



Industrial Engineering and Management

Global Management of Innovation and Technology (GMIT)

8.12.2019

MASTER'S THESIS

**Inclusive innovation process from NGOs perspective**

**- Multiple case study of Iranian NGOs**

1st supervisor: Prof. Helinä Melkas

2nd supervisor: Prof. Tuomo Uotila

Author: Pirooz Tohidi Khiavi

## Abstract

<b>Author:</b> Pirooz Tohidi Khiavi	
<b>Subject:</b> Inclusive innovation process from NGOs perspective	
<b>Year:</b> 2019	<b>Place:</b> Lappeenranta
<b>Type:</b> Master's Thesis, LUT University	
<b>Specification:</b> Pages: 81, Figures: 1, Tables: 8, Appendix:1	
<b>First Supervisor:</b> Professor Helinä Melkas	
<b>Second Supervisor:</b> Professor Tuomo Uotila	
<b>Keywords:</b> Inclusive innovation, NGOs, Social empowerment, Localization, Affordability, Constraints	
<p>Inclusive innovation is a new type of social innovation that aims to find solutions that can offer the capability to the poor communities. Throughout this thesis, the author investigated the process and barriers to fostering inclusive innovation in the Iranian context. As inclusive innovation is a new phenomenon, this thesis chooses a qualitative case study method from Iranian NGOs to do in-depth research and answer how the process and barriers of inclusive innovation are. This thesis started its journey by understanding the secondary data (Literature review) and developing a conceptual model. Later, the conceptual model helped the author to identify several questions that were asked during seven interviews from experts who mostly have management positions in the chosen NGOs.</p> <p>Moreover, the analysis was made by linking the primary and secondary data resulting in answering the two research questions of this thesis. This study identified how the process of inclusive innovation is in Iran from the NGO perspective. The finding of this study shows, NGOs can generate inclusiveness through, exclusive supportive packages to the poor communities and patients or educational programs and workshops to the needy communities. Moreover, these educational programs offered them the opportunity to improve their life skills as well as increasing their income (this is also known as localization and social empowerment). Lastly, several internal and external barriers to innovation were identified for these NGOs in Iran. These barriers were related to lack of sufficient skilled personnel for the NGOs, lack of voluntary works, lack of financial stability, lack of governmental support and the lack of connectivity to the international community.</p>	

## **Acknowledgement**

Firstly, thanks to almighty God, who has given me his blessing throughout my life. Indeed, deciding to go overseas and studying Global Management was a hefty task for me. However, I managed to gain countless fruitful knowledge in the area of industrial management, which makes me feel victories! Thankfully, during these two years in LUT University, I explored not only new horizons of innovation and management and developed my skills but also made valuable international friends around the world. I believe my learning curve has just started after going through numerous theories and frameworks, and there is so much more to deem and emphasize.

Writing the Master thesis was not easy at all. However, with the help of my family, friends, and the valuable supports of both my supervisors Professor Helinä Melkas and Tuomo Uotila, I managed to finalize my thesis. I would also like to express my gratitude to Mahak and Payam Omid for allowing me to collect this valuable and interesting primary data information to facilitate the development of this thesis.

Finally, I want to thank Mr. Sina Mortazavi, who has offered me friendly feedbacks, comments, and motivating me to finalize this Master thesis.

## Contents

Introduction.....	1
1.1 Research objectives and gaps.....	3
1.2 Report structure.....	4
2 Literature review.....	5
2.1 How to produce affordable goods and services.....	5
2.2 How to initiate social empowerment.....	6
2.3 How to generate localization for local communities.....	8
2.4 External barriers to inclusive innovation.....	10
2.5 Internal barriers to inclusive innovation.....	11
2.5.1 Financial resources.....	11
2.5.2 Human resources.....	12
2.6 Conceptual model.....	13
3 Methodology.....	14
3.1 Research approach.....	14
3.1.1 Qualitative method.....	14
3.1.2 Abductive research method.....	15
3.2 Research design.....	16
3.3 Data sources.....	17
3.4 Research strategies.....	17
3.5 Sample studies.....	19
3.6 Data collection method.....	22
3.7 Data collection procedure.....	23
3.8 Data collection instrument.....	23
3.9 Method of analysis.....	26
3.10 Quality measurement.....	26
3.10.1 Validity.....	27
3.10.2 Reliability.....	28
3.11 Methodology summary.....	29
4 Empirical investigation.....	30
4.1 Payam Omid.....	30
4.1.1 Primary data from Payam Omid.....	31
4.1.2 Empirical summary from Payam Omid.....	37
4.2 Mahak.....	39
4.2.1 Primary data from Mahak.....	41

