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The American University in Cairo

School of Global Affairs and Public Policy

**THE EXPERIENCE OF PASSENGER TRANSPORT START-UPS IN
GREATER CAIRO: AN ANALYSIS**

A Thesis Submitted to the

Public Policy and Administration Department

**In partial fulfilment of the requirements for the degree of
Master of Public Administration**

By

Passant Ehab Fakh El-Din

Under the Supervision

Of

Dr. Khaled Abdelhalim

Spring 2016

DEDICATION

This thesis is dedicated to my Mother, Father, Brother and Sister

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“وَمَا بِكُمْ مِنْ نِعْمَةٍ فَمِنَ اللَّهِ”

In the name of Allah, the Most Gracious, the Most Merciful. I am very grateful to almighty Allah for being with me and allowing me to accomplish my thesis.

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The American University in Cairo

School of Global Affairs and Public Policy

Department of Public Policy and Administration

EXPLORING THE EXPERIENCE OF PASSENGER TRANSPORT START-UPS IN GREATER CAIRO

Passant Ehab Fakhr El-Din

Supervised by Dr. Khaled Abdelhalim

ABSTRACT

This research explores start-ups that provide passenger transport services in Cairo, Egypt. It studies the various factors that affect these start-ups operations and lead to their survival or closure. It adopts a qualitative approach depending on both primary and secondary data, in-depth interviews conducted with different stakeholders with different roles, and content analysis. The findings cover a list of external and internal best practices that increases the probability of a transportation start-up's survival. The researcher recommends as well some means of Public Private Partnership that can be implemented in the transportation domain in Cairo, Egypt that might support these start-up's operations. The research enables the start-ups and the public sector to better understand the possible impacts of liaising with each other to reach a win-win situation for the sake of both the start-ups and the public sector, where the start-ups would operate the business smoothly and at the same time reduce the burden on the public sector as a public transport provider, thus lead to more effective operations.

Keywords: Start-ups, Transportation, Founders, Ecosystems, and Public Private Partnership.

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CHAPTER ONE

INTRODUCTION AND RESEARCH PROBLEM

1.1- Introduction and Background

This research explored the experience of Passenger Transport Start-ups in Greater Cairo, Egypt. It focused on three main topics: studying the factors that affect the start-ups operations and either lead to their survival or closure, studying the start-ups support ecosystem, and recommending some Public Private Partnerships (PPPs) that can improve the start-ups operations.

The transportation plays an important role in the economy especially on the environment and people's mobility. On one hand, the air quality is getting worse and there is pollution due to vehicle emissions resulted from the increasing fuel consumption. On the other hand, there is a large number of people working in places far away from their residence, which directly affects the traffic. Travelling long distances at the peak hours daily causes traffic congestion and affects both the employer and the employee, as for the employer the employees' productivity decreased because of the long period of time consumed sitting in traffic instead of working, while the employee's health is affected by the environment degradation on the public health.

The motive behind this research is the significance of the transportation problem in Greater Cairo, and the contribution such start-ups might have on the community if succeeded. However, many of the initiatives that appeared recently had a very short life span for many internal and external reasons, and during different phases in the start-up's life cycle. Accordingly, this research aims at spotting the light on these reasons, analysing them, and proposing solutions to eliminate them.

1.1.1- Transportation System in Cairo

Greater Cairo transport system is suffering from several problems such as traffic congestion, insufficient parking areas, as well as illegal parking resulted from inadequate traffic capacities of streets and intersections, incompetent traffic management and massive growth in private cars traffic due to the inefficient and unreliable subsidized public transport system (Mahdy, 2012).

Public transport services in Greater Cairo are divided between formal and informal sector. Metros, buses, minibuses and rails are forms of formal public transport, while the informal motorized transport includes: private regulated and non-regulated taxis, shared taxis, microbuses, minibuses and other forms of three wheels motorized transport (i.e. tuk-tuk) (El-Geneidy et al, 2013).

Observably, the informal transport alternatives have a great impact on urban transportation by filling the gaps of the formal public transport services in terms of accessibility, speed, and route flexibility.

1.1.2- Public Transport in Cairo

Cairo's transport problem is like any other mega city, the severe traffic congestion resulted from citizens' main dependence on the non-public transportation modes such as private cars, taxis, and microbuses that move around 70% of the passengers in the city (see figure (1)); while the formal public transportation modes like public buses and metro only move 30% of the passengers' movement. Said Dr. Galal Mostafa El-Saied, Cairo Governor. (Youm7, November 2, 2015)

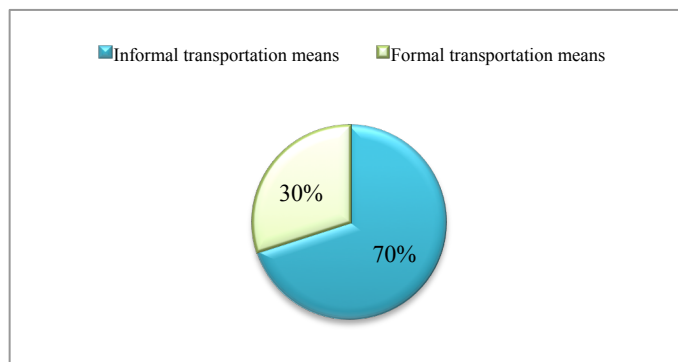


Figure 1: Percentage of Public Transportaion in Cairo

1.1.3- Road Transport

The total length of road network in Egypt is 121.4 thousand kilometre in which 90% are paved roads of a total 108.8 thousand kilometre and 10% are unpaved totalling 12.6 thousand kilometre (Korkor, 2014). The total number of vehicles reached 6.6 million vehicles in Egypt in 2012. The private cars counted 49% of total vehicles fleet in comparison to 4.6% for taxis, 1.6% for buses, 14.2% for trucks, and 26.1% for motorcycles and tuk-tuk with other modes presenting the remaining 4.5%. More than 56% of the total vehicles fleet is in Cairo, Giza, Qalioubeya, and Alexandria governorates (Korkor, 2014). According to the CAPMAS June 14th, 2015 press release, in November 31, 2014 the number of licensed vehicles in Cairo was 2.2 million out of 7.9 million licensed vehicles in Egypt. Cairo had the large percentage of vehicles reaching 27.9% compared to other governorates; there were 921.5 thousand vehicles in Giza counting 11.7%, and 702.1 thousand vehicles in Alexandria marking 8.9%. The total number of licensed cars reached 52.3% of total vehicles counting 4.1 million cars divided as follows: 91% private cars 7.8% taxis, and 0.2% diplomatic corps cars. The licensed buses reached 1.7%, the trucks 13.3%, private trailers 0.9% of total vehicles (CAPMAS, Bulletin of licensed vehicles 2014). While according to what has been mentioned in El Ahram Newspaper in (April 27th, 2016, p.14) that CAPMAS has a recent announcement stating that there were 8.6 million licensed vehicles in Egypt by the end of December 2015,, in which Cairo is in the first place having 2.3 million licensed vehicles with 26.5%. (El Ahram Newspaper, April 27, 2016. P.14).

	2012	2014	2015
Total number of licensed vehicles in Egypt	6.6 million	7.9 million	8.6 million
Licensed vehicles in Cairo	2.07 million	2.2 million	2.3 million

Table 1: Total number of licensed vehicles in Egypt

1.1.4- Problems Facing Private Transport

Despite the partial success in filling the gap of the public transport services, there are several problems emerged from the private transportation facilities. For instance, the issues related to the minibuses consolidation and services regulation, like safety concerns and operations impact on traffic congestion. Most of these issues are due to the quasi-legal status of many minibuses operations and the deficiency of the regulatory agencies in providing them with necessary infrastructure (i.e. bus stops, parking areas, etc.) further to the absence of implementing the existing driving behaviour regulations. Moreover, the monopoly of service on certain routes leaving users with few, if any, alternate service option, besides the quality of vehicles and the fare policy are other problems (World Bank, 2006). As for the microbuses, most of the drivers do not have license, further to the required route license that its implementation is practically difficult because it does not have to be shown. Cars and other vehicles suffered from the inadequate junctions designs in most of Cairo roads that were planned when the number of vehicles were much lower, also lack of facilities for car parking impeded traffic and hindered pedestrian movement because of the cars parked on sidewalks and roadways (World Bank, 2006).

Eventually, because of the poor performance of the public transport system, there have been major changes in the methods of travel in Greater Cairo. The private car became the favourite mode of transit for large percentage of Cairenes, and amongst the public transport users there has been a move from the formal public transport services to the informal and private services.

1.1.5- Emergence of Passenger Transport Private Initiatives

Egypt ranks the fifteenth amongst the countries in the world in terms of population size because of the dramatic population growth (Worldometer). According to the 2006 census, the total size of Egypt's population was 72.82 million located inside the republic. In January 2015, the number of population inside the republic was about

87.9 million, of which 9.27 million located in Cairo (CAPMAS, 2015). Due to the high rates of population and the challenges that the government faces in meeting the transportation and mobility needs in Egypt; solutions have been more complicated and untraditional, that is why citizen-based innovation and initiatives are strongly encouraged to take place in solving the problem.

Since 2013, new private initiatives in Egypt have offered diverse solutions to alleviate transportation problems in Greater Cairo, such as crowdsourcing mobile applications and customized ride sharing platforms, promoting fewer car usage and ownership; besides other flexible routing transit services that facilitate commuters' trips.

Bus pooling, launched in 2013, was one of the private commuter services that provided crowd-sourced transportation solutions, using their own buses network to move more commuters in fewer vehicles in Cairo. Tawseela was launched in 2013 as well, which is another private company for transportation services, a subscription-based bus service aiming to offer comfort ride to passengers. Whereas the car sharing initiatives like Share My Ride and Raye7 were launched in late 2013 and 2014 respectively, and most recently in Cairo the car hailing service provided by Uber and Careem, both were launched during late 2014 in Cairo, in which people can offer their own cars as a limousine-with-driver and others can request their service using a mobile application.

Although the emergence of those solutions might help in solving the transport complications, some of them had a short life span and stopped operating in a short period of time. For instance, Share My Ride and Raye7 are Egyptian start-ups offering car-pooling service through mobile application; Share My Ride was initiated in late 2013 and collapsed in 2014. While Raye7 was founded in 2014 and still functioning till present. As for bus-pooling service, Bus Pooling and Tawseela are Egyptian start-ups offering subscription-based bus service in Cairo aiming to reduce traffic congestion and provide convenient mode to commuters, both were launched in

November 2013, however, Bus Pooling stopped operations in February 2015, but Tawseela is still operating so far. Regarding Uber and Careem, both are private franchising companies, almost having the same idea of using a mobile application to order a limousine service, Uber founded in United States of America (USA) in 2009 and launched on November 27, 2014 in Cairo, while Careem founded in United Arab Emirates (UAE) in 2012 and launched in November 2014 in Cairo as well. Despite the presence of both Uber and Careem at the same time in Cairo, Uber is dominating the market.

The study consists of seven chapters; chapter one is an introduction to the transportation system and infrastructure in Cairo and elaborates the emergence of the private sector Passenger Transport initiatives. Chapter two shows the conceptual framework that is used in the study, going through the variables and demonstrating the sample design and the research methodology that have been used in the research. Chapter three presents some literature about the factors affecting the start-ups. Chapter four is a case study on six passenger transport start-ups that operated in Cairo. Chapter five discusses both public and private channels of support for start-ups. Chapter six shows the data analysis, and finally, chapter seven includes the conclusion and recommendations.

The methodology used in this research was a qualitative method; the researcher has conducted in depth semi-structured interviews with the founders of the selected transportation start-ups, government officials, administrators of accelerators and incubators, besides content analysis approach with the start-ups that were very difficult to reach. It is noteworthy that this research was conducted during early 2016, when taxi drivers held many protests in Cairo complaining about the presence of car hailing apps that inaugurated in Egypt few years ago.

1.2- Problem Statement and Research Question

The objective of this study is to explore the concept of start-ups while reflecting on passenger transport startups and franchising private companies. The study aims to highlight their business model and how do they operate; collect data on the founders' experience, start-up management, funding, and business ecosystem; as well as to describe the problems and challenges start-ups faced that might affect their performance or survival. It aims as well at clarifying the roles of support channels and evaluating their effectiveness from start-ups point of view.

This study attempts as well to answer some questions to know the factors that make two start-ups, having almost the same idea and somehow offering the same service, one survives and the other disappears.

General Research Question

What are the factors that cause the survival of one start-up and the collapse of another, especially if both have the same idea and business line?

Sub Questions

1. What are the challenges the Start-ups face? How can they overcome them?
2. What is the kind of support those start-ups need from different governmental institutions?
3. What are the business sustainability factors for Start-ups?

CHAPTER TWO

LITERATURE REVIEW

A start-up is defined as “an organization dedicated to creating something new under conditions of extreme uncertainty” (Ries, E. 2011)

There are barriers to start a new venture, despite the presence of many people who have ideas and want to generate something, as well as the great shifts in business and technology that reduce the cost (Gruber, 2014). Individuals think that manufacturing a product or delivering a great service is the toughest part of being a successful business owner, however the hardest part is what comes afterwards like involving customers, sharing value and persuading them to give you money; taking into consideration the time span that should be short for the sake of business survival (Ready, 2011).

The following section is going to discuss the different variables that affect the entrepreneurial domain. The literature review divided into eight sections as follows: the first section is covering the different views of the founder’s experience and whether it has an effect on the start-up’s life or not. Investment and finding are covered in the second section showing the factors that affects the investment decisions. While in section three, the importance of the business ecosystem towards the start-ups is defined. The role of the business accelerators and incubators are elaborated in sections four and five. Sections six and seven are discussing two important elements in the start-ups’ manoeuvres, which are networking and mentorship. Finally, the concept of pivoting is discussed in section eight.

2.1- Founder’s Experience and Leadership

Oe and Mitsuhashi (2013) suggested that entrepreneurs should develop strategies to avoid failure that majority of new start-ups are exposed to, including the formulation of business plan, business environment, legal arrangements, and organizational routines. For start-ups rapid growth, expertise in the areas of human resource

management, gaining competitive advantage, and operating procedure development are needed. It has been proved that founders who learn by doing, generate ideas concerning business opportunities and improve predictability of customer demand and future technologies. Moreover, previous job experience of the founders is beneficial in accelerating start-ups growth.

Moreover, Beckman et al (2007) recommended that there was a correlation between prior experience in human capital and positive organization outcomes, advocating that team composition, experience, and turnover are altogether essential for creating new perceptions to the firm and increasing the probability of an entrepreneurial firm to succeed.

Also Rubenson and Gupta (1996) indicated the scholars and theories that studied entrepreneurship and recognized that there would be a positive connection between founders' educational level, general management experience, relevant industry expertise, diversity of founders' practical experience and the founders' tenure. Furthermore, there was a suggestion that if the skills and competencies of the organization's leader are outdated; an up to date replacement should be assigned.

Moreover, Ensley et al (2006) studied the leadership in the new ventures and the impact of vertical against shared leadership inside of top management teams and how it affects the start-ups' performance. The researchers studies two samples, in which the vertical leadership branches from a formal or an appointed leader (ie. CEO), while the shared leadership stemmed from within a team as kind of leadership distribution. They concluded that shared leadership is crucial for the new ventures growth and development. The growth of the new ventures not only requires the leadership of the principal founder, but also needs the input of a group of talented individuals from within. Thus, the selection and improvement of the top management team is of a great importance than only focusing on an idol CEO.

Additionally, Beckman et al (2007) studied the impact of the top management demographic characteristics on the firm outcomes and provided in-depth analysis of the relationship between the entrepreneurial team and the outcomes, using two measurements for the new venture success, which are the ability to attract venture capital¹ (VC) and the ability to successfully complete an initial public offering (IPO). The key independent variables were functional diversity, turnover and background affiliations which impact the overall new venture performance. They reached that the prior team experience concerning “What and where” are main influencing factors in the entrepreneurial performance and success. They also concluded that diversification in the top management team (TMTs) help the new venture to reach their milestones, which brings new knowledge for them. Those results are similar to what (Kaiser and Muller, 2015) reached about the good impact of diversity on entrepreneurial firms’ formation and performance.

However, when Grilli (2010) studied the prior experience variable, he emphasized the role of prior experiences of founders in industry crisis and their ability to apply exit strategies. He examined the relation between the human capital and the entrepreneurial firms’ survival during industry crisis period. The study suggested a heuristic model of the relationship between founder pre-entry work experiences and firm exit routes during industry shocks. He mentioned that “Two main characteristics affect the relationship between entrepreneurial pre-entry work experience and firm exit decisions during an industry recession: namely, the level of outside options available to entrepreneurs to escape the industry crisis and the economic value of the ICT business project at the time of start-up” (Grilli, 2010, p. 628). The findings were interesting as the managerial experience exerts a significant negative impact on 90% level of the probability to exit and that the pre-entry work experience exerts a significant positive effect on the probability to exit or being merged and acquired. The

¹ Dollinger (2005, p.266) defined venture capital as “outside equity that comes from professionally managed pools of investor money”

research indicated that founders with high level of specific work experience followed merger and acquisition (M&A) exit route during industry recession periods, while founders with a higher level of generic work experience are associated with the closure option. Less experienced entrepreneurs may survive in markets simply because they do not have any other more profitable alternative.

These results is contrasted with those reached by Mitsuhashi and Oe (2013) which indicated the role of information distribution and interpretation activities in boosting the fast growth of startups. The research used the breakeven point analysis as a main goal for the new ventures where costs are equal revenues, which is the first milestone for the founders. The results demonstrate positive impacts of job and same industry experience on the rates at which start-ups reach the break-even points but did not support the founding experience effects. The study highlighted the importance of information distribution and interpretation to increase the positive relation between pre-founding experience and the start-ups growth. It also mentioned that forming a systematic process to sort and utilize information increase the startups benefits from those information. The results indicated that the pre-founding experience has no significant effect on startups' growth; this may be caused because the data did not differentiate between success and failure founding experiences. It also mentioned that the high commitment to share the founders' previous experiences might be harmful except if these experiences were in the same industry field so the shared information should be selectively chosen. The main findings were that the startups reached their break-even points earlier when their founders have pre-work experience in the same industry, and that impact became stronger when these firms commit more resources to information distribution and interpretation.

Those findings are similar to what Cassar (2012) has reached while studying the impact of industry and startup experience on entrepreneur forecast performance in new firms. The research explored whether the industry and startup experience

improve the entrepreneur's forecast and evaluation of the new project or not. It mentioned that most new ventures fail to achieve the entrepreneur expectations and sunk. Many arguments agreed that work and startup experiences improve the entrepreneur judgments. While the main argument of this research was that work and startup experience could increase human capital, improve the entrepreneur's judgment, only if the impediments to learning and applying knowledge were overcome. Findings were realistic and cope with other researcher about the positive impact of the work experience on the entrepreneur judgments and tend to have more realistic expectations. The results also showed that the industry experiences are more beneficial in industries with greater uncertainty, such as high-tech industries. However the research found no evidence on the benefit of the startup experience whether in the same industry or not in improving the entrepreneur's expectation.

2.2- Investment and Funding

Besley (1995) emphasized that the institutional environment has a substantial influence on investment decisions. Also, North (1987) indicated that institutions set the rules in an economy by defining incentives, decreasing uncertainty and controlling transaction costs. While Crum and Nelson (2015) pointed out that countries differ to the extent in which property rights are protected and currency is stable. If there are unfavourable conditions like high inflation rate and weak property rights, business decision-making would be hard and organizations might face uncertainty. Thus, business plans are most likely affected by these factors, particularly the new investments. Entrepreneurship appears to flourish even in tough environments. Those factors might not exclude entrepreneurial investment completely, but make it more challenging to happen through restricting new ventures investment that yields high-expected returns within short payback periods.

