketing plan
- Sustainable competitive advantage and compelling differentiators
- Strong growth potential
- Skilled and experienced management team”

can apply. It is interesting to note that Incubator B, has no criteria for accepting startups as it is rather than a typical incubator, a technology and innovation park, offering office spaces for technology startups and a place where they can exchange their ideas. In this way it creates entrepreneurial ecosystem, fostering the growth of business ideas. It also hosts technology seminars and conferences.

5.2 Provided services

Incubation model is also determined by the services that the incubator provides to entrepreneurs. Based on the literature on business incubators (e.g. Bergek and Norman, 2008) we can divide services provided by business incubators into three main categories: infrastructure support, business capability development, and market reach development. In order to map the provided services of incubators, I used a set of features for each of these categories as previously done by Boris Mrkajic in his paper (Business incubation models and institutionally void environments). The overview of services provided by the researched incubators can be seen in the following table.

Table 3. Overview of the services provided

Provided service	Brief description	Code	Basic routines for identification	Incubator							
				A	B	C	D	E	F	G	H
Infrastructure	Providing infrastructural support for basic business operations (e.g. coworking space, access to internet, laboratories for developing prototypes, etc.)	1.1	Co-working space		✓ *	✓	✓ *	✓	✓		
		1.2	ICT		✓		✓	✓	✓		✓
		1.3	Access to laboratories				✓			✓	
		1.4	Administrative support				✓ *	✓ *			✓
Business capability	Providing support in developing business	2.1	Business training	✓ *	✓	✓ *	✓	✓ *		✓	✓ *

develop ment	skills of incubated firms and entrepreneur s.	2.2	Business mentoring	✓ *	✓ *	✓ *	✓	✓	✓	✓	
		2.3	Link to knowledge sources	✓	✓	✓	✓	✓ *	✓	✓	
Market reach develop ment	Providing support in launching products (goods or services) to the market, linking the incubated firms to the other relevant stakeholders in the market (e.g. investors, universities, etc.), inclusion into the value chain (e.g. domestic and international suppliers, and clients), and other supports that support market reach of the incubated firms.	3.1	Pre-seed financial support			✓		✓	✓	✓	
		3.2	Seed funding	✓ *			✓	✓	✓	✓	
		3.3	Link to investors	✓ *		✓	✓	✓	✓	✓	✓
		3.4	Link to supply chain (e.g. suppliers and customers)	✓			✓			✓	✓
		3.5	Link to potential strategic partners	✓	✓	✓	✓				✓

Note: ✓ stands for provision of service, while ✓* stands for higher priority of service relatively to the other services

We can see from the table that all incubators provide some service in all three categories except for Incubator A, who doesn't offer any infrastructural support, and the reason for this being that it is an Angel investment network and is mostly focused on connecting incubators to investors. We can see that incubators B, C, D, E and F all offer co-working space, while for Incubators B and D it is one of the more important services provided. Both of the incubators B and D offer co-working space that's in city center, and where the incubatees can not only work but can meet other entrepreneurs and exchange ideas with them, as well as expand their network. Incubators that offer co-working space usually offer ICT services as well.

We can see that all of the incubators offer substantial business capability development services. The reason for this being that in both cases whether the incubator is focused on making profits or enabling entrepreneurs in specific industries, developing their business skills will lead to their greater success, which would in turn be a success for the incubator. As we have discovered, one of the challenges in Egypt is access to business knowledge and culture which opposes to working in private sector and even more to becoming an entrepreneur, therefore receiving some business training, mentoring or having a link to knowledge sources will be of great help for Egyptian and entrepreneurs from MENA region. Incubators A, C, D are offering mentoring and hand-on support, giving incubatees access to experts, whom also check with them on their progress. Mentors of these incubators have an assertive role, have regular meetings with entrepreneurs and also proactively approach them. Incubator D has a networking platform that offers more than 1000 international mentors.