Moreover, Crum and Nelson (2015) mentioned that uncertain and high inflation are both problematic in investment decision-making. Firms and individuals became more hesitant, in high uncertain inflation, to enter into contracts and even if they entered it would be short term. While high levels of inflation led to negative economic outcomes, such as raising the rate of returns needed for business investment that makes business operation less attractive. Consequently, Individuals would undertake new businesses when the projected return on investment is adequately high. On the contrary, when inflation is low, entrepreneurs will invest in low return entrepreneurial projects because of the low discount rate of these projects at that time.

Sanyal and Mann (2010) analyzed the financial structure of the start-ups to provide a benchmark for any financial problems faced by start-up firms during internal or external crisis. The research differentiated between four types of finance:

1. Internal equity: The equity is owned by the entrepreneur or his family/ spouse/ employees of the company and this type represented about 26% of start-ups covered by the research.
2. Internal debt: when the entrepreneurs take loans from the family or any personal sources and it counted about 3% of start-ups financial structure covered by the research.
3. External debt: when the business takes loans from banks, the government, business loans from business credit cards, other businesses, and/or from other sources. 70% of start-ups use external debt to start their business. Of this external debt used to fund start-ups, 58 % of the value of external debt is credit card debt, 5.6 % is bank debt, and the rest are loans from government and other sources.
4. External equity: when equity financing is obtained from angel investors², other businesses, government, venture capital, and/or other sources. Approximately 1.4 % of ventures use external equity financing in their initial year of operation.

The findings of Sanyal and Mann (2010) proved that startups with tangible assets as potential collateral are more likely to use external debts. Entrepreneurs with other businesses as collateral are less likely to give up control to external equity investors.

² Authors defined angel investors as “wealthy individuals who provide capital for start-up companies” (Degennaro, 2010, p.55).

On the other hand, all else equal, start-ups with higher human capital embodied in the entrepreneur or more intellectual property assets have a lower probability of using debt than other start-ups, consistent with the higher asset specificity and lower collateral value of these assets. While start-ups that are solo, first time, home office based, small, less organized mainly depend on internal equities and debts and credit cards.

Those results could be analyzed through a research conducted by Lalic, Horvat and Calopa (2014), the research analyzed the start-ups development stages and the potential financing sources at each stage. The research was mainly investigating the start-ups in Croatia to determine if it made a shift from traditional to newer methods of financing. The data was obtained from online questionnaires conducted with previously selected start-up companies in Croatia. The main covered points were:

- Main sources of finance used by Croatian companies.
- Their development stage and the used finance methods.
- The preferred financial source (informal or formal/ traditional or modern).

The findings were interesting as it showed that the Croatian start-up companies prefer traditional and informal financial sources with emphasis on family and relatives finance. While after passing the first period the founders begin to search for more professional source of finance, such as business angels, either foreign or Croatian ones, and seed investments, although the level of development of the company and the experience of managers are not necessarily associated with the financing method.

Korosteleva and Mickiewicz (2011) studied the determinants of start-up financing covering wider geographic range; they investigated 54 countries during the period from 2001 to 2006. The research aimed mainly to determine the Globalization impact on startup finance. They mentioned that raising capital to operate and launch is one of the main constraints faced by new ventures. The startups financing problems are accompanied by a weak business environment and inadequate legal framework.

The research analyzed mainly the impact of the financial environment, property rights system and international financial flows on financing the startups, determine the role of informal sources of finance. The effect of net financial flows from abroad on the startups.

The main findings could be summarized as follows:

- The strong protection of property rights has positive impacts on external financial flows and its size.
- Financial liberalization increases both the likelihood of the use of external finance and its volume in start-ups. It also creates ample opportunities for entrepreneurs to accumulate savings to be subsequently used for launching their own businesses.
- Informal finance while facilitating start-ups' access to external finance does nothing to enhance large-scale project.
- Inflow of remittances leads to higher volume of own finance.
- The larger share of offshore deposits affects both external and own funding negatively.

It is obvious that property right plays an important role in the business segment. Crum and Nelson (2015) pointed out that individual's decision of whether to start a business or not, is a decision of how he/she will invest his/her time and resources (counting property) which will be influenced by how solid property rights are. Absence of formal property rights might constraint individuals' capability to get capital for starting or expanding a business. Further, weak property rights discourages investment as those who invest in new ventures do not know whether they are going to keep any generated profit and/or improved property or not, and vice versa. When property rights are pretty strong, both entrepreneurs and angel investors might accept longer payback intervals and lower financial returns. Whereas, when property rights are comparatively weak, their requirements will be shorter payback intervals and higher financial returns. Crum and Nelson (2015) added that Angel investors are like entrepreneurs, they provide risk capital and expose to significant risks in their investments. But they are diversified, unlike entrepreneurs who are usually undiversified, because of having a large sum of personal wealth not invested in start-

ups besides money invested in different new ventures, by financing several deals individually or with another angel investors. Angel investors use complicated tools for screening new ventures before investing in them, therefore, to a great extent, angel investors assess their market and business exposure to market accurately compared to entrepreneurs. Hence, they asked for high compensation returns when their investment is subjected to larger degrees of risks.

Nanda and Kerr (2009) also considered that the financial constraints faced by the entrepreneurs are one of the biggest hurdles to starting and growing new business. The researchers aimed to determine the impact of financial market development on entrepreneurship and examine how tendencies to start new businesses relate to personal wealth or recent changes therein. They reviewed two major streams of work examining the relevance of financing constraints for entrepreneurship. The main findings were that financing constraints are one of the biggest concerns impacting potential entrepreneurs around the world; whereas the public policies have a main role in stimulating the start-ups role in the economy. Also, it also concluded that wealthy people tend more to be entrepreneur because of the lower risk aversion and preference for being their own boss.

2.3- Business Ecosystem

Peltoniem and Vuori (2004, p.6) highlighted that in 1993 Moore introduced the concept of business ecosystems, he defined a business ecosystem as: "An economic community supported by a foundation of interacting organizations and individuals--the organisms of the business world". While Peltoniem and Vuori (2004, p. 13) defined business ecosystem as "A dynamic structure, which consists of an interconnected population of organizations. These organizations can be small firms, large corporations, universities, research centres, public sector organizations and other parties, which influence the system."

Moreover, Moore (1993) mentioned that the companies cannot be considered only as a member of a single industry but a part of the Business Ecosystem that crosses variety of industries. He also differentiated the development of the business ecosystem to four stages mainly which are (Birth, Expansion, Leadership, and Self-renewal); each stage has its own co-operative and competitive challenges. He also structured the business ecosystem for new ventures to three layers, which are:

- Business Ecosystem: Investors, trade associations, research intuitions, public bodies, investors, other stakeholders, competitors, and unions.
- Extended ecosystem: customers, complementors, suppliers' suppliers, and standard bodies.
- Core business: suppliers, core contributors, and distribution channels.

Heikkila and Kuivaniemi (2012) agreed on those results and added a deeper analysis for the business ecosystem of new ventures. His research identified how the business ecosystem develops around a service business idea proposed by the entrepreneur. The research aimed to recognize the different domains of players that are or should be involved in the ecosystem while it is under construction. He stated that the expansion of an ecosystem can be analyzed and even perhaps planned by considering six differing sub-ecosystems: technology change, research insights, changes in customer demands, competitors, social environment, and legal and policy environment. He mentioned that innovative ideas might come from big companies, but they are proposed and drove by entrepreneurs or spin-off companies, adding that many new businesses die young, but there are possibilities to be restored later through ecosystems that support the growth.

In the same line, Valkokari (2015) provided a scientific and more defined definition for ecosystem types and their interaction. His research was a descriptive one as he analyzed previous researches conducted in the same field to conclude a clear definition for business ecosystem types. The purpose of his conceptual article was to define what is meant by different concepts regarding an ecosystem and especially

describe the relationships between the three different ecosystem types: business, innovation, and knowledge ecosystems. He mentioned that “First, business ecosystems focus on present customer value creation and large companies are typical key players within them. Second, knowledge ecosystems focus on the generation of new knowledge, and research institutes and innovators, such as technology entrepreneurs, play a central role in these ecosystems. Third, innovation ecosystems occur as an integrating mechanism between the exploration of new knowledge and its exploitation for value co-creation in business ecosystems.” Valkokari (2015, p.22). The research emphasized that the three ecosystems are interrelated and interact with each other to form a complementary ecosystem for the new ventures.

While Smith, (2013, p.25) investigated the risk of entering the new ventures specified business ecosystem. He identified the business ecosystem by “a strategy for entrepreneurs to access and exchange many different aspects of value, resources, and benefits”. He mentioned that the limited resources and choices available for entrepreneurs push them to accept higher risks to establish their business. Choosing and evolving in a certain business ecosystem has benefits and risks. These risks are significant and can inhibit the startup’s growth. The study reviewed previous researches conducted in the same field and linked the results to determine how to overcome the risks related to different business ecosystems and provided recommendations to avoid those risks. The research findings of Smith (2013) related to the category risks of business ecosystems are mainly: general risks (nature of relationship between actors/keystone) & Nature of control, Platform risks (loss of intellectual property rights, keystone interdependence), Community risks, and replication of the company business model by its competitors. While risks related to participating in a certain business ecosystem relates to four areas: general risks (dominant actors, relationship type between actors, and change in actors, alliances),

keystone risks, (location in the value chain) and standard risks like war or rapid change. The research provided five recommendations to avoid those risks, which are:

- Identify the category of business ecosystem before entering.
- Conduct a systematic pre-entry inspection of the business ecosystem before entering.
- Pay attention to horizontal relationships, because risks are different between actors.
- Pay attention to coalitions, because they can add value or destroy value.
- Practice real-time resource management after entering the business ecosystem

2.4- Business Accelerators

Miller and Bound (2011) conducted research to understand how to better support the growth of innovative startups and determine the role of startups' accelerators problem. They mentioned that the number of accelerator programs has grown rapidly in the USA and Europe over the past few years and that the accelerator programs created dozens of successful startup companies. They also mentioned that the rise of the accelerator programs is associated with the change in the startup economics, as the costs of new technology start-up projects decreased sharply during the past few years. The findings were realistic as they reached that the accelerators have a positive impact on founders through increasing their knowledge and creating powerful network. Accelerators also benefit angel investors and venture capital investors through creating a pipeline of investable companies, scouting for and filtering talent and connecting them with a concentrated stream of mentors and strategic resources. Accelerators help in building trust between investors, founders and stakeholders.

But there are different results regarding the accelerators under the public umbrella. Gonzalez-Uribe and Leatherbee (2015) investigated whether government funded business accelerators create value for start-ups. They focused on the case of Start-Up Chile (SUP), an accelerator sponsored by the Chilean government. Their research focused on governmental accelerator program that gained participation of public and

private sector. The results were unexpected, although they concluded a positive impact of accelerator services related to mentorship on start-up performance, as whenever mentorship is bundled with some basic services such as co-working space and seed capital will lead to an increase in fundraising significantly, more hire, and fast customer base growth. Yet, they found no evidence that the basic accelerator services such as money and space led to the development of venture fundraising.

Whilst Fehder and Hochberg (2014) discussed the impact of accelerators on venture capital's supply, they attempted to assess the impact of such programs on early stage venture capital funding. They mentioned that the role and efficacy of the seed accelerators was little at best and the government used the accelerators hoping to transform their local economies through the establishment of startup technology clusters. The research focused mainly on a particular aspect of the ecosystem, which is the availability and provision of seed and early stage venture capital (VC) financing for startups. The research aimed to measure the impact of startup accelerator formation on the venture capital financing activity. The results could be summarized as follows: accelerators regionally influence the business ecosystem. Accelerators present more seed and financing activity in early entrepreneurial stages, which is not only restricted to accelerated startups, but also extended to non-accelerated companies, as what is offered in the accelerator such as mentorship activities and the demo day might increase the non-accelerator companies' exposure in investors area.

2.5- Business Incubators

Al-Mubaraki and Busler (2013) conducted a research based on a wide range of literature review, focused on the definition and role of the incubators. The paper identified the strength and weakness of business incubation in developing countries. They mentioned that incubators led to economic development through a three-stage cycle, which are 1-incubators phase, 2-post incubators phase and 3-extension phase.

The findings showed the mixed support offered within the incubation phase to the entrepreneurs and the jobs created by the start-ups inside the incubators. Moreover, it highlighted the success of the graduated companies in the Post-incubation phase where each start-up has reached the maturity stage and being able to stand free in the local market after leaving the incubator. Whereas in the Extension phase, the graduated start-ups will have the ability to expand in the market and will positively affect the economic development, because of the incubators' outcomes that embraced entrepreneurship, graduated companies, and job creation.

In addition, Garibay et al (2013) reached the same results. They presented a preliminary study on the regional impact of business incubation in ecosystem knowledge-based companies. Their research aimed to define the impact of business incubation on economic development of the entire region. They mentioned that the positive impact of business incubation on technology startups was proved; however its impact on the entire region was still unknown. They reached that business incubation has a positive impact on the regional economic development, but only if the support provided by an incubator is tailored to the individual firms.

Also, Chiara (2014) reached the same findings in a research exploring the role of the incubators in the business environment. The study aimed to investigate the roles of incubators and accelerators in the Entrepreneurial Network. The research applied qualitative perspective with a multiple case study approach. The findings were similar to the previous researches; indicating that the role of incubators is to accelerate the path of new ventures, facilitate the relationship between different actors in the business ecosystem, promote the development of local economy and reach competitiveness.

2.6- Networking

Witt (2004) analyzed the role and impact of entrepreneurs' networks on the success of the startups. He clarified how we can measure the impact of networking and how to quantify the startup success. By reviewing the existing literature on the relationship between networking activities, entrepreneurs' network-by-network partners and success of start-up. The research indicated that the measurement of the start-up's success depends on its phase; in the creation phase the success measurement would be the actual foundation, while in the proving phase the success measurement would be the survival, and in the growth phase the success measurement would be the profits and growth rate of sales and employment. The research reached that there is a positive relationship between the degree of entrepreneurial networking activities and structural measures of the founders' network, and that the relation between network structure (size and diversity) and the respective start-up's success is expected to be inversely U-shaped.

Huse (2014) reached a near result in his thesis that examines the impact of the networking on the entrepreneurial process. The thesis purpose was to determine how the entrepreneur uses his/her network to plan, develop, and accelerate his/her business. This study was based on the combination of two strands of theory: entrepreneurship theory and network theory. The thesis reached that the entrepreneur's networking is a vital part of the entrepreneur's decision to start business. The research provided evidence of the important role of well-developed network during the entrepreneurial process, and that the different feature of the network enhances and facilitates the resource acquisition. The thesis presented evidence that informal networks of strong and weak ties are used differently throughout the entrepreneurial process to gain information, knowledge and resources.

Likewise, Christopoulos (2011) reached the same results in his thesis, in which he explored the role of networks in establishing an entrepreneurial venture. He aimed to

determine the extent of the relationship between entrepreneurship and networks. The thesis concluded that the network assist the startups to overcome establishment challenges. Also the network benefit is not tied by only one stage but it continues throughout the business life cycle.

2.7- Mentorship

St-Jean and Tremblay (2011) emphasized the role of the mentoring process in accelerating the entrepreneur's knowledge. The study investigated the impact of the mentorship on the entrepreneurial process through helping the entrepreneur to identify the opportunities. The research surveyed novice entrepreneurs and the findings reached that the mentees more trust their capabilities in recognizing opportunities when they learn more with their mentor. Also, it has been indicated that mentorship might be a good method in supporting novice entrepreneurs in the start-up growth and in the expansion of their SMEs.

In the same line, St-Jean (2011) aimed to explore the main functions of the mentors for novice entrepreneurs. He mentioned that the provision of many mentorship programs accelerate the entrepreneurial process. Many experts advised mentors to improve their performance in order to benefit the mentees. The research aimed to determine the main functions of the mentors to benefit their mentees. The results confirmed mainly four psychological functions (reflector, reassurance, motivation, and confidant), four entrepreneurial career-related functions (integration, information support, confrontation, and guide) and a role model function. These results are useful to raise the awareness of volunteer mentors about functions they may likely exert when they are twined with novice entrepreneurs.

Also St-jean (2012) studied the impact of mentoring on the development of novice entrepreneurs. He mentioned that mentoring is an essential element in the professional development of entrepreneurs. This study aimed to understand how to maximize the

learning and benefit gained during the mentoring process. The research investigated the influence of the mentor characteristics on the mentoring process. The research concluded that to maximize the benefits of mentoring process, many factors should be considered. The study demonstrated that the mentor's career-related functions are the most effective factor in the development of learning, followed by psychological functions and the role model function. In order to foster these functions, trust and perceived similarity are needed to build a strong and high-quality relationship, as is mentee self-disclosure.

2.8- Pivoting

Ries (2011) identified Pivot by a structured course correction designed to test a new fundamental hypothesis about the product, strategy and engine of growth. He mentioned that when the company pivots, it starts the process all over again as it establishes a new work frame. A successful turn on and a more productive project is the sign of the good pivoting process. He summarized the types of pivot as follows:

- Zoom-in pivot: a single feature of the product became the whole product.
- Zoom-out pivot: whole product became a feature of a larger one.
- Customer segment product: the product is partially confirmed, solving the problems for other customer segments.
- Platform pivot: A change from an application to a platform or vice versa.
- Business architecture pivot: the startup changes its production strategy from high margin/low volume to mass market or vice versa.
- Value capture pivot: how do companies capture value?
- Engine of growth pivot: change in the company growth strategy to a faster one.
- Channel pivot: delivering the same solutions through different and more successful channels.
- Technology pivot: achieving the same solution using a completely different technology.

Also Hart and Wood (2015) mentioned that Pivot is a sharp correction point in a fledging company's business model, which is done by big public companies. They

emphasized the role of culture pivot that when the company pivot strategically, the lead director has to make sure that the company is pivoting culturally as well, he/she owes that to the shareholders.

Whereas LaRose (2014) presented a paper that determines the meaning of the pivot point and its role in start-ups' success. The research defined the pivot point by "the juncture at which a fledgling company realizes its original business plan must be reshaped or even scrapped entirely. The inability to recognize the need for such drastic change is often what dooms startups, while those that can adapt tend to have a greater chance of success." The paper emphasized the key role of the pivot point, as the business should evaluate the capital costs and human resources to determine how to proceed.

In addition, Comberg et al. (2014) analyzed the main influencing factors affecting the pivot process for startups. They mentioned that the probability of startup failure and struggle is high, so the pivot is a crucial point to pass the hard times and correct the path. The research determined six factors that influence the pivoting process in start-ups, which are the role of founders, sustainability of the business model, cash and financing, market conditions, business financials and new technology. The role of the founders was the strongest driver of the pivot, as in most of the start-ups; founders combine both ownership and management. The research also emphasized the interrelation between the market conditions' factor and new technology factor.

It has been concluded that there are many variables that affect the start-ups sustainability, both internal and external factors, but most importantly the human capital is one of the core influencing factors in each business. Start-ups founder's demographic characteristics and work experience are critical factors that have been analyzed to determine their impact on startup businesses. Moreover, it is obvious that to start any business there should be a good amount of money, therefore, funding is

considered one of the main factors that affect start-up's growth and one of the main milestones for each entrepreneur to construct the business. Furthermore, the business success not only depends on the entrepreneur and funding factors but also the business ecosystem is very crucial component in the success equation. Since the business Ecosystem is the surrounding environment for any new venture, it is comprised of all bodies interpret the business during its life stages like (investors, associations, research institutes, competitors, customers, suppliers, public and private sector...etc.) that is why it plays a vital role in the business's life cycle. Looking at the current weak economic conditions that affect all the economic aspects and leave its shadow on the inefficient use of the resources. The overall slowdown led to a higher unemployment rate. Many policies have been conducted to overcome these obstacles but few ones left good consequences on the employment rate. Start-up accelerators programs are one of those successful policies that benefit the whole economy. Additionally, the business incubation programs, which are an Eco-social programs that aim to accelerate the startup role in the economy, that are provided by the accelerators and incubators to coach entrepreneurs through business training courses and guide them to define their way to success. The incubators help start-ups in creating new jobs, developing a better economic system and accelerating the new ventures. Moving to networking that is one of the main features of our era, any business depends on the surrounding network to achieve its objectives, as without network how could business expand. Many literature indicated a positive relation between networking and entrepreneurial development. So, mentorship is an important factor for businesses to expand and grow efficiently. Mentoring is an advanced method to guide and build professional entrepreneurs. Moreover, mentoring is considered as an essential element in helping entrepreneurs to build their knowledge and determine the appropriate opportunities and seize them. Last but not least, pivoting is a crucial point in any new venture; it is the point of change needed. It

should not be a 180-degree change but it should be a corrective path to the start-ups. Entrepreneurs should recognize this moment when they realize their wrong path, and then they should correct their way and pivot their start-ups.

Since there is a gap in the literature, as there has been lack of research with particular focus of comparing “Collapsed” versus “Sustained” start-ups in Cairo, specially in the transportation field. Hence, this study develops a base for further research in this area.

CHAPTER THREE

CONCEPTUAL FRAMEWORK

3.1- Conceptual Framework

The literature review, presented in chapter two, shows that there are some factors that help entrepreneurs succeed and sustain their startups, however, there are other elements were not discussed in the studies. This research focused on some elements assuming that they affect the start-ups' operations, whether to survive or disappear. It has been noticed that there is no one-size-fits-all; the start-ups that survived till now are the ones that are most adaptable to change, cope with the transformations and keep offering what people want. Perseverance as well as agility are core features in the success of any start-up.

The main concept in this research is the sustainability and the collapse of the transportation start-ups arose in Cairo, Egypt, at the same period of time, and almost delivering the same service. There are many explanations behind the start-up continuity. Moreover, the assumptions that are derived from the main concept are divided between two factors, Internal Factors and External Factors, in which each of these factors includes many variables that have a great effect on any start-up.

In figure (2), the author displays the elements included under each factor that many of them were reviewed in the study to answer the main research question.

Determinants of the *Internal Factors* are:

1. Founders' experience, management skills and whether they are working on a full-time or part-time basis in their start-ups.
2. Funding the business either through self-funding (financial bootstrapping³), or investors' finance the start-up or by using crowd funding which is a funding method using the general public "the Crowd" to fund a specific business.

³ Financial Bootstrapping is defined as "the use of methods for meeting the need for resources without relying on long-term external finance from debt holders and/or new owners" (Winborg et al, 2001, p.235-236)

As for the ***External Factors***,

1. Business ecosystem supports the start-ups from different channels because of the network of interrelated organizations that stimulate the system and the operation of any start-up. It consists of variety of organizations such as corporations, universities, private and public sector and other segments that affect the business strategically. Business ecosystem encourages the value creation, innovative and new knowledge production, as well as resources accessibility that supports start-ups' sustainability and protects them from an early end.
2. Accelerators and incubators might affect the start-ups operations because of the support they provide to start-ups such as networking, co-working space, seed funding, mentoring and coaching. Both accelerators and incubators contribute in the entrepreneurship ecosystem; they almost provide what businesses want for operations; starting from a space till finding investors who might be interested in funding the start-ups. The accelerators help start-ups to speed up in a short time frame (few months), either to succeed or crash quickly without wasting resources (time and money). Whilst incubators provide the practical entrepreneurial support to those who have scalable business plans to easily grow in the market, the incubation period is usually around one year or more.
3. Business climate is another external factor that includes the process and time of registering a business, regulations, and political and economic stability

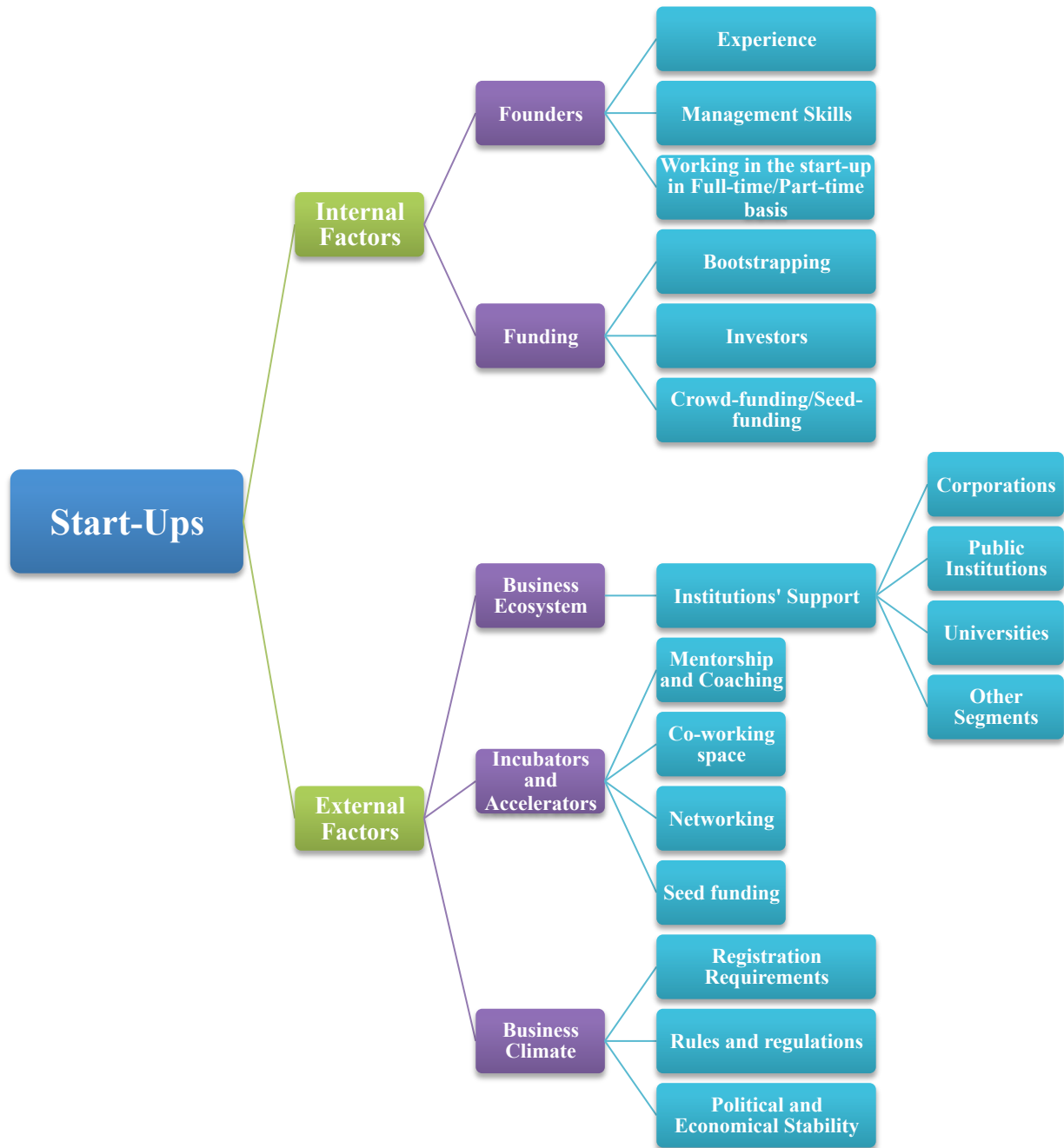


Figure 2: Conceptual Framework

CHAPTER FOUR

RESEARCH METHODOLOGY

Due to the scarcity of the literature that covers the area of transportation services provided by start-ups, this research depended mainly on primary data through conducting semi-structured interviews with the founders of the transportation start-ups that encouraged the car-pooling and bus-pooling services in Cairo, Egypt, in addition to government officials and administrators of start-ups' accelerators and incubators. While the secondary data have been collected from journal articles, websites, these...etc. as shown in the below figure (3).

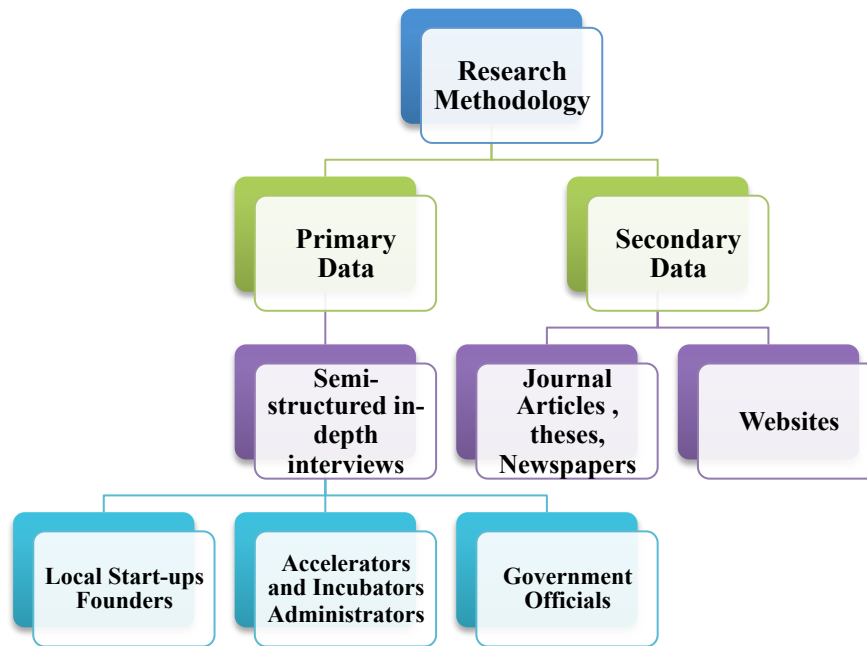


Figure 3: Research Methodology

4.1- Sample Design, Sample Selection and Sample Area

There are two types of initiatives started in Cairo that provide Passenger Transport services, which are local start-ups and private franchising companies. To avoid sampling bias, this research focused on both types of start-ups; including the collapsed start-ups as well as the continuing ones. The sample included different Passenger Transport services such as car-pooling, bus pooling and car hailing services.

The studied companies in this research are: as for the bus-pooling services; Bus Pooling (Collapsed) and Tawseela, they were studied as examples of local start-ups that offer bus-pooling service, furthermore, Share My Ride (Collapsed) and Raye7 were examined as models of local start-ups that offer car-pooling service. Moreover, Uber and Careem were reviewed as samples of the private franchising companies that offer car-hailing service.

4.2- Data Source

Since the qualitative method is useful in exploring specific experiences, it indicates evolving concerns and the type of the data is illustrative. In addition, this technique answers the why and how questions that could not be answered in detail in the quantitative method. Consequently, as for the data collection, the researcher used the qualitative approach in the research because of its flexibility in measuring the reasons behind a specific behavior both in depth and in detail. Accordingly, The researcher used semi-structured in-depth interviews in this study and it was effective and suitable to the nature of the study.

*** Primary Data**

Qualitative analysis was used in this study to gather data. Data needed to validate the research questions were gathered from primary sources using in depth semi-structured interviews with four founders and one co-founder of passenger transportation start-ups, five accelerators and incubators administrators, in which two of them are affiliated to Egyptian Ministries, and former consultant to the Minister of Transportation..

Before collecting the data, a pilot interview was conducted with a service provider to check the respondent understanding and further questions were included. Also, an informal discussion with an expert was done and extra variables were added to the conceptual framework.

*** Secondary Data**

The information of secondary sources was assembled from the CAMPMAS, websites, formal Facebook pages, literature review, World Bank reports, Newspapers, and Ministry of Transportation. Moreover, published data in books, thesis, and refereed journals were used in the research completion. Exploiting the aforementioned methods, triangulation, validity and reliability of the study were met.

4.3- Ethical Consideration

As the researcher conducted this study under the umbrella of the American University in Cairo (AUC), the International review Board (IRB) reviewed the questions as well as the consent form used in the interviews and the approval has been received that indicated the adhesion to the ethical guidelines before conducting the interviews.

4.4- Research Limitations

Although the research has reached its aims, there were some unavoidable limitations. A constraint that is experienced pertains to data collection, as the research has been conducted in early 2016 during the taxi drivers' protests against Uber and Careem. These unexpected protests against two of the well known transportation service providers, hindered the possibility to interview one of both companies' staff because of the huge workload, as communicated. Fortunately, the two aforementioned companies are famous and well established which enabled the researcher to find a large amount of secondary data, as they were interviewed several times in the media. Concerning the role of public administration and public policy towards the start-ups, the data is too little in the literature, or even could not be found, and there is no sufficient information linked to it, so the researcher conducted semi-structured interviews with government officials to know how they interpret entrepreneurship.

CHAPTER FIVE

CASE STUDY START-UPS

5- Brief Information about the studied Start-ups

The case study start-ups is covering two bus-pooling service providers, two car-pooling service providers, and two car-hailing service providers as shown in the below figure (4).

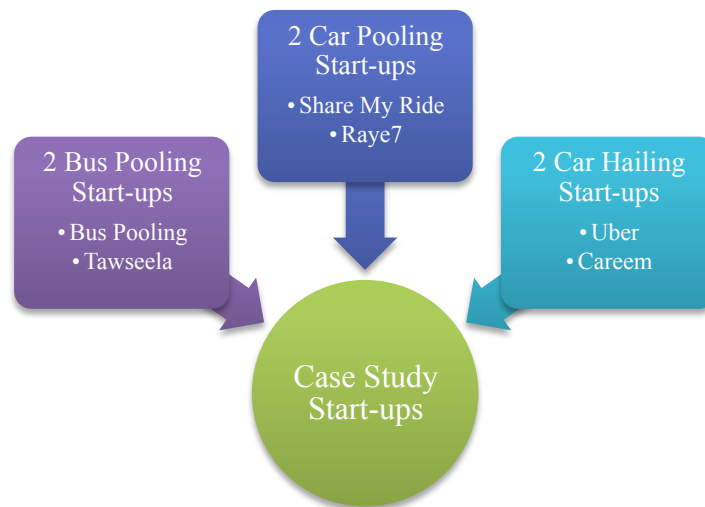


Figure 4: Case Study Start-Ups

5.1- Bus Pooling

Bus Pooling was a private transportation start-up that used to offer crowd-sourced subscription-based bus service for daily commuters.

“Bus pooling was transporting employees who share same home location, work location and working schedule. We were Uber but using buses for regular repeated daily routes (From Home to work and vice versa).” Bus Pooling Co-Founder

The service providers used to match the similar service requests that they received and provided the requesters a bus with a customized route according to their home/work locations and their work schedule, assuring a secure, punctual, reliable, and economic ride.

“Once a group completed, we offer them a bus, from which we contracted them out, in the working times (from 8 to 4, or from 9 to 5) either from Sunday to Thursday or according to the group’s request for a monthly fee.” Bus Pooling Founder

Bus Pooling contributed in decreasing the number of private cars in the streets, as it promoted the idea of sharing a comfortable bus instead of driving in congestion during the week days to go from home to work and vice versa. The company was targeting private car owners and people who pay a huge amount of money on transportation services trying to find a decent mean of transportation, it was offering lower cost solution and more comfortable to car drivers.

“We were replacing almost ten cars by one small bus in the congestion, if this solution was adopted in a bigger range, replacing one thousand car by one hundred bus, it would release daily a space for nine hundred cars (if only one thousand person used the service) from the street which is a number.” Bus Pooling Founder

Moreover, from the safety point of view, Bus Pooling was claiming that their service was a secured transport service than the public buses/microbuses and the taxi. The company was providing a fixed bus with the same driver and the same riders, in which the company has full details about both the driver and the bus that made any kind of harassment difficult, and the same group of people who work and live in similar area that guarantees a higher safety. So the passenger would have a community that helps in the traffic jam and gives a kind of safety especially for girls whereas they are not alone.

“Our service was more secure, as we know the details of the drivers unlike the taxi driver you do not know his information and there is no authority you can report to it. So safety, accurate timings, convenience, assembling you with people whom you cannot group yourself with them in your own, which can help you to decrease the cost when it is distributed on several customers, plus the high quality of the transportation means that it is not available in the normal public transportation.” Bus Pooling Founder

Bus Pooling was founded in May 2013 during “Start-up weekend” competition, and officially launched in November 2013, in Cairo Governorate, Egypt. The founders

were three Egyptian engineers who share the same academic background but diverse work experience in different fields such as software development, business development and operations. The tasks were divided between the three partners as follows: Marketing and Finance, Sales and Operations, and technical and software development.

“I used to operate the bus business in my previous company on not-for-profit basis for three years to serve my colleagues needs. This gave me a strong operational background in that area that helped me to jump-start in the start-up.” Bus Pooling Founder

The idea of Bus Pooling was developed in May 2013; when the founders met in a competition for the start-ups and brainstormed ideas. Throughout that event, the idea was admired among coaches as well as investors. By the end of the event, the website was up and running. A month later, there were massive protests (June 30th) and curfew that kept everything on hold for a while, and then the site was officially launched in November.

“We started in the end of 2013 to launch officially, we started our work in June 2013 but when we got ready was in November 2013” Bus Pooling Founder

Bus Pooling used to operate through its website, where users submitted their service requests with their daily trip details, then Bus Pooling matched people with similar requests in groups, then once a group exceeded the minimum threshold of confirmed requests, the company provided the group with a comfortable van with a route tailored to their request. The company also provided buses for trips and one-day events. The service helped both car owners and those who do not have cars in two important sides: money-wise and time-wise.

“For the car owners with Cairo terrible traffic, our monthly subscription fees becomes nearly equal to car wear out value plus car expenses. While those who do not have cars, we remove a big financial headache of using taxis or getting a loan to buy a car. Nonetheless, We buy to our customers from four to six hours daily wherein they could sleep, relax, communicate with friends or even send a couple of emails” Bus Pooling Co-Founder

The buses that Bus Pooling used were outsourced; this enabled faster and easier expansion unlike owning a fleet, which requires a big capital. The founders had their own network of buses owners and drivers who fulfilled the company's requirements for both the driver and the van.

Although Bus Pooling was incubated in an accelerator that provided with a seed fund, and had a small angel investor, yet, the founders were expecting more investment, as they claimed that they were not just an idea, they proved the concept and had sales.

Consequently, Bus pooling stopped its operation in early 2015.

“We were incubated in an accelerator during 2014, we were offered a small fund that were used in our operations. We expected more investment, as we proved the concept, we spent 4 or 5 months doing sales, but we didn't have money and our last bus stopped in February 2015.” Bus Pooling Founder

Bus Pooling used different platforms and techniques to market the service, such as info-graphics, videos and cost calculator which were posted on the company's website and the social media like Facebook, and Twitter. Nonetheless, the founders have been interviewed several times in the media.