When it comes to Incubators that are concerned with facilitation of launching of products, they are Incubators A, H. Both of this incubators offer equity investment opportunities. Here it interesting

to note, that incubator A that is all about investing into entrepreneurial ventures and getting “minimum target return is 3 – 5 times our money back in 3 – 5 years” is providing intensive mentoring services. This is done so that angel investors are confident that entrepreneurs are progressing and are getting all the help they need.

5.3 Mission

Incubators allocate their resources in order to accomplish a certain mission and meet their goals. There are two types of incubators, one kind are incubators driven by financial gains and those who are not driven by financial gains but are seeking to accomplish a different mission. They could be seeking to boost the entrepreneurial activity or they could be seeking to increase number of firms in a certain industry. When looking at activity of different firms their type becomes noticeable.

Table 4. Overview of incubators’ mission and acquisition strategy with respect to the incubated ventures								
Incubator mission/acquisition strategy	Incubator A	Incubator B	Incubator C	Incubator D	Incubator E	Incubator F	Incubator G	Incubator H
For-profit mission	✓			✓				✓
Equity stake acquisition	✓			✓	✓			✓

When looking at our sample we can see clearly that Incubators A and D have for-profit mission and take equity stakes from their incubates for giving them funds. Although Incubator H takes equity stakes from the companies it funds and expects financial returns it couldn’t be said that it has clear for-profit mission. As stated on their website they occupy: “ the space between

philanthropic giving on the one hand and financial investment indifferent to impact on the other hand”. Incubator H supports social entrepreneurs by giving them technical assistance and equity investment opportunity. They are looking for project ideas that can bring positive change and sustainable impact on employment and employability. Incubator H is also targeting companies that would create jobs for youth and women. Incubator E, as a university incubator, although offers equity investments is mostly helping companies in their nascent stage, helping them develop their ideas, create business plans, models and MVPs. Incubator E also doesn’t look at the market potential of the idea but is rather looking at entrepreneurial team. Incubators B, G, F take no equity from incubated ventures, as they do not have for-profit mission. Incubators F and G are part government and government respectively and as such are not looking to earn profits but are looking for entrepreneurial ventures that can foster their economy. It is interesting to note that both of them are looking at market potential of entrepreneurial ideas. They are looking whether these ideas are innovative and could solve some problems existing in the economy.

5.4 Support of women, youth and sustainable entrepreneurship

When looking at our incubator cases only incubators C, D and H are focused on providing special support to women, youth and sustainable entrepreneurship.

While Incubator A encourages and welcomes more women to become entrepreneurs and apply to their program, that’s as far as their support goes, with no funds dedicated specifically to women, youth or sustainable entrepreneurship. Incubators C and D are both actively looking for projects in clean tech that they can support.

Incubator D is supporting projects from “all business sectors powered by technology”. These include among others projects in environment and clean technology. The value of investments that these projects can get is up to 40,000 Tunisian dinars (US\$16,000) in exchange for five percent of equity.

Incubator G has a biotechnology incubator, among others, and with it is offering “support for the creation, development and growth of new businesses in the field of biotechnology”. The biotechnology incubator of Incubator G supports four industry sectors and among them it supports environment. This incubator “assists incubatees to develop their business model, business plan” and later in stage 2 “assists incubatees with the establishment of their business, the setting up of processes and plans for growth”. Incubator offers dedicated laboratory and office spaces and gives access to incubatees 24 hours seven days a week. Also the incubator notes that all stages of incubation are open to both men and women.

Incubator H is supporting social entrepreneurs that can help solve social problems and bring about change. This incubator is specifically looking for entrepreneurs that will employ women and youth. Incubator H offers social entrepreneurs with “technical assistance and equity investment opportunity”. They are looking for projects that “brings positive change and make sustainable impact on employability”. Also they are looking for companies that would allocate their workplaces to women, 50% of them, and youth (younger than 25), to 33% of them. From this we can see that their objective is to help women and youth who have one of the highest unemployment rates in these regions. They are supporting startups who will employ women and youth, with acceleration programs and investments.