Challenges:

Bus Pooling stopped its operation in February 2015 because of the challenges they faced; there were both internal and external difficulties Bus Pooling went through in which the challenges can be summarized in the following points:

The Internal Challenges:

1. Funding the business was a very tough mission; the founders were paying from their own pocket. Moreover, searching for investors was an uneasy task because they are very few in Egypt, they request a very high return compared to what happened abroad.

“Funding our business by bootstrapping was another challenge, at the same time we need fund, but because the investors are very few so they request more comparing them with any start-up’s ecosystem abroad.” Bus Pooling Founder

2. Working in a part-time basis causes some delays. Two of the three partners were full-timers but the third was part-timer that affected the business progress negatively.

“Not all the team were full-time, the part-time partner was unfocused, so the thing that should take a week to be done it took two to three or even four months,” Bus Pooling Founder

3. Hiring staff was infeasible, the founders were self-funding their business, they were unable to hire and sustain employees because of the monthly salaries that they could not afford.

“We could not hire expert staff because of lack of fund and their high salaries, we had to hire interns instead which required more training and double work” Bus Pooling Founder

4. Bus Pooling was the founders’ first start-up, moreover, the founders’ have had basic business background and they were learning all over the way.

“It was our first start-up and we were not aware of many things that we learnt the hard way.” Bus Pooling Founder

5. Multi-tasking Founders, only the three partners were doing all the functions starting from the software development, operation, marketing, sales, logistics, customer service to the extent of collecting the fees from the customers, which makes them unfocused.

“We were too little in terms of staff, no one was focusing on the big picture, the 3 of us were doing all the functionalities, and we were burnout in nonsense.” Bus Pooling Founder

6. Testing the market was a challenging task, it needed a considerable amount of investment and the company was under-funded.

“We did not have enough money to test in the market several times and pivot till we reach a successful model.” Bus Pooling Founder

7. Having a location was another issue; Bus Pooling did not have a specific office to operate from, however, it is not obligatory for a start-up to have its own place but it could be a factor.

“We did not want to pay for having our private office at that time, we shared offices also we had to work from home most of the time, But not having your own place makes some distractions.” Bus Pooling Founder

8. Grouping requests was very challenging and required more marketing, the founders needed a large number of requests in a short time to match people and offer several buses, since their business depends on similar requests to offer the service. They needed to have around 10,000 requests to operate around 30 buses, as it is an exponential relation, the probability to find similar requests will be higher in larger number of applications.

“We were in a bad need for the network, as in order to do the matching for the bus riders it was not an easy task at all, we needed almost 1000 request to match 10 people with the same needs.” Bus Pooling Founder

The External Challenges:

1. Educating the market was challenging, to convince people to try and use a new service was tough and needed money to market the idea and attract a large number of users to provide the service.

“To persuade people with a new service like what we were providing takes time, because our service needs to match ten people have the same request, which is very difficult and needs a huge marketing to be done.” Bus Pooling Founder

2. Although, Bus Pooling was incubated in the American University accelerator and was offered a co-working space, seed fund and access to the university facilities and mentors, but the accelerator was in its early stages and the founders did not get the utmost benefits of the accelerators.

“The accelerator was in the beginning phase, we joined them in their second cycle, and the demo day was not that big, there were almost no investors, although, it was expected to see a large number of investors on that day.” Bus Pooling Founder

3. Coaching was difficult as there were few mentors in the field of the transportation, accordingly the founders were learning in a hard way.

“We were seeking the help of mentors, we used to ask for their opinions from time to time. Furthermore, there was no real coaches in the transportation domain we know them, we did tests based on our own experience.” Bus Pooling Founder

4. The founders of Bus Pooling suffered from the consumer behaviour; they claimed that some customers wanted the best service with the lowest price.

“Many people promised to start the ride then suddenly they did not answer our calls. Others were negotiating our fees, they wanted to buy a car with one Egyptian Pound.” Bus Pooling Founder

5. The Country’s laws and regulations are unclear, the laws of investment and transportation are vague, and there are no policies for the start-up companies to know what they should abide by.

“We don’t know whether we can offer transportation service or not. Moreover, we tried to check with the Ministry of investment about the rules we have to stick to, we asked two lawyers there each one of them said different answer.” Bus Pooling Founder

6. The political status in Egypt was unstable at the time Bus Pooling arose that did not encourage any investor to invest money in the country especially in that type of business, which needs a huge amount of money.

“This project needs a big investment and because the country was unstable economically, nobody wanted to invest in a start-up managed by youth, so investors were worried to invest in such as big project, as transportation needs a huge amount of investment.” Bus Pooling Founder

7. Finding the good driver who meets the company’s criteria was a very tough mission for the founders.

“Dealing with drivers was very bad experience because he knows that he can work at any time, he feels that because he is the bus owner, he needs to be treated as a business owner. Most of them dealt arrogantly with clients as if they were peers” Bus Pooling Founder

Despite all these challenges that the founders of Bus Pooling faced, till now (March 4th, 2016) they are receiving requests from customers to return back the service. It is obvious that this industry needs investment to expand in the market, as money will be generated while operating more vehicles and having more clients; i.e. there are economies of scale for this business that were not reached by Bus Pooling.

5.2- Tawseela

Tawseela is another private initiative that offered bus transportation service to customers in its beginning, it launched in November 2013, however the founders worked on the idea from June 2012. The mini/micro-buses that Tawseela used to provide were very comfortable; they replaced the van's 14-seats interior with a more comfortable 8-seats interior with large spaces for legs stretching, also, there were outlets for charging mobiles and Wi Fi to surf the Internet. The routes depended on the customers' voting on the website, the large number of votes to and from specific places led to the availability of the service. Tawseela's buses had a specific start and end points, from point X to point Y, not from each individual's home like School buses. Also, buses were provided for one-day events and trips.

September 2015 was the turning point of Tawseela, the founders had changed their business model, from Business to Customer (B2C) to Business to Business (B2B). Tawseela is now offering transportation service to companies and schools using the regular mini/micro buses with trained drivers, providing companies and schools with an administrative panel to manage and detect the violations of buses, and allowing employees and parents to monitor their rides and their children's trips through a mobile application. Currently, Tawseela is dealing with six companies and schools and providing a thousand ride per month.

Tawseela's business model does not include buses ownership, so from day one of operation, the mini/micro buses are outsourced from family or individuals who privately owned those buses. Typically, bus owners are people who have some savings and pay that amount as a deposit to buy a micro/mini buses, then afterwards, the instalments will be paid from the bus operations.

“Typical bus owner is a family or individual has some savings and put it as a deposit to buy a bus, then pay the instalment from the operations of the bus. We do not buy buses in our model.” Tawseela Founder

As Tawseela's operations depend on the outsourced buses and drivers, the company offers different type of trainings to the drivers before hiring them. Trainings are on safety matters, customer service and information technology, throughout the trainings the drivers learn the rules that they should abide by with the customers, such as the speed limits, how to deal with customers and how to use the mobile application that Tawseela developed to drivers that shows their trips.

“Tawseela train the drivers on safety, customer service and IT. Then provide them with a mobile application where their trips are downloaded on it.” Tawseela Founder

As now Tawseela is providing its service to business, there is an administrative panel provided to their customers, which shows the trip details and follows-up the buses. For schools, Tawseela is providing besides the administration panel to the school another mobile application to parents to check out the location of their children. Regarding the cost, the fees that the companies and schools pay for the service, Tawseela pays the bus owners and drivers then gets a percentage from the transaction.

“Now we are contracting with companies and schools, then we take a cut from the transactions. At the same time, we provide an administration panel to the companies and schools to follow up the buses who is late and who is not. In case of schools, we provide the parents a mobile application to see where is the bus of their children.” Tawseela Founder

The objective of Tawseela founders is to offer a better transportation solution than what is currently provided by offering a safer ride because of their quality control system. Bus drivers are trained technically and non-technically. These kinds of trainings are effective as they helped Tawseela's staff to monitor the driver's attitude and act accordingly, the speed of the buses are monitored and the drivers who exceed the limit are warned and their salary is deducted, as a kind of punishment, and if they persist they will be subjected to a fine.

“We are not trying to solve the transportation problem but we are trying to offer an alternative better than what is offered. We offer a safer and a high quality ride than what is offered. There is a quality control process with and without technology. Bus drivers are trained, speed limit is monitored, our process

indicates that drivers have to adhere to a specific speed limit, if exceeded the driver will be warned if he persists he will be fired.” Tawseela Founder

Tawseela’s founders have different academic backgrounds in finance, marketing and computer science associated with technical expertise that help in the business operations because of the knowledge diversity, which is needed in this domain. At the same time, Tawseela had the chance to hire staff for operations as well as to engage consultants in specific areas periodically, because the high cost of the good calibres.

“We hired people for the operations and because of the difficulty of attracting high calibres we use consultants to give us a push in specific area then we continue on our own. Currently we have six full-time employees” Tawseela Founder

Previously, Tawseela used to operate through their website, riders had to visit the website to book their order, then buses were offered to the routes of popular demands. It has a Facebook fan page with a total page likes of 14,231 and a Twitter account with 294 followers, the last interaction on both Twitter and Facebook page was on February 2014 and May 2014 respectively. But now, after pivoting to business, Tawseela reached companies and schools through direct sales.

“As long as we provide B2B service, we do not need activity on Facebook because the page maintenance takes time and we have a limited staff.” Tawseela Founder

As any start-up company, Tawseela faced some challenges, may not be as big as other start-ups difficulties but at the end the founders had some troubles. As for the **internal challenges**, Tawseela’s founders are consuming much time in doing many tasks in which some of them are not in their fields and they know nothing about, consequently, the founders have a very limited time to focus in the important things.

“The staff members inside the company are doing many duties in things they do not know which consumes a huge amount of time, instead of focusing on important things such as: strategy and business development.” Tawseela Founder

While the **external challenges** that Tawseela met were the following:

1. Tawseela started its operation on November 2013, when the status of the country was unstable and many people were suffering from the curfew specially who were working in the transportation field, as when people stopped going to their work, accordingly, the trips were cancelled.

“When we started our service, one of the challenges that faced many people was the instability, like the curfew and similar stuff. We are a transportation service, if the work is cancelled; accordingly, our trips are cancelled.” Tawseela Founder

2. Attracting talented staff is very hard for start-ups, as the talented person is, most likely, searching for either a big company to work at whose name would help in the career path or a place that offers a good financial package. Unfortunately, both requirements cannot be found in a start-up company especially in its beginning stage.

Difficulty to attract talent is a challenge that faces any start-up, as the talented person needs to work with either a big known name to add it to the CV or to work with someone who offers a good financial package, but the start-ups in Egypt could not offer both.” Tawseela Founder

Despite the challenges that Tawseela faced, the founders tried to adapt their business and adjust their business model before it was too late, they changed it from Business to Consumer to Business to Business, as upon the founder’s opinion, the rules of the B2C business are unclear and that kind of business needs a big venture fund. What differs Tawseela from other businesses is both their flexibility, they are operating with buses owned by others which makes them flexible with demand, and the technology part they are offering which allows them to scale up.

“The Tech part is the thing that allows you to scale up. Most of the businesses are very very traditional, all what they provide is transportation service and we are trying to offer more than that.” Tawseela Founder

5.3- Share My Ride

Share my ride is a private start-up initiative that offers a flexible and safe means of transportation for people within their trusted circles, it is a commission based carpooling application that aims to fill the empty car seats in people's cars and both the driver and the riders will be rewarded, if that happens, gas would be saved, driving time would be shortened, auto emissions would be reduced and people would meet along the way.

Share My Ride is customized to cope with the Egyptian conservative culture; the application allows people to share their rides within their trusted friends, also it includes a preference for gender and smoking as well as rating and reviews.

All service users will benefit from the service's reward system, which is collecting points, whatever the unit is, that can be transferred to different types of rewards (such as cash, fuel vouchers upon an agreement between the founder and an oil and gas corporation, and others) and then the company gets commission in between. This was the main concept and the model Share My Ride wanted to implement.

The idea of Share My Ride arose in mid-August 2013, at that time the streets in Egypt were unsafe and people used to use a platform, which does not support communication, to plan their trips with each other. However the platform does not help people to communicate, but they were circumventing and using it.

“This is where Share My Ride started, why do not we create a platform for people to communicate with each other. So I started to write the concept of Share My Ride, develop it, think more about it, ask friends and take their opinions. Then I built the case.” Share My Ride Founder

Share My Ride has a founder and two co-founders with different engineering background; one founder has a bachelor degree in Civil Engineering, is a certified Project Manager with more than twelve years' experience in Project Management field, completed two Postgraduate Diploma in Engineering Management and an MBA

holder. The first co-founder has a good knowledge of both technology and of business, holds a bachelor degree in Computer Science and more than twenty-five years of experience in the Information Technology (IT) field holding a senior leadership and management positions, besides a huge expertise and familiarity in entrepreneurship domain⁴. The second co-founder also has a bachelor degree in Computer Science and has a working experience in the information technology field in addition to experience in start-ups. Those three are the only ones who worked at Share My Ride on a part-time basis without any full-time staff.

Share My Ride used the Social Media to Market itself, it has initiated a Facebook page in December 2013 (<https://www.facebook.com/ShareMyRideCairo/timeline>) with 3,488 fans. Also, instagram was used as a marketing tool as well as the website.

Share My Ride is totally funded by the founders, *“Our deal was, that the three of us will pay.” Share My Ride Founder*

A decent amount of money was spent in the beginning to initiate the Facebook page for marketing campaigns and to pay freelancers to develop an application but it did not work, which led the founders to search for another company and spend another bulk of money to get a working mobile application.

Challenges

Share My Ride faced some challenges from the beginning, for the start-up to move on it needed a network, money and for sure mentorship. The founder has searched for accelerators, incubators as well as investors and has submitted several applications but none of them was accepted.

“I submitted at least 15 applications for incubators/accelerators competitions, in addition to the bulk of emails I wrote to people seeking their support, unfortunately I did not get enrolled in any of the programs.” Share My Ride Founder.

⁴ This co-founder was thought to be like an angel investor from the start of Share My Ride, but after the collapse it has been noticed that this person was not an angel investor but a co-founder.

In March 2014, a co-founder with a great knowledge in entrepreneurship has joined Share My Ride and was very interested in the idea. After a couple of months a decision has been taken to be three partners and the other co-founder who has another start-up that develops mobile applications has joined Share My Ride.

The issue here was that the three partners had another jobs and none of them worked in a full-time basis in Share My Ride. However, one of the main reasons that directed the founder to start Share My Ride was at that period of time the founder had no full-time job

“What made me start Share My Ride is that I lost my job before then with a long period of time, the multinational company that I was working for closed its office in Egypt, the post was excellent as well as the salary. I could hardly find a similar job.” Share My Ride Founder

In June 2014, the founder got a full-time job offer in a multinational company, and first co-founder encouraged and supported the offer acceptance because of the secure pay. Accordingly, the tasks were assigned, as the first co-founder will take care of the management and the second co-founder was supposed to take care of the technical part.

“Spending fifteen months out of work was really tough. In June 2014, I got a good job offer with a secure pay in a multinational company; so with the approval of the first co-founder (investor) who will invest in Share My Ride, I accepted the job. It was a one-year contract, through this year I was very busy and stressed out from the full-time job and from Share My Ride as it was collapsing.” Share My Ride Founder

The three partners were unable to meet regularly, things were moving in a very slow pace, and sometimes the information was not delivered to the three of them.

The life cycle of Share My Ride was too short. In early October 2014, the last status was posted in Share My Ride Facebook page: the used platform to communicate with people. It collapsed in less than one year, although the developed deals with the partners.

“We started and collapsed in less than one year. However we were three partners and had support agreements.” Share My Ride Founder

There are different reasons behind the collapse of any start-up, As for Share My Ride the reasons will be summarized in the following lines;

1. Being late in introducing the idea to the people and spending too much time working on the model.

"Spending much time on the concept, this is mistake number one that I advise anyone not to do, if you have an idea go and do it directly" Share My Ride Founder

2. Searching too early for an investor is not a good decision.

"Make something, Release it to the people, then search for an investor" Share My Ride Founder

3. Having almost nothing other than the idea and looking for an investor.

"When an investor comes that early to the picture he wants to take everything because you have nothing" Share My Ride Founder

4. Working on a part-time basis in the start-up in its first stages

"I accepted to take a full-time job when I had to be sitting in my start-up doing the work." Share My Ride Founder

5. Taking too much time to release the idea and implement it

"Share My Ride was not implemented, it did not take its chance to be released in the market and to be tried by people. It was a concept and unfortunately many hassles occurred that hindered and stopped us before we begin." Share My Ride Founder

6. Networking is an important factor in the transportation service as well as mentorship

"I needed a network, I needed money and for sure I needed mentorship." Share My Ride Founder

Although Share My Ride was a carpooling service, the only thing it offered was providing buses to an event for start-ups as a plan for marketing the idea, but nothing happened except being charged a considerable amount of money. Share My Ride had a very short life cycle and its concept was not implemented however the success of the idea and the presence of funds.

5.4- Raye7

Raye7 is a car-pooling start-up that provides a ride-sharing service within someone's social network (work / university / social media). Raye7 is operating through a mobile application, it has a website and is active in different social media platforms such as Facebook, twitter, Instagram and LinkedIn. Through Raye7's mobile application, travelers can connect with classmates/coworkers/connections close to them to share their trips. For a safety reason, Raye7 adhered to the Egyptian culture and citizen's life style in which commuters can only ride with people they trust in their circle, which makes the trip an enjoyable, and efficient in terms of cost and time.

“The transportation solution that we are providing is carpooling between people in the same community, we are doing crowd-sourced transportation, so people can ride cars in streets but with only the trusted circles. As a passenger I can ride with people in the same company I am working at, the university I graduated from, my Facebook friends and friends of friends.” Raye7 Founder

The main founder of Raye7 is a computer engineer, who has seven years of experience in software industry and a master's student in the field of technology management. At the late stages of the start-up a partner has joined the company. The idea of initiating Raye7 was inspired upon personal experiences in commuting inside and around Cairo and because the major congestion problems in the city. So this business contributes to solving the passengers' transportation problems, which are the crowded means of public transportation, the expensive cost of the taxi and its alternatives, and the fixed times of the official buses offered by the companies and private universities.

“Our solution contributes to solving the passengers' transportation problems like the crowded and uncomfortable public transportation means, the harassment issues that people are suffering from, the expensive price of the taxi, and the high cost of the taxi alternatives and their availability problems. Moreover, The timings of private universities buses and companies buses are inflexible” Raye7 Founder

The idea of Raye7 was developed in 2014; the main founder was working on it beside a full-time job, at that time there was a competition in Germany and Raye7 won the second place with the idea only. During 2015, the founder was working on the idea on a part-time basis, and then by late 2015 the founder left the full-time job and focused on Raye7 more. Raye7 was active on the social media since 2014, while the mobile application has been released in December 2015 in android and in January 2016 in iOS.

“Raye7 is in the market since December 2015, before then it was in testing phase. The idea was born in 2014; I was working on it in the background, one day per week. There was a competition in Germany and I won the second place with only the idea, since then people knew about us. In October 2015, I resigned from my full-time job and started working in Raye7 on a full-time basis.” Raye7 Founder

Raye7 is offering a comfort transportation solution, and a cost efficient, that is cheaper than other options, as the passengers have to pay one third of the taxi price to the car drivers and Raye7 takes ten percent of any transaction.