Incubators B, F although are not specifically supporting sustainable entrepreneurship they are supporting startups based in technology which can then help firms starting with clean technology as their main product. Incubator B is offering firms a place where they can further develop their tech ideas, but still they are not specifically encouraging innovations in clean tech or other sustainable technologies. Incubator F is offering various programs through which startups can go through in order to develop their ideas, then turn them into business plans, while through other programs they are offering customized trainings and consultations. Both of these incubators although are not currently focused on supporting sustainable entrepreneurial ideas have the proper setting to do so and would benefit greatly from doing so.

6 CONCLUSION

By analyzing the given case studies we can come to different conclusions about incubation models in MENA region, most of which are also true for other developing regions. We can, additionally, see how having different sponsors will impact incubation model and why. Also by analyzing these case studies we can conclude that none of the above are the same and that institutionally void environments will require more than one incubation model. Looking back at the development of business incubation models in developed countries and their different generations we can see that both of these models will be needed in developing countries, the reason for this being that the institutional voids are immense and cover different stages of entrepreneurial life cycle.

Through analyzing the cases I came to be of the same mind with Boris Mrkajic and saw that two incubation models can be identified which are aligned to the stages of entrepreneurial life cycle. Some of this incubation models help entrepreneurs in their nascent or pre-birth stage and these are nascent incubation models. Incubators which fall into this category are Incubators B, C, E, F, G. Based on the literature on entrepreneurial life cycle (McAdam and McAdam, 2008) the following stage is seed or start-up stage and this stage is targeted in analysis by Incubators A, D, and H. Here it is interesting to note that Incubator E has 3 programs designed to help entrepreneurs at different steps of nascent stage and 1 program that helps entrepreneurs in their seed stage. The programs are designed so that entrepreneur could go from one to the next and could enter seed stage as soon as after 14 months. I see this incubation model as a great one for developing countries as it helps entrepreneurs go through entire pre-seed and seed stage smoothly and with great help at each step. Incubator E helps entrepreneurs that have a project in mind, first develop the right business model

and business plan, second it helps them create MVP (minimum viable product), and thirdly it helps them after their business has been going well to reach new international markets.

When looking at why is there the need for different incubation models and two prototypical in nascent incubation model and seed incubation model, the reason is because of the many externalities faced by entrepreneurs in MENA region, which is also true for other developing countries. Some of the externalities faced by the entrepreneurs, as mentioned before, are lack of entrepreneurial education and in some areas education in general; difficult access to finance; complicated legal regulatory procedure and cultural mindset and norms, which discourage entrepreneurship. These externalities are faced in the first two stages of entrepreneurial life cycle and therefore could be mended with the two proposed incubation models. The biggest challenges that entrepreneurs in nascent stage have is the lack of business capabilities and skills, and these are necessary not only for this stage but for the latter as well. However, as previously seen developing these business capabilities can be hard when education system is underdeveloped and entrepreneurial education is weak. Particularly, in Egypt no entrepreneurial education has been offered by schools and universities until recently (Hattab, 2012). Entrepreneurial education is important because it influences not only the level of entrepreneurial activity, but the quality of businesses started as well. Consequently, having an incubator that would provide entrepreneurs with infrastructural support, shared administrative services and that could share with business knowledge with them would be of immense help to entrepreneurs in nascent stage. Thus, I agree with Boris Mrkajic, that one incubation model, NIM, should be focused on the nascent stage and specialize in business capability development and infrastructural support.

Entrepreneurs in Egypt also encounter challenges in their second, seed stage as well. At this stage entrepreneurial ventures need to cope with rough market conditions at which they need to launch