“One of the passengers’ problems is not finding comfort either in public transportation or official buses. While the carpooling is providing comfortable solution, also it is cost efficient that is cheaper than any other option. Passengers pay to the drivers 1/3 taxi price and we take 10% of it.” Raye7 Founder

As for funding the business, in the beginning the founder used to fund the business from personal savings, then afterwards, the founder went through several competitions and the Raye7 not only won the competitions but also was granted a good amount of money that helped the business to grow. Moreover, Raye7 was incubated in both incubators of INJAZ Egypt and TIEC.

“Raye7 was funded by Bootstrapping, spending our own money, plus some awards we got.” Raye7 Founder

Raye7 had the chance to hire both technical and non-technical staff working on both part-time and full-time basis; wherein five are full-time staff and seven are part-time employees. Both full-time and part-time employees are paid except one in each category.

“The staff is divided into two categories, the first one is the technical employees. Such as: iOS developer, android developer, backend developers, technical coordinator, and UX designer. While the Non technical staff are: customer support, social media, and public relations.” Raye7 Founder

Raye7 as start-up has met few challenges both internally and externally; the internal one is the lack of knowledge of the staff in some areas like finance and sales.

“There are knowledge areas still missing in the team. In our team we still miss the finance and sales areas. We need to work more in our teams and get experts in the fields we are missing.” Raye7 founder

Whereas the external challenge that faced Raye7 is hiring talents, finding the technical talents is difficult in Egypt because they are very demanding and requiring high salaries and benefits.

“External Challenges: hiring talents, who are working in the latest technology and has the expertise is not so easy in Egypt, if we find them, they will be very very very expensive and we cannot afford them.” Raye7 Founder

Despite the presence of many car-pooling applications in Cairo, Egypt, in the past few years, Raye7 has had a positive presence in the market compared to what had existed before. Raye7 did its homework; it did its best in doing a market research that adheres to the Egyptian culture. It went through many competitions and got supported from many institutions and sectors such as Injaz Egypt (NGO) and TIEC (governmental entity), and in the most recent competition, Raye7 mobile application got the second place in the World’s Leading Mobile Application event held in Barcelona, Spain last February 2016.

	Bus Pooling	Tawseela	Share My Ride	Raye7
Status	Stopped	Continued	Stopped	Continued
Service	Bus pooling, Nov.2013	Bus pooling, Nov.2013	Car pooling, late 2013	Car pooling, 2014
Founders Work Experience	3 Engineers: 2 Software (1 MBA holder) Engineers and sales	Engineering Finance Marketing	3 Engineers: Project manager, CEO for start-ups, Developer	1 Software Engineer
Funding	Bootstrapping + seed fund from accelerator + a small angel investor	Bootstrapping + investments + raising fund	Bootstrapping + investments	Bootstrapping + incubators' funds + investment
Ecosystem	Accelerator	N/A	N/A	2 Incubators
Internal Challenges	<ul style="list-style-type: none"> •Money •Hiring staff •No time to focus •Basic business knowledge •Buses 	<ul style="list-style-type: none"> •Many duties •Limited time to focus on big things 	<ul style="list-style-type: none"> •Late idea introduction •Much work on concept •Poorly developed •Early investor •Busy Founders •Miscommunication 	<ul style="list-style-type: none"> •Missing knowledge area
External Challenges	Investment, Market Education, Unclear rules, Coaching, Country's instability, Consumer behavior	<ul style="list-style-type: none"> •Country's instability •Difficulty to attract talent 	<ul style="list-style-type: none"> •Not involved in incubator / accelerator 	<ul style="list-style-type: none"> •Hiring Talents

Table 2: Comparison between local start-ups

5.5- Uber and Careem

Both Uber and Careem are Car hailing mobile applications that provide limousine/taxi service; they are operating in Cairo since late 2014 and offering Cairenes a high quality of transportation alternative by clicking a button. They are promoting themselves as offering comfortable, reliable, affordable and safe rides. Uber is founded in San Francisco, California, in March 2009, operated in more than 400 cities worldwide and started in Egypt by November 2014. While Careem is founded in Dubai in July 2012, currently operating across 20 cities and started its service in Egypt from November 2014 as well.

Egyptians used the online marketing and the word of mouth, through the social media such as Facebook and twitter, to market Uber and Careem services by describing their rides experience and advising their circle of friends and family to try the service. There are several factors that differentiate Uber and Careem from the regular taxi service. According to the posts and reviews posted on Facebook, people were praising the manner of the drivers, the high quality of the ride, the method of payment, the customer service, and the vehicles conditions.

The business model of Uber and Careem is almost the same; they are not acquiring cars but depending on the crowd-sourced private vehicles of the public for an amount of money. To join the fleet of Uber and Careem, drivers/captains went through criminal detection, several health and drug tests and comprehensive training programs to adhere to the criteria that guarantee the passenger's satisfaction.

What differentiates Uber and Careem from another transport service provider is the administrative system that helps in improving the service such as; putting criteria to join the fleet, evaluation system by the passengers, and reward and punishment system to the affiliated drivers/captains depending on the passengers' evaluation and review. Thus, many citizens adopted the service, both many car owners left their cars

and those who do not have cars and were using the regular taxi converted to Uber and Careem service providers.

What encourages people to use Uber and Careem service rather than the regular taxi are the following:

- The regular Taxi often refuses to carry passengers to destinations they want. By using Uber and Careem, the user-friendly mobile application, and pressing a button, a car comes directly to the passenger's place and takes the passenger wherever he/she needs to go.
- The fare of the regular taxi sometimes is incorrect, sometimes the drivers did not run the fare meter and occasionally return the change to the passenger. While Uber and Careem application, passengers can pay cash or with credit card according to the kilometer travelled, in which the fare is automatically calculated as the applications are linked to the GPS, that makes no chance to play with the meter.
- Passengers can see the details of the driver, the driver's photo and the vehicle's details, and can track the arrival on the map using the GPS.
- The passengers feel the safety by using Uber and Careem rather than the regular taxi, since the companies have the data of the drivers and their cars. Moreover, the passengers evaluate the drivers after each trip; if the driver receives poor rating he/she will be warned, if the driver still receive bad reviews the contract will be terminated.
- Drivers are professional because of the training they received, on using the maps, decent customer service and sexual harassment awareness in cooperation with Harassmap (an Egyptian anti-sexual harassment non-profit organization) before joining the companies' fleet. Moreover, drivers do not talk to the passenger unnecessarily and do not play the radio.

- Several taxi-riders have argued that if the regular taxi service was satisfactory, people would not have resorted to the private companies like Uber and Careem. People believed if regular taxi drivers want to save their livelihoods they must improve their services.
- Uber and Careem keyword is the reviews/ratings. This is the keyword in any service-serving people especially in a crowd-based system; if you could not evaluate people in a crowd-based service there would be a lack of trust.
- Both Uber and Careem are venture-backed startups and are well funded. They spend generously on marketing campaigns, free trials and referral programs, which decreases the barrier that people have to try their service.

Since the transportation is a game of scale, in order to provide Business to Customer (B2C) service, the service providers need to have scale which needs big venture fund. This industry needs investment to expand in the market, as money will be generated when many vehicles are operated and more clients opted for the service. That is why Uber and Careem are in the market providing their service to customers and achieving good results because of both the large amount of investment spent to expand in the MENA (Middle East and North Africa) region and the large amount of service users.

Uber and Careem were surprised that the Egyptian market has a huge source of growth as mentioned in recode article (April 22, 2016), according to their announcement that Cairo has been the fastest growing city for the service since its launch in Egypt, which proves that the Egyptian market is very big and can accommodate many transportation service providers like regular taxis, ride sharing services offered by start-ups and companies such as Uber and Careem.

Like any new company started in Egypt, both Uber and Careem met some challenges but at the end unlike what the Egyptian start-ups met. Below are some challenges that the two companies faced in Egypt:

- Since there is a first-mover advantage, there is also a late-mover advantage, in other words, who enters first pays a huge amount of money to educate the market but at the same time will occupy a big segment, while who follows enters the market without the need to do the same, the market is already educated. Uber and Careem paid a considerable amount of money to educate the market. So now some people know that there are another options rather than riding their cars and using the regular taxi that makes them ready to use Uber and Careem, while others who cannot afford using Uber and Careem everyday will find another alternative offering the same model.
- The protests organized by taxi drivers against both Uber and Careem, accusing both companies of stealing their livelihood illegally and creating trouble between them and the passengers. On one side, some taxi drivers were against the service provided by Uber and Careem and asked the government to ban them from operations, and on the other side there was a suggestion to legalize Uber and Careem and to pay the same taxes the regular taxi drivers pay. However, according to *Ahram Online (February 29, 2016)*, the operations manager in Uber Cairo said, “Uber is licensed as a technology company in the countries where it operates, emphasizing that Uber pays taxes and has commercial registers. Moreover, the limousine, car rental, and tourism offices which are partnering with Uber are licensed and have commercial registers.”. Also, Careem claims it is operating legally in Egypt.
- Uber’s and Careem’s management used to defend their business saying that they are providing thousands of job opportunities to unemployed Egyptians, claiming that their service is important for the whole Egyptians, for those who use the service as passenger and who join the fleet as driver.
- In February 2016, there were several posts on Facebook criticizing what happened with Uber and Careem drivers, when some taxi drivers trapped both

companies' service providers by ordering the service as if they need a ride and when the drivers arrived they fought with them.

- Although in March 2016 there was an announcement by the traffic authority that Uber and Careem services will be suspended in Egypt as it is illegal a private car license to operate as a driver (Mohamed Elsayy, Masrawy.com, March 9, 2016), but there was another declaration on the same day by the cabinet spokesperson endorsing the importance of protecting such companies as they are offering a distinctive service which is needed by the Egyptian market.” (Mohsen El Bedeiwy, Youm7, March 9, 2016).

All the studied start-ups and the reviewed companies that offer transportation services agree that the market in Cairo is very big which is open to all service providers and there should not be any fight on customers in that effect.

	Uber	Careem
Service	Car Hailing App	Car Hailing App
Founded	San Francisco in March 2009	Dubai in July 2012
Operating in Egypt	November 2014	November 2014
Competitive Advantage	Drivers' manner, high quality of the ride, method of payment, customer service, and vehicles' conditions.	
Challenges	<ul style="list-style-type: none"> • Educating the market • Taxi protests • Taxi drivers traps • Defending their business (legal issues, job creation) 	

Table 3: Comparison between international start-ups

CHAPTER SIX

CHANNELS OF SUPPORT

6.1- Accelerators and Incubators

Both accelerators and incubators play an important role in the operations of the start-ups. There is no doubt that they facilitate major issues in the start-ups functions from different dimensions, whereas most of those services are offered by accelerators and incubators: co-working space, access to equipment, seed fund, mentorship, networking, and connection with peers. Below is a comparison differentiating between accelerators and incubators.

	Accelerator	Incubator
Entrepreneurs	Have a very early stage concept	Have a more developed business plan
Objective	Speed up the startup so that it either succeeds or crashes before investing too much time or money	provide guidance and advice to help start-ups grow and succeed
Services	co-working space, business training programs, access to mentors, network, and administrative, legal and finance support	
Time frame	Short time period (3-6months)	Long time period (1-1.5yrs)

Table 4: Comparison between accelerators and incubators

As shown in figure (5), there are different types of accelerators and incubators in Egypt that will be highlighted in this research, For instance; a non-profit organization (INJAZ Egypt), a university-based accelerator (AUC Venture Lab), and centers affiliated to ministries (Bedaya Center and Technology Innovation and Entrepreneurship Center).

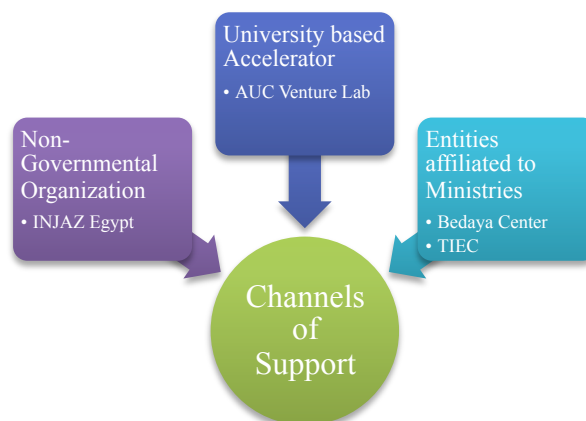


Figure 5: Channels of Support

6.1.1- INJAZ Egypt

The organization's name is derived from the Arabic word INJAZ - meaning 'achievement'. INJAZ Egypt is a non-profit organization; regionally it is part of INJAZ Al-Arab that includes 15 countries in the MENA region that connects the Arab business leaders' mentorship to inspire a culture of entrepreneurship and business innovation. Moreover, it is under the biggest umbrella of Junior Achievement (JA), the world's biggest and quickest growing organization focusing on economic education, which exists in more than 133 countries. Junior Achievement is a very old organization, which started in 1919, and it is the largest business education organization in the world.

INJAZ Egypt offers different education programs on a volunteer-base; it aims to increase the possibility of Egyptian youth to join the job market either as qualified employees or as entrepreneurs who can contribute to the economic growth both locally and globally.

*“Basically, we are running to support entrepreneurship and work readiness by encouraging youth to have business ideas and empowering them to find jobs as soon as they graduate.”
Projects Manager at INJAZ Egypt*

As the reason behind the increasing unemployment rate is not the lack of vacancies, but the absence of good calibers, INJAZ Egypt started to fill this gap; they offer both school and university students several training programs, including business education courses, soft skills, and financial literacy, which prepares them for entrepreneurship or job market.

“We are supporting youth to be a good quality and good caliber to find a job easily, and we are offering those who have the entrepreneurial spirit the skills to have their own businesses.” Projects Manager at INJAZ Egypt

Collaboration with the Private Sector:

INJAZ Egypt is cooperating with the private sector since its model is voluntary based and is trying to fill the gap of what the business really needs, accordingly, it encourages corporate and individual volunteers to play a role in delivering the diverse programs and initiatives it offered. Therefore, INJAZ Egypt has partnerships with companies whatever its business line, to help them in finding volunteers to implement the programs. INJAZ Egypt has around 4,700 volunteers either from the corporate level or people started their own businesses.

“We do an orientation session to the companies and we tell their staff about our programs, and whoever is interested sign up with us, then we deliver to them our training of how to implement this program, then they implement it.” Projects Manager at INJAZ Egypt

Collaboration with the Public Sector:

Since the mission of INJAZ is to inspire and empower young people to contribute in economic development and to support them to find job or to start their own businesses. INJAZ Egypt believe in cooperation with the public sector to achieve their mission and facilitate their operation, therefore they have several memorandum of understanding between them and the Ministry of Education to enter the Schools in different governorates and give training sessions to the students, Ministry of Youth and Sports to implement the university programs, Ministry of Higher Education to apply the vocational program in the vocational education entities and the Ministry of Investment to facilitate the registration procedures for start-ups.

“We believe we have to work from the grassroots, from the core. As for the School level, we have INJAZ classes to deliver our programs and to be implemented in the curriculum. For instance, the lessons in the schedule are: English lesson, Arabic lesson, INJAZ lesson, etc.” Projects Manager at INJAZ Egypt

Since INJAZ Egypt believes that there is a lack of entrepreneurship education in the MENA region and many youth are employers of others, according to the World Economic Forum held in 2010, it has been mentioned that the education systems of the MENA region are not sufficient to produce skilled graduates with the necessary expertise for advancement in the business environment, so they provide different programs and initiatives to schools covering the work readiness, financial literacy, and entrepreneurship to equip the students with the skills required in the market and provide them with the needed talents to start their own start-ups. Moreover, the work readiness program also targets the university students by offering them workshops on how to write a cv, mock interviews, how to write your own business plan and so on.

“As for the universities, it is a bit different, we cannot take a whole lecture, so what we do is announcing workshops for instance on how to write a cv, mock interviews etc., we used to do that through different channels, either through our relationship with students organizations or departments or whatever the channel is.” Projects Manager at INJAZ Egypt

Because the programs of INJAZ Egypt are diversified, the age range they covered is between 12 and 27 years old in middle schools, high schools and universities and they are planning to expand the age range in the coming years.

“In the coming years we are planning to expand our age range from 7 or 8 and 30 years old, we are working on that.” Projects Manager at INJAZ Egypt

Although there any different tracks offered by INJAZ Egypt but focusing on Start-ups, INJAZ Egypt is providing an entrepreneurship pipeline program that targets creative and passionate university students and graduates called “Start Up Egypt”. This program train people with no prior business knowledge on how to become successful entrepreneur and having an innovative business that contributes to the national economy and creates jobs. According to INZAJ Egypt website, there are three main phases in the pipeline:

1. **Ideation:** in which the participants apply to join the program, form teams, and submit a business idea. During this phase, students get trained on key pillars of business planning and entrepreneurship. Then at the end of this stage, it will be determined which teams will move forward to the next stage according to the feasibility studies.
2. **Acceleration:** students in this phase develop their product or service and receive guidance and support from mentors. Moreover, in a week, teams receive some skills needed for their start-ups such as, product development, finance, branding, soft skills...etc. Then both a prototype of the product and a business plan are formed. Then at the end of this stage there is a competition to filter the winners to be qualified for the next stage, which is the Incubator.
3. **Incubation:** this phase is to ensure that participants are exposed to all the essential information to launch their ideas. Afterwards, there is a competition between the start-ups and the winning teams will be physically incubated, offered a seed funding, and assigned a mentor to coach them step-by-step. Then by the end of this stage, there will be a demo day for displaying the products and services, which will be a chance for the teams to be introduced to the network of investors of INJAZ Egypt and angel investors for further support and funding opportunities.

“Participants want consultation to know how to start a business, expand it, and commercialize what they do. Moreover, they need money to fund their business that we offer as a grant without taking equity or money return, a range from 50k to 120k EGP is given as a capital to start the business upon the needs of the teams. Also they need networks and mentorship, sometimes they reached a “Plateau” that they could not expand their business in terms of connections, market plan, large market segment, and sales. So our programs help them to accelerate either to expand their business or to think for another solution if their model is not working well. All of that achieved through the programs’ training sessions or through the mentors in our network who are a top notch entrepreneurs who started their businesses or in the corporate VPs.” Projects Manager at INJAZ Egypt

Following this program, the first milestone of the start-ups is to register their companies to be eligible to receive the first check of the seed fund, in which INJAZ Egypt facilitates the start-ups registration according to the MOU between them and the Ministry of Investment, otherwise they will not take the first check. Furthermore, there are some rules to spend the money, such as spending the money for business use according to the policy of INJAZ Egypt; they cannot use it for travelling for instance. To monitor the expenditure, teams should submit receipts that show the items they spent the money on. In addition to the seed fund, start-ups get access to offices in order to start their work, networks, legal services with low fees, and mentorship.

“Start-ups could not take the seed fund if they are not registered, we have partnership with the ministry of investment to facilitate start-ups’ registration. The committed amount of money is for the company’s expenses not for the personal use, the money should be paid in specific areas according to the agreed milestones. If the teams did not stick to the rules INJAZ will withdraw the rest of the money.” Projects Manager at INJAZ Egypt

Throughout this program that lasts for almost one year, applicants are provided with training sessions, received consultation from mentors on business expansion, registered their companies, get funds, offered office space, and connected with experienced business representatives to support their development. Additionally, there is a “meeting progress report” as a kind of follow up to know how things are going, also, there is a business consultant affiliated to INJAZ Egypt, who sits with the start-ups on monthly basis (for six months after the competition, within the one year of the incubation) to know where they are in the milestone and then he writes a report. All of these supports help participants in building their startups from the beginning of the idea till finding the needed investment.