their product (Chakrabarti et al., 2011; El-Namaki, 1988). Egypt first has complicated regulatory procedures, which discourage entrepreneurs from starting their own business. Government enforces burdensome bureaucratic procedures, they increase the risk of entrepreneurs, and also obstruct entrepreneurs' efforts to acquire resources (Dutt et al., 2015; Katz, 2006). The second challenge entrepreneurs face in Egypt at this stage is difficult access to finance. The access to capital is deficient and the banking system frail, both of which hinder new ventures operations that have difficulties in raising funds (Aidis and Estrin, 2006). A way for entrepreneurs to overcome this challenges is to rely on entrepreneurs networks and social capital (Hansen, 1992). However, these entrepreneurs networks are underdeveloped in institutionally void countries. For, these reasons I agree with Boris Mrkajc saying that we should use seed incubation model, which would be similar to the advanced incubation model used in developed world. This incubation model could help entrepreneurs with networking, that is finding people that could be their customers, suppliers and potential partner, but also other entrepreneurs with whom they could exchange their ideas. This idea is emphasized by Incubator B, relying on provide office space but also space where entrepreneurs could meet and see what they are doing and learn from each other. This incubation model would also help with funding, as it is difficult to get loans from banks and entrepreneurs from these countries often do not have enough capital by themselves. They could either try to find angel investors that could help them, as is the case with incubators D and H or could grant them some free funds, which is more likely when Incubator is government run.

We can also see that these two incubation models can coexist and moreover that they complement each other. This can best be seen with Incubator E, that has some characteristics of both of these incubation models and its projects are designed in a way that entrepreneurs can go from one stage to the other, developing their business capabilities, skills and their idea and eventually going to the

market and finding investors. Also focusing on both developing business capabilities and marketing their product, finding funding and networking would be too demanding of entrepreneurs, to have all of these done at the same time. Of course, variations of these incubation models are to be expected as well as overlaps between these two models, but it is difficult to expect to have one incubation model that would satisfy all the needs during entrepreneurial life cycle, and even more for all the needs in institutionally void environment.

It is also important to look at the sponsors and for which incubation model they opt out. Incubator sponsors can be sorted into two wide groups: non-profit and for-profit. The non-profit incubators are made up of government incubators, NGO and university incubators. When looking at our cases Incubators C, F, G are government sponsored, Incubator E is university sponsored, while Incubator H is NGO sponsored. It is true for them that they mainly have non-profit mission with exception of Incubator H that beside philanthropic mission is looking for some financial returns as well. Although philanthropic mission is still the center of this Incubator's activities. Incubators C, E, F, and G in my analysis have opted for mainly nascent incubation model (NIM), while Incubator H has opted for seed incubation model (SIM) by looking to help social entrepreneurs that are looking to enter the market, by investing in them and getting equity in return. For these Incubators it can be said that they are looking for economic and social development of their community and that they see developing capable entrepreneurs a way to do that. Incubator H has a similar mission but instead of focusing on business capability development is rather looking at funding entrepreneurs that have an idea that can make a positive change or make a sustainable impact on employment and employability. Incubators C, F and G invest in business capabilities of entrepreneurs, which are non-rival goods and which in other case would remain underinvested in. Therefore by investing in business capability development they correct some institutional created gaps. As mentioned

before the reason for having incubators that help develop business capabilities of entrepreneurs is that that they haven't been properly developed by government through schools and universities. In developed countries the case is the opposite, and that is why there isn't a need for incubators that focus on business capability development.

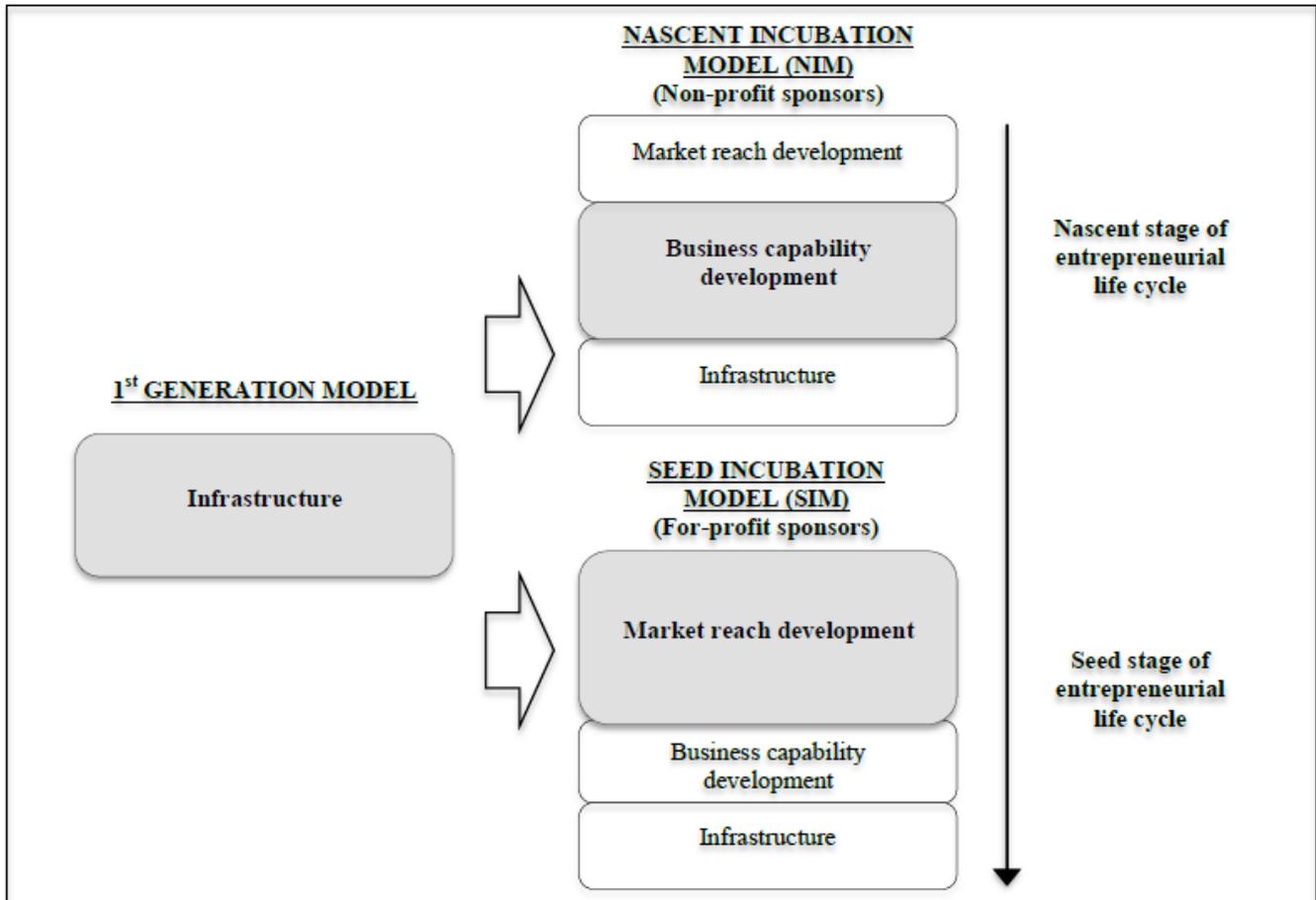
Although in our case, an NGO sponsored incubator is using seed incubation model, they will usually provide support in nascent stage as they will usually not have resources for providing this type of support (Mrkajic, 2017). NGOs usually know the local context, and can therefore help entrepreneurs design their ideas so that they are tailored to the local needs (Webb et al., 2010). When it comes to academic institutions they can help entrepreneurs develop their business skills, by sharing the knowledge they possess with them. Universities also have facilities, laboratories and workspace, that they can share with entrepreneurs. Governments can also be helpful in this nascent entrepreneurial stage, as they have strong networks of specialists and experts, who can share their knowledge with entrepreneurs and they can also offer publicly owned working space to entrepreneurs (Dutt et al., 2015).

On the other hand for-profit incubators are exclusively privately sponsored. Incubators in my analysis that fall into this category are Incubators A, B, and D. Although Incubators A and D help entrepreneurs in their seed entrepreneurial stage, Incubator B although privately sponsored offers help primary in nascent entrepreneurial stage. Both Incubator A and D help entrepreneurs with market reach development. They are looking at the market potential idea of entrepreneurs, and help them successfully enter the market with this new idea. Both of them offer their services and invest in entrepreneurial ventures in turn for getting equity stakes. This way entrepreneurs get money that they would hardly get, given how hard it is and risky to get loans from banks and they also get invaluable business mentoring along their process of entering and developing in the