“Our role is accomplished after one year, as we have a limited resources, but we are planning to design an alumni program for those who completed our program. But, if anyone comes seeking support; we help as much as we can.” Projects Manager at INJAZ Egypt

Although INJAZ Egypt is a non-governmental organization that depends mainly on volunteers and sponsors, but it is on the right track of achieving its vision, which is empowering one million young Egyptians by 2020 to be successful entrepreneurs and desirable employees who share in the country development and economic prosperity. INJAZ has reached to more than 480,000 students, around 4,700 volunteers, 25 universities, 208 public schools, 25 governorates and 47 companies.

6.1.2- AUC Venture Lab

The American University in Cairo (AUC) has launched the first university-based accelerator/incubator in Egypt, the AUC Venture Lab (V-Lab), founded by the School of Business since 2013, is cofounded by SODIC and the Arab African Bank, and sponsored by General Electric. The AUC V-Lab contributes to promoting entrepreneurship and youth empowerment, which helps in filling the gap of the entrepreneurial ecosystem in Egypt. Its mission is to support entrepreneurs and commercialize innovative businesses developed by startups based in Egypt.

*“The V-Lab mainly selects the more innovative, new and interesting ideas. Our history includes technological, artistic, environmental, educational ideas ...etc.”
Endowed Chair of Entrepreneurship*

There are three phases in the V-Lab, selection, acceleration, and incubation phase. For start-ups to join the Venture Lab, they passed through a rigorous **selection** process prior the initial start date by three months, the V-Lab runs two cycles per year, three months each, in each cycle from six to ten most innovative start-ups ideas are selected. Then the selected start-ups are provided with an extensive **acceleration** experience for three months, including intensive business trainings, mentoring, networking events, access to AUC facilities, faculty, and students, co-working space and investment opportunities, in addition to 20,000 EGP seed capital award with Zero percent equity.

“To join the V-lab, applicants have to apply through an online application, then we do screening to the applications received. Usually we get from 150 to 280 applicants. We select the most innovative, new and interesting ideas. Next, there are two rounds throughout the selection process, during the first round applicants pass through interviews, some training activities, and then we select from them around 30 applicants. Afterwards, in the second round, there is a very big panel interview in which we select from 6 to 10 participants to join our Acceleration program in which we do our activities, training, mentorship, support, seed funding, and access to the university facilities.” Endowed Chair of Entrepreneurship

By the end of the acceleration process, there is a Demo Day that allows the visibility of start-ups in the presence of investors, mentors and venture capitals (VCs). Based on the achieved milestones of the start-ups, those with high performance could be granted the opportunity of **incubation** and continue using the services of the Venture Lab for an extended period.

“After the acceleration completed, we hold a Demo Day, which is the big event celebration. Then if some of them need to stay around for support and acceleration, they can continue till the end of the year, which is more of ad-hoc support.” Endowed Chair of Entrepreneurship

The Venture Lab has flexible rules that help the start-ups to succeed. For instance, it is not obligatory for the joined start-ups to register their business before or after joining the V-Lab, but the founders are the ones who decide when is it suitable to register their start-up. What the Venture Lab do in the registration issue, is suggesting to register whenever they are ready for that.

“Registration is not a must to join the V-Lab. They might choose to register at the convenient time for their start-up. So we don't force them to register, we suggest registering whenever they are ready for registration.” Endowed Chair of Entrepreneurship

Unlike other accelerators and incubators, the AUC V-Lab does not restrict the expenditure of the seed fund in specific areas. What they do is providing the start-ups by the seed fund as a kind of capital to help them in building their business.

“The founders can utilize the seed fund on whatever they want, the most important thing is to work on their start-up and deliver.” Endowed Chair of Entrepreneurship

What the AUC V-Lab requests from the start-ups is to be committed to the program, to attend all the training sessions provided by the mentors, to use the co-working space regularly, and respect the code of ethics and the culture of the place. Other than that V-Lab does not force the start-ups to do anything else.

“We need the start-ups to commit to the program as that is what they benefit. They have to commit for being here in AUC at least 3 or 4 days per week. They have to stick to the code of ethics and respect the culture of the AUC.” Endowed Chair of Entrepreneurship

As of the beginning of year 2016, the AUC V-Lab completed five cycles, incubated 46 start-ups, conducted 1,007 hours of mentoring and training, 36 million EGP generated revenue by start-ups, 23 million EGP raised in funding start-ups, and 253 created jobs. Furthermore, the Venture Lab has been assessed as the most promising incubator in Africa according to the list of the Global University Business Incubators for 2014.

“The Venture Lab (VLab) of the American University in Cairo (AUC) has been evaluated as the most promising incubator in Africa in the Global University Business Incubators List for 2014.” (Al-Ahram Weekly, Issue No.1230, 22 January, 2015)

The AUC Venture Lab offered support for many start-ups in different fields such as renewable energy, e-commerce, education, arts and fashion, and transportation. In transportation domain in specific; it incubated Bus-Pooling team in its second cycle in 2014 and offered them the services of the accelerator provided for the entrepreneurs.

6.2- Public Sector

Although the public sector believed in innovation and entrepreneurship and noticed that those two components play a significant role in the economic growth, thus several governmental entities initiated centers few years ago to incubate start-ups and Small and Medium Enterprises (SMEs) to help them building their companies in a professional way, yet these entities are not marketed and publicized well and their capacities are not fully utilized.

6.2.1- Bedaya Center

The General Authority For Investment and the Free-Zones (GAFI), affiliated to the Ministry of Investment and the main body of the government which regulates the investment in Egypt, has established Bedaya Center for Entrepreneurship and SMEs Development in 2011 to endorse investment in Egypt, believing that the SMEs sector play a crucial role towards economic growth and job creation.

Since Bedaya's mission is aligned with the national strategy to support the SMEs sector to grow and develop in Egypt in order to foster the economic development indicators, which could happen through involving all the stakeholders of the Ecosystem in Egypt, it gives access to the entrepreneurs and the SMEs to financial and non-financial services through several programs.

Bedaya Center is trying to capture the existing gap in the entrepreneurial domain and provide feasible solutions. Bedaya offers tailored programs to strengthen the innovation competency, promote the entrepreneurial culture, and enhance the competitiveness of the SMEs and start-ups. The center works as a facilitator that empowers the entrepreneurs to access the services provided, for example the non-financial facilities such as technical consultation, legal assistance, and business technicalities, etc. in addition to financial aids through the creation of private equity

investment fund that is devoted for the growth of the SMEs sector by providing the needed funds and through “Bank referral program” that helps SMEs to prepare a bankable file to easily apply for a bank facility from the financial institutions that provide particular programs for SMEs. In addition to “Bedaya Fund”, which is established in early 2013 by GAFI, it provides funding to the SMEs which have a solid foundation and a capital more than two million and less than fifty million Egyptian pounds but still need the money to reach their maximum potential. A private sector company is managing the allocated fund among four main sectors, which are manufacturing, food and agriculture, information technology, and services. To maintain geographical distribution balance, sixty per cent of the fund is dedicated to different governorates other than Cairo. The fund will be invested for a period from three to five years and there will be several exit scenarios, either through public offering in NILEX or shares acquisition.

*“Bedaya offers non-financial support such as: legal advices, consultancy, marketing plan and business plan and access to finance through the social fund and some banks to get loans besides Bedaya Fund that it is given to the registered SMEs that its capital from two million to 50 million Egyptian pounds.”
Entrepreneurship Program Leader at Bedaya*

In collaboration with the Academy of Scientific Research and Technology (ASRT), “Bedaya Start-up Academy” has been developed targeting the entrepreneurs, it offers them the know-how and the skills needed for business establishment. The period of the program is two months, wherein participants will receive technical trainings in different areas to provide them with the required basic knowledge such as marketing, finance, management, legalities, HR and product development in which they will learn by doing and there will be interaction between team members and instructors. By the end of the program, teams will pitch their projects and will be evaluated from an assessment committee before being introduced to investors. Afterwards, the first three teams will have the opportunity to join Bedaya Incubator and Accelerator

programs. Then, a Demo Day will take place to give the graduates the chance to present their ideas in the presence of interested investors.

*“The academy teaches the entrepreneurs starting from the know-how of the business till the pitching. Then the final stage is the celebration where there are funding opportunities as each start-up pitch in front of judges, investors, venture capitalists.”
Entrepreneurship Program Leader at Bedaya*

Those who are interested to join Bedaya Start-up Academy have to pay a refundable 1,000 EGP as a kind of commitment to be reimbursed by the end of the program. The selection criteria depends on the following, candidates' age should be at least 21 years old, applicants should present a viable, commercialized and innovative technological idea that meets solves a real problem according to GAFI's priority sectors such as Engineering industries, Agribusiness, Textile, Electronics, Chemical industry, and Renewable Energy; the team should have diversified background both educational and practical, participants should be dedicated to the program in terms of attendance (half of the team members must attend the program) and commitment with mentors.

*“To join the Academy, the idea should be technological innovative, help the community by providing a novel solution for an existing problem, the project should be feasible economically, the idea should be in the sector of GAFI's priority such as textile, electronics...etc., the prototype could be developed in the market, the team should have varied experience and not less than 21 years old, committed and accessible for coaching and mentorship.”
Entrepreneurship Program Leader at Bedaya*

Bedaya Center do not force the start-ups to register their companies to get the support, as they believe that entrepreneurs might change their ideas after piloting in the market, as if there is no final product and profit generation the entrepreneur will suffer.

*“There were some entrepreneurs who changed their ideas in Bedaya Start-up Academy 1.”
Entrepreneurship Program Leader at Bedaya*

There is a follow-up process, every month the teams should submit a progress report, and if materials are needed they have to fill a purchase form stating the items needed

for prototype development, then a technical person will check first the importance of the requested item, next it should get the judges' approval before the purchasing. Bedaya Start-up academy has graduated two batches; the first one was in Cairo in January 2014 and the other in Sohag on April 21, 2016.

Bedaya Center initiated "Intilac Program" with the cooperation of the Academy of Scientific Research & Technology (ASRT) to develop entrepreneurship and SMEs, offer them the needed help to succeed, and guide them to reach the market with their final products. This program was planned to start in May 2016. The duration of Intilac program is twelve weeks, in which different workshops will be delivered to the participants that cover business related topics including business model, market research and segmentation, product development, finance and accounting principles, company's registration, strategic fluctuations...etc. Participants throughout this period have the opportunity to engage with the mentors and be coached; furthermore, they can test their ideas in the real business environment. Near the end of the program, participants will be evaluated and there will be an opportunity for only six teams to join "Bedaya Accelerator" (funded by the ASRT) and be incubated for the prototype preparation. The incubated teams will receive a prototype fund, prototyping workshops, technical and business support, networking opportunity with the ecosystem, technology validation, technical and practical training internally and abroad, and access to technology and investment promotion programs, as well as scientific and industrial conferences.

"Intilac" is initiated to teach entrepreneurs how to do the prototype and the technical stuff. This project is planned to take place on May 2016. It is planned that the entrepreneur will receive practical training on how to build and manage successful enterprises, the selected teams will be incubated in Bedaya Accelerator for 6 month and then it might depend on the needs of the project whether to extend the period or not. Also, technical mentorship and consultancy will be available, as well as legal services and opportunity for networking with ecosystem will be provided." Entrepreneurship Program Leader at Bedaya

To be eligible for incubation, applicants should be one of the following: an entrepreneur who has only the idea, a student in the final year in the university who hopes to transfer the graduation project into a business, graduated youth who want to join the entrepreneurship field and have their own business, an existing start-up which has a business plan and a prototype, or a person who has a patent and want to transfer it to a prototype or want to market it. Regarding the selection criteria, the project should be an applicable technological project, solve community problem, economical feasible return, offer employment opportunities, and preferably to be outside Cairo. The incubated companies will receive non-refundable financial Support of around 150,000 EGP to help in the development of the prototype and make a feasibility study and market research to start the company.

Although Bedaya Center is affiliated to the public sector, but at the same time has several cooperation with the private sector to be able to achieve its entrepreneurial goals. To that effect, Bedaya Center is encouraging the private sector to offer voluntary services in its “business clinics program” which depend on the excellent and vital network of volunteers who committed themselves to help entrepreneurs and SME's by sharing experience and insights in various business related areas.

“Bedaya Centre is offering free consultancy services to the start-ups through specialized firms according to MOUs between the center and different firms, afterwards if the entrepreneur still wants the service, he can contact the consultant directly with fees. Bedaya’s role is to connect them with each other” Entrepreneurship Program Leader at Bedaya

Moreover, Bedaya Center cooperate with other accelerators and incubators to offering them services for their incubated entrepreneurs, for instance Bedaya Center delivered a session to Injaz entrepreneurship competition in 2013 on the legal consideration regarding companies’ registration. Also, it played an important role in Euro Med @ Change event, which took place in Egypt through Bedaya Center, in which Bedaya coordinated with the Ministries, NGOs, and different business ecosystems. A

consortium of four organizations from Europe and the Mediterranean (ANIMA) managed the event, this event launched new dynamic for SMEs and gathered international experiences between Europe and four partner countries, which are Egypt, Morocco, Tunisia, and Lebanon. Besides, coordinating 45+ related businesses, as well as finance and innovative links. The event provided partnership and networking opportunities as well as external expertise

“Euro Med @ change was a joint event with ANIMA, it targeted start-ups inside and outside Egypt. The role of Bedaya Centre was contacting and delivering information session to Ministries and NGOs, while ANIMA contacted the entities abroad. In Egypt we dealt with many ecosystems to nominate the best 12 start-ups to pitch in the event, whether they are registered companies or not, this was a great event for sharing the experiences and offering one on one consultancy with the Business to Business.” Entrepreneurship Program Leader at Bedaya

Although there is no particular rule for start-ups, but article (28) in the Egyptian Constitution states that the government shall pay attention to SMEs in any field, this should be taken into consideration. The State should issue a specific rule to the start-ups to manage its operations from a primary stage, from the phase of having an idea till having a solid foundation that could compete in the market.

6.2.2- Technology Innovation and Entrepreneurship Center (TIEC)

The Technology Innovation and Entrepreneurship Center (TIEC), launched late September 2010, is a center affiliated to the Information Technology Industry Development Agency (ITIDA), which is under the umbrella of the Ministry of Communication and Information Technology. TIEC 's strategy is to create an entrepreneurial and innovative environment by supporting entrepreneurs in the Information and Communication Technology (ICT) sector and offering incubation services to the start-ups for one year; the services include working space, equipment, mentorship, fund, and consultancy service in different fields such as finance, legal, and management, etc.

*“TIEC’s support is given to start-ups that deliver community service using the ICT, either its core business is ICT or utilizing ICT technology in doing the business.”
Manager at TIEC*

Since TIEC’s mission is to encourage an innovation-based economy, it is fostering innovation, entrepreneurship, and the formation of intellectual property in ICT and its applications. Its vision is to be the leading regional hub for entrepreneurship and ICT based innovations.

TIEC is offering different programs and several services to encourage entrepreneurship and help entrepreneurs to start their own businesses. It helps in different stages, before having an idea by offering a short program (for six days, eight hours per day) “InnovEgypt” to the university students to develop the culture and skills of entrepreneurial thinking, the program is trying to teach the concept of innovation and entrepreneurship to the students which helps in generating employment opportunities and economic growth, believing that those people are the ones who are most probably become entrepreneurs.

Before an idea existence, we are teaching university students how to be entrepreneurs and how to think of a new idea to solve the problems they are facing through a capacity building program called “InnovEgypt”.” Manager at TIEC

Moving to the start-ups services, TIEC is providing an accelerator service to those who have only the ideas but do not have business model and prototype. **TIEC Entrepreneurship Accelerator (TEA)** is a pre-incubation program aiming to turn participants' ideas into feasible business model by offering them with skills covering different fields such as marketing, operations management, legalities, finance, market analysis, product analysis and writing business plan. TEA is functioning three times per year, each round for twelve weeks, in Cairo, Alexandria, Mansoura, and Assiut governorates and planning for further geographical expansion. To join the Accelerator, applicants should have both an idea and a team, if they will be selected; they will receive mentoring and coaching to turn their ideas into business plans within the twelve weeks, then an expert panel from TIEC, Industry and Academia will evaluate the business plans and the qualified teams will have the opportunity to pitch in the presence of investors.

“In the “Accelerator”, entrepreneurs receive training on how to develop business model and mentorship till the idea is settled after surveying and piloting in the market. To join this program it is obligatory to have an idea and a team. At the end of the 3 months, the ideas should have a clear business model and a prototype.” Manager at TIEC

While start-ups that have a prototype, business model and there is a market need for their service or product and are seeking a support to build the company, can apply to join **TIEC Incubator**. Then the submitted applications will be evaluated and the short listed will be invited to pitch, those teams that passed the pitching will be incubated for one year. The selection criteria depends on the kind of the start-ups, TIEC selected the real entrepreneurs who have ICT-based or ICT-related innovative ideas with a working prototype and solving a real issue, moreover, the start-ups' ideas should be scalable, economically viable, and has the potential to be commercialized. In the Incubators, the start-ups get up to 120,000 EGP of in-kind services (consultancy services, marketing, software, hardware, etc.), working space, equipment, and mentoring.

*“To join the “Incubator”, start-ups should have an idea, business model, prototype and a market need so the next step is to build the company. The support given is a work space, equipment, tools, and whatever needed to work on building the company, such as legal advices and assistance for registering the company plus non-refundable EGP120,000. The incubation period is one year, if the start-up needs to extend, they can use the co-working space but the services will be stopped.”
Manager at TIEC*

Furthermore, the **Business and Entrepreneurship Support Training (BEST)** is a start-up support program offered by TIEC during the whole year to the start-ups that are related to the ICT field. There are specific criteria to join the program which are: start-ups should be registered from three years or more, their maximum number of employees are thirty, have a valid website, and previously joined one of TIEC’s programs (Accelerator, Incubator, Innovegypt). There are several topics covered in the training programs and workshops such as: HR Management for Startups, Entrepreneurship Learning, Design Thinking, New Product Development, Digital Marketing Strategy, and Technology Management...etc.

Additionally, TIEC is offering a **Start-up Support Program** that encourages entrepreneurs to select the services they need for their ICT start-ups. The program is adaptable to one-on-one support according to the needs of the entrepreneurs, it covers several topics and services essential for the growth of the start-up.

The following are some regulations for the start-ups that join TIEC;

- The money the founders received as a fund for their start-ups should be spent on whatever they want except on salaries, they can buy software, hardware, travel to attend either a conference and present their product or a specialized training even if it is abroad, print materials to market the start-ups, also if the start-ups need to hire specific consultant to deliver special help to them that would be fine. Moreover, TIEC is urging the start-ups to submit receipts and provide samples of what the money spent on to monitor the money expenditures.

*“The incubators were established in 2005 under the umbrella of the Ministry of the ICT, while TIEC was founded in 2010. At that time the start-ups misused the fund by stating on papers that the money was paid on salaries but they spent it on things not related to their businesses. That is why start-ups can use the granted money on whatever the thing is except on salaries.”
Manager at TIEC*

- Start-ups requests should be placed ahead of time, for instance a month earlier than the time they need the thing to be done, as TIEC could not manage the requests in a limited time because at the end it is a governmental entity that is subjected to the rules of the government, the simple example is getting at least three quotations before getting anything done. Yet, there is a plan to automate the process to accelerate the service provided.

“There are few start-ups left TIEC not because we broke the deal or we did not deliver our services, but because they could not bear the government administrative procedures. The start-ups that could not continue its operation in that way leave smoothly. Yet, we are trying to automate the administrative procedures to quicken the process.” Manager at TIEC

- As for the start-ups registration process, it is obligatory for the start-ups to register their companies within the first three months of the incubation and TIEC is helping those start-ups in the registration procedures.
- Once there is a contract between TIEC and the Start-ups that will be incubated, the first thing the start-ups do is putting with TIEC their “milestones” for the year of the incubation. In each milestone, the expected status of the start-ups should be clear. Then TIEC measures each milestone what the start-ups did, whether they met the criteria they designed for themselves or not, if not what were the reasons behind, if the reasons are rational that would be fine but otherwise they will be warned and monitored by TIEC. If they failed to meet the milestones that they put to their start-ups again, TIEC will terminate their contract.

“The business owners are the ones who put their milestones and TIEC does not interfere. The founder has the total freedom to put them every 3 months or every 6 months.... etc.” Manager at TIEC

Since TIEC is a governmental entity that is affiliated to the Ministry of Communication and Information Technology, and the role of the governmental entities is public service, TIEC does not take any return of any of the provided services. TIEC’s objective is to increase the number of companies, educate people on the concept of entrepreneurship and innovation that will positively affect the business community in general.

“What distinguishes TIEC is that it does not take any kind of return from the offered services. The final outcome at any stage of the support such as, capacity building, accelerator or incubator is totally owned by the start-up.” Manager at TIEC

Regarding TIEC’s collaboration with ministries, there is a kind of cooperation with the Ministry of Higher Education to offer one of the programs to the university students “InnovEgypt”. Also, there are alliances with other ministries to facilitate TIEC’s job, but it is not obvious whether it is a formal or informal co-operation.

“We are dealing with different ministries in several programs, for instance we are cooperating with the Ministry of Higher Education in delivering the program of “InnovEgypt”.” Manager at TIEC

As TIEC supported many start-ups in different fields such as social, environmental, medical, educational, technology, media, agriculture, and transportation (TIEC incubated Raye7 and Bey2ollak in the transportation domain) etc. that makes them aware of the obstacles many entrepreneurs are suffering from that result from the policies and regulations. Consequently, TIEC is working on Entrepreneurship Policy Advocacy (EPA) to help entrepreneurs work with full energy and enhance the innovative competitiveness in the country, through exploring the entrepreneurship policy, looking at national policies for improvement, encouraging public private dialogue, and recommending policies and laws changes.

“Unfortunately, there are no rules or policies that regulate the start-ups operations; they are treated like any other company. People at TIEC talked to former president consultant about initiating policies for the start-ups and he promised to pass this suggestion to the presidency.” Manager at TIEC

	INJAZ Egypt	AUC Venture Lab	Bedaya Center	TIEC
Type	NGO , was registered with the Ministry of Solidarity in 2007.	University based, founded in 2013 in AUC	GAFI , has established Bedaya Center for Entrepreneurship & SMEs Development in 2011	ITIDA , launched TIEC in September 2010
Service offered	<ul style="list-style-type: none"> • 12-27 years • Training programs prepare for job market and entrepreneurship. • “Start Up Egypt”: Ideation-Acceleration-Incubation. • Space, seed fund for registered start-ups, training, mentorship • Cooperation with private & public sector 	<ul style="list-style-type: none"> • Promotes entrepreneurship and youth empowerment • Filling the gap of entrepreneurial ecosystem. • 3 months acceleration period • Space, seed fund, training & mentoring • Cooperation with private sector 	<ul style="list-style-type: none"> • Supports the SMEs for their crucial role towards economic growth and job creation • Financial and Non-financial support. • Several programs (Bedaya Start-up Academy & Intilac) • Accelerator/ Incubator • Cooperation with private & public sector 	<ul style="list-style-type: none"> • Supports entrepreneurs in the ICT sector • 1 year incubation • Space, fund, mentorship, consultancy • Several programs (BEST, SSP, InnovEgypt, TRA, TIEC Incubator) • Cooperation with public sector

Table 5: Comparison between Egyptian accelerators and incubators

CHAPTER SEVEN

ANALYSIS

7- Data Analysis

This chapter is to analyse what has been reached after the in-depth interviews with different stakeholders working in the entrepreneurship domain. Bus-pooling and Car-pooling transportation start-ups (Bus Pooling, Tawseela, Share My Ride, and Raye7), Incubators and Accelerators (INJAZ Egypt, and AUC Venture Lab) and the Public Sector Entities (Bedaya Center, Technology Innovation Entrepreneurship Center (TIEC), and a former consultant to the Minister of Transportation. It has been aligned with the conceptual framework, in which both the internal and the external factors directly affect the operations of the start-ups.

It has been noticed that there are different points of view behind the collapse/closure/failure of any start-up as shown in figure (6); for instance, the opinion of the entrepreneur differs from that of the accelerator/incubator, which varies also from the public sector point of view. Although all the factors play a role in the success or failure of the start-ups, but the percentage differs depending on the kind of the start-up itself and what it offers.

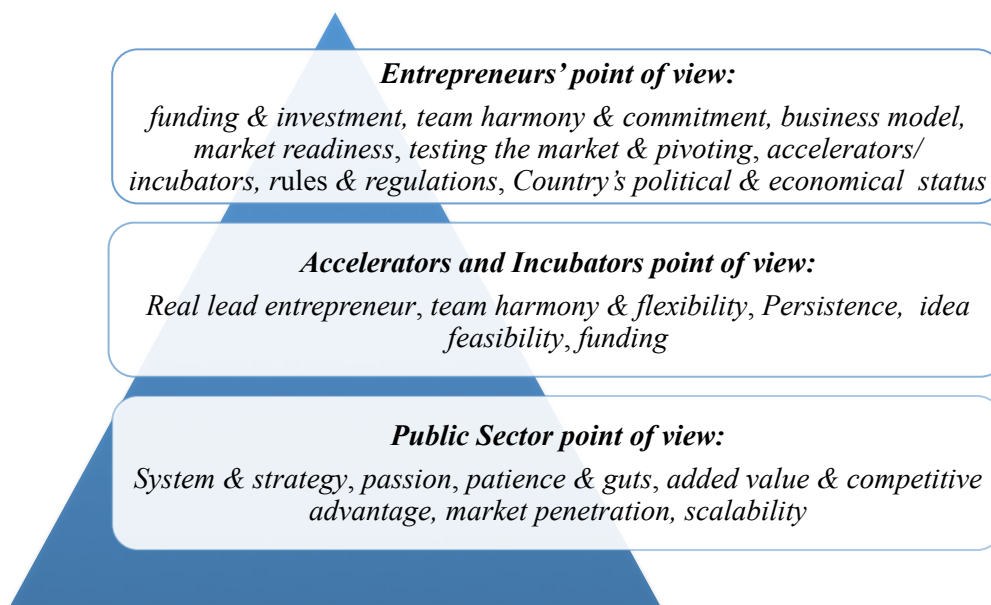


Figure 6: Analysing different point of views

Entrepreneurs' point of view:

When it comes to the entrepreneurs, the following are the most common reasons behind the success/failure of the start-ups as claimed by the start-ups' founders: *funding and investment constraints; the team harmony and commitment, the business model, the market readiness, testing the market and pivoting accordingly, joining accelerators and incubators, rules and regulations, and in some cases the country's political and economical stability* affects the start-ups' functions.

The following comments made by the founders of the transportation start-ups, which were selected in the case study, concerning the collapse of the start-ups:

"Transportation needs fund, to do a start-up in transportation domain it needs money." Bus Pooling Founder

"Rules for transportation start-ups were vague and unclear." Bus Pooling Founder

"Going to market and reaching people should be very fast." Share My Ride Founder

"Harmony between partners is very crucial for any start-up, if there is no coordination, understanding, and commitment, it is contagious and the start-up to a great extent will fail." Share My Ride Founder

"Start-up without someone committed 100% from the cofounders and full-time, for me it doesn't make any sense." Share My Ride Founder

"Being involved in any accelerator or incubator would help so much, in terms of networking, mentorship and sometimes funding." Share My Ride Founder

"The reason behind the collapse of a start-up might be one of the following: unsuccessful business model,, or a good one but the market is not ready for it now. If this is the case, it is very important for the start-up to pivot." Tawseela Founder

"The country's political and economical circumstances affect the start-ups, in terms of operations and investment." Raye7 Founder

Accelerators and Incubators point of view:

While those who manage and work in the accelerators and incubators have another opinion, they suggest the collapse of the start-ups because of the following factors: the absence of the *real lead entrepreneur*, the *team harmony and flexibility*, the *idea feasibility*, also *funding* is another challenge. The following are some quotations of what have been said by the administrators of the incubators and accelerators regarding the factors that affect the start-ups:

“To open a business, the founder should have the guts and be a risk taker, especially in Egypt as things do not go smoothly, and the business environment is tough.” Nahdet El Mahrousa Board Member⁵

“Having an idea is not enough to start a business, the idea should be applicable and implementable in the real ground.” Nahdet El Mahrousa Board Member

“Funding is another issue, some founders do not have enough money to sustain. The solution is to borrow, if the business needs 100k it could not work by 50k, sometimes if things are not done well it could not be done.” Nahdet El Mahrousa Board Member

“Flexibility within the team to change their business model or the idea to adapt to the changes is very important. Sometimes it is very hard to convince a team that the idea has to be changed, they are strictly bonded to their idea and at the end they collapse.” Projects Manager at INJAZ Egypt

“The network, the funding and the idea are needed, but the entrepreneurship shapes all these things.” Endowed Chair of Entrepreneurship

“So it ends up being around the entrepreneur, being able to persist till something picks up or not. It is not about the idea, entrepreneurs have to be flexible enough to shape their ideas” Endowed Chair of Entrepreneurship

⁵ Nahdet El Mahrousa is a non- governmental organization that supports social entrepreneurs through developing successful and scalable innovative social enterprises in its incubator.

Public Sector point of view:

The government officials look at the start-up from different scope, some see the failure is because the *lack of a strategy and a system*, others say the *passion* towards the start-ups is very essential, as well as *patience and guts* are important factors for start-ups' sustainability, besides the importance of the *added value and competitive advantage* that distinguish one company than another, in addition to *a significant market penetration and scalability*. Below are the government officials' quotes got through the interviews the researcher conducted:

“The one who succeed is the one who has the guts and is patient.” Manager at TIEC

“What distinguishes one company than another and makes it sustain, is the competitive advantage and what this company adds to the business others did not provide.” Manager at TIEC

“The problem of the individual solutions is the small penetration size, it did not take a big portion of the market which does not solve the problem significantly, yet, it should be considered.” Former Consultant to the Minister of Transportation

“Upon the applicability and scalability of the transportation start-up service, the start-up might get a support, it depends on how it fits the ministry's needs.” Former Consultant to the Minister of Transportation

“What makes one service/product different than others is the added value and the competitive advantage.” Entrepreneurship Program Leader at Bedaya

“Entrepreneur's passion is very important, in addition to market research, sometimes there is no market need for a product or service, but the company could create the need.” Entrepreneurship Program Leader at Bedaya

“The goal of a start-up is to figure out the right thing to build – the thing customers want and will pay for – as quickly as possible” (Ries, 2011)

It has been analysed that the start-ups that were able to survive are the ones who tested the market, revamped the idea, and pivoted the business model as quickly as possible to avoid the idea imitation till they reached the real market need. Those who succeeded probably changed the idea and the business model in the middle. So it is about persistence, are they going to try and persist till they reach something that picks up or not? The bottom line is: if the entrepreneurs are not persistent enough, they will fall in the middle of their way, as it is a mix of talent and hard work. What was obvious also, if the main founder is not working on a full-time basis on his/her start-up to enhance the operations, work on the added value and develop the competitive advantage, the business will collapse.

Reflection on the studied start-ups

Bus Pooling	Tawseela	Share My Ride	Raye7
Went out of money	Had the capital	Three partners had a full-time job	Full-time Founder
No staff working with the founders	Hired full-time staff for operations and	Not involved in any accelerator or incubator	Won many competitions and incubated in a couple of incubators
Did not find a real mentor.	Used periodic consultancy	Needed mentorship	Shown in the media
Needed a network	Have a high technology platform	Needed network	High technology platform
	Pivoted their model from B2C to B2B		Hired Staff
	Founders have different background		One main founder and a sibling partner

Table 6: Analysis of local start-ups

As for **Bus Pooling** stopped their operations after implementation and making revenue because of the following:

- They went out of money and the transportation domain needs huge fund.
- There were no staff working with the founders, so they were doing all the operations and logistics and there was no one focusing on the big picture.
- They did not find a real mentor in the transportation domain, as they claimed.
- They needed a network to operate smoothly.

While what differentiated **Tawseela** from Bus Pooling are:

- They hired full-time staff for operations and used periodic consultancy.
- They pivoted their model from B2C to B2B after reaching to the point that the B2C service needs many enhancements in the country's regulations.
- They had a high technology platform that differentiates them from another provider.
- They had the capital that helped them in the operations.
- The founders have different background in finance, marketing and technology.

While **Share My Ride** start-up collapsed because of the following:

- The three partners had a full-time job and were not focused on the start-up.
- They were not involved in any accelerator or incubator; and they needed mentorship and network.

What differentiates **Raye7** and helps it to sustain till now are the following:

- The founder left the full-time job and dedicated the whole time to work on the start-up.
- Hiring staff for operations and the mobile application development.

- Participated and won in many competitions, incubated in a couple of incubators, and received a good amount of funding.
- Having a high technology platform to operate the service through.
- Shown in the media several times, besides their presence in the social media.
- There was one main founder of the start-up and a sibling has joined at the late stages, which led to a harmonized teamwork and dedication

Here are some ground rules and success factors reached on basis of the research:

- The start-ups that are doing well, started with an idea, tested the market quickly, and then if it does not work, they changed it, then changed it again, then completely revamped it and then continue pivoting till something matures that becomes interesting. When it becomes interesting to people, money comes, even if it comes slowly.
- Real entrepreneurs did not leave their ideas and disappear; they take care of it and lead its success.
- Lead entrepreneur assign the roles precisely and follow-up to assure that things are done flawlessly.
- Harmony between the partners is very important.
- Finding good mentors and coaches to the business is crucial for the start-ups' success.
- If the idea is not working, start-ups should pivot.
- Businesses might fail because of the weak operations, although the market is getting large, this is the problem in Egypt. It is not the concept of having more projects; but developing a project to be implemented in a sustainable way to withstand for decades.
- Once there is a system, people working within will be good. The point is to erase the fear of change and convince people to change the system.

Besides, The researcher reached that if there would be a priority list for entrepreneurs to guide them to start their business and sustain, it would be as follows:

Concerning the **internal factors**:

- As for the **founders**; they have to be a real entrepreneurs who has the guts and persistence. It is also essential for entrepreneurs to know how to adapt with the market needs and be flexible enough to change their ideas accordingly. Full commitment and resilience to their start-ups are very crucial for the sustainability.
- Considering the **funding** issue, Entrepreneurs have to be very cautious in raising funds for their start-ups. They have to do it right, if they could not get the right amount to start the business they do not have to start it because they will fail if it is not managed correctly.

Regarding the **external factors**:

- Entrepreneurs have to search for **ecosystems** to be incubated in, really makes a difference. Being incubated in an accelerator or incubators and introduced to different institutions that support start-ups helped in their growth and expansion.
- While the entrepreneurs have to be very careful towards the business climate. For instance, before starting a business, entrepreneurs have to make sure that their product/service is needed in the market then decide whether it needs some modification or not, afterwards they can register their company.
- Also, entrepreneurs have to know the rules and regulations of getting the support from different sector that support the domain of entrepreneurship. It has been analysed that each sector has its rules and regulations for supporting the entrepreneurs and start-ups, for instance, the accelerators and incubators that are affiliated to the public sector will support the start-ups that solve a community problem, while others accelerators and incubators will support any innovative idea with specific criteria.

CHAPTER EIGHT

CONCLUSION AND RECOMMENDATIONS

Since this study explored the passenger transportation start-ups in Cairo, Egypt, and reviewed the role of the accelerators, incubators as well as the public sector in supporting the start-ups, there are some concluded recommendations (see figure (7)) for the following stakeholders:

- Start-ups in general and transportation start-ups in particular.
- Accelerators/Incubators.
- Public sector towards start-ups in general and towards transportation start-ups in specific.

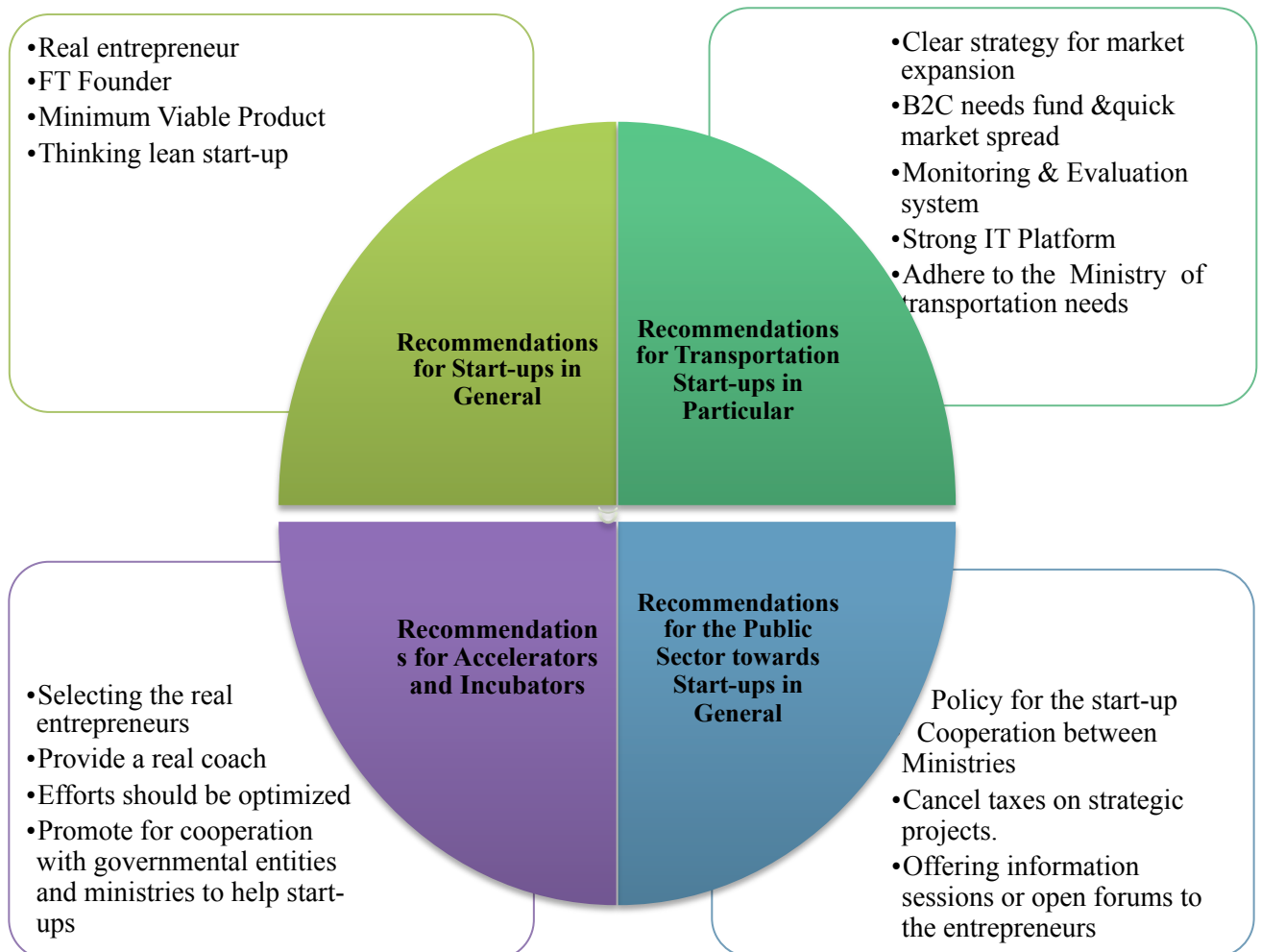


Figure 7: Recommendations

8.1- Recommendations for Start-ups in General

1. The leader should be a real entrepreneur, as per Carland et al. (2002) the main traits of the entrepreneur are rational decision maker, risk assumption, try on hand, provide management to the firm, risk taking and risk bearing. Also, leaders should engage the talented individuals in his/her start-up and take their input for the sake of the start-up development according to what what has been highlighted in the literature review.
2. The main founder has to work on a full-time basis, which plays an important role for the success of the start-up, especially in the primary stages. As it is like a baby and no one will give much care than the main founder would do.
3. The founders need to go to market quickly and test their assumptions, rather than waiting to finish a fully developed product first. Having a Minimum Viable Product (MVP) and testing the market sooner, will help in reaching the right combination faster.
4. Start-ups' founders have to think lean start-up in the execution phase, they should not consume a considerable amount of time to have a product without being sure that there is a market need, the best option is to test the market fast and revamp accordingly. (Ries, 2011) defined the lean thinking, as the value of delivering benefit to the customer, anything else is waste.
5. The start-ups' business model should not be a long document, however, it should be very strong and to the point that attracts the ecosystems to support the business.