market. In return these incubators get financial returns which are expected to be significantly higher than having their money deposited in the bank, but the risk is higher as well. Both of these incubators, and in generally privately sponsored incubators, have vast business knowledge and have extensive networks that can be of great help to entrepreneurs in this second stage. With their social networks, this incubators can help entrepreneurs find their potential partners, customers, suppliers or just some other successful business people who can help them in achieving their market potential. Also privately sponsored incubators are much stricter when it comes to choosing which entrepreneurs they will incubate, since there is no guarantee that they will be successful and that incubators will get their desired financial return. The lone exception to this rule in our analysis is Incubator B, which is privately sponsored and does have for-profit mission but doesn't strictly help entrepreneurs in their seed-stage. Reason for this is that they are offering office spaces, which are in the same complex with office spaces of other entrepreneurs. In this way they are creating an environment where entrepreneurs can share their ideas, and expand their networks, and find potential partners, customers, suppliers, etc. They also create an environment where entrepreneurs can develop further their ideas an becoming inspired by sharing them with other like-minded entrepreneurs. For this reason it can be said that Incubator B, although privately sponsored offers help primarily in the nascent entrepreneurial stage.

In conclusion, I agree with Boris Mrkajic that there is a need for more than one incubation model in institutionally void environments, in order to mend different gaps existing in the environment. Also when it comes to his conceptual framework of incubator models I agree with the way he envisions incubation models in developing countries and that entrepreneurs can go through two of them in succession. However through my analysis it is clear that often incubators will be offering some services and of both of these models but will primarily be focused on one of the stages.

Boris Mrkajic's conceptual framework of incubator models for institutionally void environments can be seen in Figure .



When looking at to which extent the incubators are supporting sustainable, women and youth entrepreneurship we can see from our sample that out of 5 incubators which are supporting sustainable, women and youth entrepreneurship in MENA region 2 of them are private, 2 are government sponsored and 1 is NGO sponsored. Therefore we can conclude that there can be both for-profit and non-profit incubators which are supporting sustainable, women and youth entrepreneurship. However it is important to notice that the incubator that is providing highest

level of support in these areas is Incubator H and it is NGO sponsored. NGO sponsored incubators will have a better chance with

Therefore we can conclude that there can be both for-profit and non-profit incubators that support sustainable entrepreneurship, and they can support sustainable entrepreneurship for different reasons, but possible innovations can benefit everyone and will create not only value for incubators and incubatees but will lead to a more sustainable world. The reason for support are that for-profit incubators will consider the innovations marketable while non-profit incubators will support them because they will benefit everyone and will not look at market opportunity of ideas first. These innovations are crucial considering that we want to have technologies that will bring disruptive changes and that will lead to a greener, healthier world. Also supporting women and youth entrepreneurs is of great importance for this region as both of these groups have high unemployment rates in MENA region and they will also bring different innovations to the table, with regards to adult male entrepreneurs.

6.1 Perfect incubation model

As we have seen by studying the environment of MENA region and institutionally void environments in general, there is not one specific incubation model that would work. It is necessary for the incubators to focus on one of the two stages and for the stake of the future to provide some special help to entrepreneurs wanting to create sustainable value – shareholder wealth that at some time helps lead to a more sustainable world. Also because of the low rate of women and youth becoming entrepreneurs it would help to have more incubators which are specifically supportive of these two groups. A great example of incubator supporting women and youth is Incubator H,

specifically focusing on providing jobs for these two groups while also looking for social entrepreneurial ideas. Both for-profit and non-profit incubators have reasons for involving sustainable entrepreneurial projects in their incubation process because it is the future towards we want to go, more sustainable world, and because the necessity of these disruptive innovations will generate a market for them, which means profits for everyone involved. Therefore regardless of the sponsor of incubator and incubation stage at which the incubator is incubating entrepreneurial venture, all incubators should work towards involving sustainable entrepreneurs in their programs. Therefore it can be said that the perfect incubation model for MENA region is the one focusing on one of the two stages, which is involving women and youth entrepreneurs in their programs and is also targeting sustainable entrepreneurial projects and is giving additional funds for such ideas.

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