8.2- Recommendations for Transportation Start-ups in Particular

1. Since the objective of the passenger transportation start-ups is to solve community problems, which are traffic congestion and poor public transportation, those start-ups should have a clear strategy on how they would expand in the market and affect a larger market segment to attract the attention

of the Ministry of Transportation and get its support. Since the Ministry of Transportation is a governmental entity, it is like any public authority that has its own priorities, so for supporting a transportation start-up it should fit to the ministry's needs, the more the scalability and applicability of the service, the more opportunity to get a support.

2. Those who are offering business to consumer (B2C) service should be aware that this kind of business needs a large amount of funding, as it needs a quick market spread. If passengers request a transportation service, certainly they need it rapidly; otherwise they will not use the service. This leads to paying a bulk of money in both operations and marketing to reach good results.
3. Monitoring and Evaluation system for the drivers, the transportation domain needs to be managed in a way that protects the passenger from both the road hassles and drivers harassments. By monitoring and evaluation, the passenger would be safe, as for any reason if anything happened he/she could report the problem and the mistaken get punished.
4. Currently, to offer a transportation service used by the public, it is all about developing IT. In this era, investing in a strong IT platform will distinguish one service provider than another. It all boils down to the added value and the competitive advantage.
5. Since many governmental entities are looking at the benefit they will get in return of provided support, the transportation start-ups have to adhere, to some extent, to the needs of the Ministry of Transportation in solving the transportation problems to get its support. If those start-ups fail to meet the ministry's objectives, they will not be supported. Upon the applicability of the service, and how it fits to the ministry's needs, the start-up might get a support.

6. Transportation start-ups that deliver almost the same service have to coordinate with each other, they have to cover a big range and get a large number of users. The transportation start-ups should be implemented in a bigger scale to make a real difference and get the needed support from the public sector, as at the end it is a community service.

8.3- Recommendations for Accelerators and Incubators

As the accelerators and the incubators play an important role in the sustainability of the start-ups, because of the ecosystem environment they provide to the small companies, the following recommendations have to be taken into consideration:

1. The selection process should be target the individual not the idea; as you are incubating the person not the idea. If there is a good team and the entrepreneur they should be chosen, even if there is a mathematical problem in the idea, it will be solved, as it is the role of the accelerators and incubators. That is why it is a key point to correctly select the real entrepreneurs and offer them coaching.
2. Provide a real coach to each entrepreneur to give support, in which every coach could have from four to five entrepreneurs to encourage them and put them on the right track. Entrepreneurs are in a real need for true mentors and coaches.
3. Both time and money should be invested in someone who has a big project that is expected to have a big effect and might sustain, so it will hire many people and has an impact on the economy and social dimensions, has a real added value and a know-how. The Support for the entrepreneurs needs to be very careful to avoid wasting time and resources. Efforts should be optimized because of the small capacity and lack of resources.

4. The expended money as well as the consumed effort in issues that are not important should be used in other channels that benefit the start-ups to breakthrough.
5. Everyone working in the ecosystem should pressure and promote for cooperation with governmental entities and ministries to help start-ups.

8.4- Recommendations for the Public Sector towards Start-ups in General

As most of the start-ups arose in Egypt are initiated to solve community problems, therefore, those companies should be encouraged and supported by the public sector to help them to sustain and continue offering their service. Below are some recommendations for the public sector to be taken into consideration:

1. The first thing that should be done is creating a by-law for the Start-up companies in Egypt, whether the startups is local (100% Egyptian) or franchised start-up, a law that encourages people to start a new business and invest in it. The law should cover start-up's registration, closure, taxes, investment and funding, as well as international cooperation criteria has to be demonstrated in the law. The regulations have to be easy for start-ups to start their business, innovate, raise funds, and get in and out.
2. Facilitate the companies' registration, automate the system and avoid red tape and bureaucracy.
3. There should be cooperation between all the Ministries to serve the small companies that have excellent ideas and solve public problems.
4. Customs and taxes must be cancelled on the strategic projects. If the project or the business is not strategic, the government should impose more taxes, but if it is strategic, the government should support the idea/the project, do not impose taxes and promote it.

5. For sustainability there should be administrative stability. If there is any administrative change, someone will leave the office and another will take his place, there should be a hand over and documentation to track the process.
6. Data sharing, transparency and confidentiality issues should be clearly reflected in the by-laws. There should be specific criteria for those issues, as long as they are not mentioned in the legislation openly, so as not to hinder the start-ups operations. There should be a non-disclosure agreements, data will not be used with a third party also it should be anonymous.
7. The Ministries and the governmental entities should release the needs and the problems they face to the ecosystem to help in filling the gap and solve the problem. If there is an entrepreneur who has the start-up that could help in solving the problem or that might help or even other entrepreneurs can design a specific tool to solve the problem. If that happened, the government official have to provide mentors to help in getting a good outcome that perfectly fits their needs.
8. Most probably the government will not move forward without the parliament, there should be a more of lobbying on important laws from the parliament side.
9. The accelerators and incubators that are affiliated to the ministries should coordinate with the government and the parliament to encourage the ministries to have memorandum of understating with each other to promote the concept of the entrepreneurship and enhance the business environment.
10. The public sector has to offer information sessions or open forums to the entrepreneurs to know the Ministries' rules, Channels for support, Mentorship and Network that could be provided, and the facilities that could be offered to them to start their own businesses.

11. There are three reasons that hinder the implementation of the ideas in Egypt;
1- the incompetent human resources, 2- the inefficient administrative system,
3- and the inefficient rules and policies. In which those three problems can be solved easily by the intervention of the public sector. If those problems are solved, anything will work smoothly.

8.5- Recommendations for the Public Sector towards Transportation Start-ups in Particular

The role of the public sector is always needed for the progress and the development of the community services. Focusing on the transportation services in particular, the government has to encourage people and gives them incentive to leave their own cars and go for the public transport as an initiative to decrease the traffic jam. To achieve so, things should be prioritized, for instance the first step should be developing a good infrastructure, then traffic signals should be used appropriately, also the parking management should be handled perfectly, at the same time the government has to encourage the private sector that offers solution in the transportation domain to decrease the congestion such as ride sharing in the form of car pooling, bus pooling and car-hailing services. All these steps should be tailored to what kind of problem the ministry of transportation wants to address to get its support.

As long as the transportation start-ups are providing a service to the public, the governmental entities should encourage them and facilitate their operation as they are solving a real community problem.

1. Support the start-ups by educating the market and publicizing the idea of bus pooling and car-pooling to decrease the congestion and save the environment from the carbon emissions as well as cut the percentage of the benzene consumption, as at the end they are helping the government in providing services to the citizens.

2. The Ministry of Transportation has to create an electronic platform to include the different transport applications, there would be a criteria to join this platform such as company's registration, good car conditions and well trained drivers to guarantee a good service and a safe drive as it will be somehow under their responsibility.
3. The Ministry of Transportation should coordinate with other ministries (see figure (8)) to provide the needed data for the start-ups that offers transportation services to facilitate their operations, such as:
 - Coordinate with the Ministry of **Interior**, to provide the start-ups that provide bus-pooling services a list of drivers, their contacts, their bus models, their violations, and the buses quality, that would facilitate their job by selecting both good drivers and vehicles.
 - Coordinate with the Ministry of **Petroleum**, as long as the government is subsidizing the benzene, it should promote the companies that provide car-pooling and bus pooling services which encouraging people to leave their personal cars and share their ride with others. Since those companies are trying to decrease fuel consumption, therefore those companies should take an incentive in return, even if the incentive is something symbolic.
 - Coordinate with the Ministry of **Investment**, to facilitate the registration procedures for the start-ups that offer community service. And if the company decided to close, the closure process should be not complicated.
 - Coordinate with the Ministry of **Finance**, to reduce the imposed customs on buses, minibuses and minibuses, accordingly the transportation cost will be decreased.

- Coordinate with the Ministry of **Environment**, to give the transportation start-ups incentives for their effort in decreasing the carbon dioxide (CO₂) emissions, by decreasing the number of cars in streets.
- Coordinate with the Ministry of **Information and Communication Technology** and the Ministry of **Planning**, to adopt a monitoring and administrative policy reform in support of public transport.

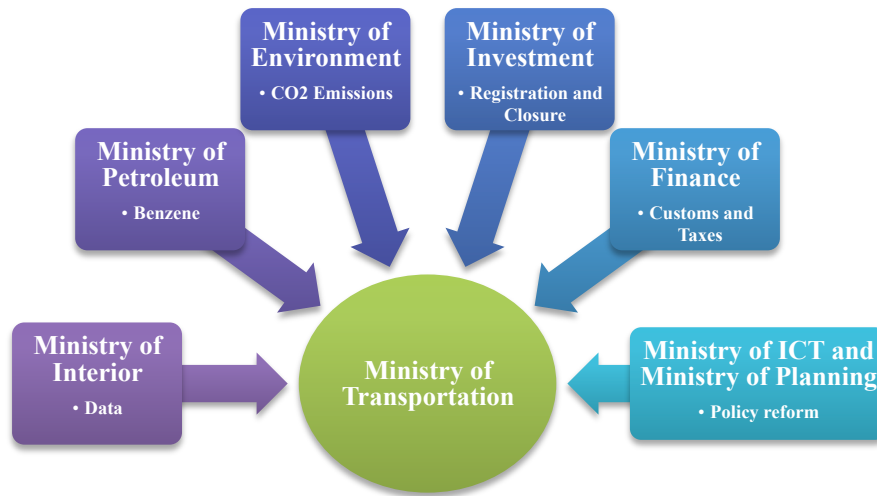


Figure 8: Cooperation between ministries

8.6- General Recommendations

To solve a problem, the main solution is to tackle the main roots of the problem. To do so, there should be cooperation between different sectors, the private sectors, the public sector as well as the social community; all these sectors must play a role in developing the country. If we have a strategic project and the public sector, the social community as well as the private sector work with each other to solve a problem, the problem will be solved. Applying this principle to start-ups:

1. There should be forums to hear from the entrepreneurs the challenges they face and try to offer consultation and solution.

2. The Public Sector should promote the concept of the entrepreneurship and introduce it at the early stages in the schools.
3. The system has to be changed, but to do so, people should know that this needs effort; they should not get bored and fear the change to reach a better situation. The status of the entrepreneurship in Egypt is hard because of the inefficient process, if nothing changed, entrepreneurship will stand still. People have to challenge the process that needs more assertive moves. “It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change.” Charles Darwin.
4. After studying the transportation start-ups that launched in 2013 and 2014, when there was political instability and many businesses exiting Egypt, it has been concluded that before starting a new business, the entrepreneur should study well both the economic and political status of the country to avoid business failure.
5. It is also crucial that both the public and private sector to offer funding opportunities and involving the banking industry in funding the businesses that offer community service and solve a real problem.

8.7- Future Research Recommendations

It is recommended that the future research should shed more light on the following:

- How do the Public accelerators and incubators differ from the Private ones.
- Program Evaluation of the impact of these kind of start-ups.

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Appendices

A- Appendix 1 “Service Providers Questions”

1. What are the transportation solutions you provide?
2. How do your solutions contribute to solve the passenger transportation problem in Cairo?
3. How long you have been in the market?
4. How do you fund your business?
5. What are the challenges you face in your business?
 - What are the external factors?
 - What are the internal factors?
6. What is the background and expertise of the founders?
7. Did you hire expert staff or not?
8. How did the public sector facilitate your job?
9. How could the public sector facilitate your job?
10. What is the current impact of your service in numbers (number of people adopting your solution, economic productivity, traffic congestion alleviation, environment...etc.)?
11. What is the expected impact of your service in numbers (number of people adopting your solution, economic productivity, traffic congestion alleviation, environment...etc.)?
12. Who is the regulator agency of your business?
13. What are the rules and regulations you abide by?
 - What are your suggestions to be more efficient?
14. Have you gone through a venture capital before?
 - In case of yes, What was your experience?
15. Why start-ups with the same ideas continue their operations and other collapse?
16. What is the scale of competitiveness in your business?
 - What is your competitive advantage?
 - How do you deal with your competitors?

B- Appendix 2 “General Questions”

Questions for both government officials (Ministry of transportation, Bedaya Center and TIEC) and accelerators and Incubators (INJAZ Egypt, AUC Venture Lab and NAhdet El Mahrousa)

1. Do you support start-ups?
 - If yes, what kind of support do you provide to the start-ups?
 - If no, do you have plans to help the start-ups?
2. Do you have any concern related to the start-ups operations?
 - If yes, please indicate examples
 - What could be the solutions
3. What are the policy framework and legislations that start-ups abide by?
4. Should start-ups officially register the company? How do you manage start-ups registration?
5. Is there any cooperation between the Ministries of transportation, Interior, Petroleum, Investment and traffic authority?

C- Appendix 3 “Informed Consent Form”



Documentation of Informed Consent for Participation in Research Study

Project Title: Exploring The Experience of Passenger Transport Start-ups in Cairo

Principal Investigator: Passant Ehab Mohammad (ID#: 800-11-2481)

You are being asked to participate in a research study. The purpose of the research is to study the Experience of Passenger Transport Start-ups in Cairo and examine the factors that support or impede their operation, the findings may be *published, presented, or both*. The expected duration of your participation is 45 minutes or one hour maximum.

The procedures of the research will be as follows; I will ask you some questions and you have the right not to respond to questions that might be inconvenient or cause any risk.

Throughout our discussion, the conversation will be audio recorded after taking your permission in order to collect precise data; otherwise it will not be recorded. Therefore:

- I agree to record the interview
- I do not agree to record the interview

There *will not be* certain risks or discomforts associated with this research.

There *will not be* benefits to you from this research.

The information you provide for purposes of this research *is not confidential*, therefore:

- I agree to reveal my name in this research
- I do not agree to reveal my name in this research

If you have any questions about this study and should you need any further clarifications, please feel to contact me at 01229229067.

Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or the loss of benefits to which you are otherwise entitled.

Signature _____

Printed Name _____

Date _____

الجامعة الأمريكية بالقاهرة



استمارة موافقة مسبقة للمشاركة في دراسة بحثية

عنوان البحث : استكشاف خبرات الشركات الناشئة لنقل الافراد في القاهرة

الباحث الرئيسي: بسنت ايهاب فخر الدين - طالبه ماجستير فى الجامعه الامريكيه بالقاهره
البريد الالكتروني: passante@aucegypt.edu
الهاتف: ٠١٢٢٩٢٢٩٠٦٧

انت مدعو للمشاركة فى دراسة بحثية عن استكشاف خبرات الشركات الناشئة لنقل الافراد في القاهرة.

هدف الدراسة هو استكشاف الشركات الناشئة لنقل الافراد في القاهرة و ما هو سبب استمرار او اختفاء هذه الشركات

نتائج البحث ستنشر فى دوريه متخصصه او مؤتمر علمي او ربما كليهما.

المدة المتوقعة للمشاركة فى هذا البحث هي خمسة و اربعون دقيقة او ساعه فقط

اجراءات الدراسة تشتمل على استكشاف الشركات الناشئة لنقل الافراد في القاهرة و المتغيرات التي تؤثر على البقاء عن طريق طرح بعض الأسئلة. مع الأخذ في الاعتبار ان الحوار سيتم تسجيله صوتياً للحرص على دقة المعلومات بعد الحصول على موافقتكم اما في حالة الرفض لن يتم التسجيل و لذلك:

اوافق على التسجيل
 لن اوافق على التسجيل

لا يوجد مخاطر من المشاركة فى هذه الدراسة

السرية واحترام الخصوصية: المعلومات التي ستدلى بها فى هذا البحث لن تكون سرية، لذلك

اوافق على ذكر وظيفتي بالرساله
 لا اوافق على ذكر وظيفتي بالرساله

أي أسئلة متعلقة بهذه الدراسة أو حقوق المشاركين فيها أو عند حدوث أى اصابات ناتجة عن هذه المشاركة يجب ان توجه الى بسنت ايهاب فخر الدين - هاتف رقم: ٠١٢٢٩٢٢٩٠٦٧

ان المشاركة فى هذه الدراسة ماهي الا عمل تطوعى. حيث أن الامتناع عن المشاركة لا يتضمن أى عقوبات أو فقدان أى مزايا تحقق لك. ويمكنك أيضا التوقف عن المشاركة فى أى وقت من دون عقوبة أو فقدان لهذه المزايا.

الامضاء:

اسم المشارك :

التاريخ :/...../.....

D- Appendix 4 “Institutional Review Board”

CASE #2015-2016-091



To: Passant Ehab
Cc: Mariez Wasfi
From: Atta Gebril, Chair of the IRB
Date: Feb 11, 2016
Re: Approval of study

This is to inform you that I reviewed your research proposal entitled “Exploring The Experience of Passenger Transport Start-ups in Cairo” and determined that it required consultation with the IRB under the "expedited" heading. The proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink that reads "Atta Gebril".

Dr. Atta Gebril
IRB chair, The American University in Cairo
2046 HUSS Building
T: 02-26151919
Email: agebril@aucegypt.edu



Institutional Review Board
The American University in Cairo
AUC Avenue, P.O. Box 74
New Cairo 11835, Egypt.
tel 20.2.2615.1000
fax 20.2.27957565
Email: aucirb@aucegypt.edu