4.2.2 Empirical summary from Mahak.....	52
5 Analysis and discussion .....	55
6 Conclusion and implications.....	61
6.1 Answering the research questions .....	61
6.2 Theoretical contribution .....	63
6.3 Managerial implications.....	64
6.4 Limitations .....	65
6.5 Suggestion for future research.....	65
References.....	66
Appendix A: Interview questions .....	75

## List of figures

Figure 1: Research model .....	13
--------------------------------	----

## List of tables

Table 1: Participant names and NGOs .....	21
Table 2: Table of operationalization .....	24
Table 3: Methodology summary .....	29
Table 4: Payam Omid charity in brief.....	30
Table 5: Payam Omid's primary data summary .....	37
Table 6: Mahak charity in brief .....	39
Table 7: Mahak's primary data summary .....	52
Table 8: Table of analysis .....	58

## **Introduction**

*In this chapter the author will define the portion of inclusive innovation in the bottom of pyramid markets as well as the role of NGOs in this process. The background of this research is presented in this chapter by defining inclusive innovation and the importance of inclusive innovation in developing countries. Furthermore, the author defines the roles of inclusive innovation in poor classes of the society as well as NGOs' roles and barriers.*

When poverty appears and persists, the negative self-reinforcement of economic, political, and social behaviors makes it difficult to change (Wydick, 2008; Mortazavi et al., 2020). There are different ways of studying and understanding poverty in societies. Groups of scientists and economists in particular merely believe that the levels of income and consumption have a direct impact on poverty as well as welfare. Based on this viewpoint, economic well-being is the result of whether someone has enough income to achieve a basic level of consumption or human welfare (Wagle, 2018). On the other hand, according to Ryan (2001), social scholars have seen poverty as a function of lack of individual capabilities to acquire a fundamental level of human welfare, with, for instance, education or health.

Poverty has many reasons and the combination of different complicated factors increase economic impoverishment. These primary factors include unsuitable economic policies, low economic growth, low productivity, lack of human resources, and labor market deficiencies leading to limited job growth (Ajakaiye, 2001). Furthermore, institutional environments involving political, legal, and economic uncertainties play important roles in the poverty crises of developing countries (Durlauf, 2006).

Even though the global poverty rate has been declining since the year 2000, we still have more than 2.5 billion people who live on less than \$2.50 per day (Xun, 2018). The UN has outlined the frameworks for several plans for global poverty alleviation. In 2000 the UN set Millennium Development Goals (MDGs) as far-sighted methods by which to diminish extreme poverty, hunger, illiteracy, and disease (United Nations, 2009). The MDGs' main parts and targets were highly relevant to the needs of developing countries, with, for example, universal primary education (Harcourt, 2005). MDGs had remarkable successes but they did not fulfill the expectations with regard to poverty reduction. For instance, achievement of the goals has not been experienced equally across the globe and human rights scholars have claimed MDGs do

not adequately align with the standards of human rights, particularly related to participation, non-discrimination, and transparency. In this vein, the UN shifted MDGs to Sustainable Development Goals (SDGs) in 2015 to globally address different MDGs' shortcomings (Fukuda-Parr, 2016).

Scholars in management fields are calling for more research on the role of innovation in poverty reduction (George, 2012). According to Halme et al. (2012), many believe that in the last decade, there have been increased calls for developing countries to introduce alternative ways of addressing poverty issues. Prahalad (2009) argued that innovation models are the solution to poverty reduction as well as doing business with impoverished people around the world; both require new types of social innovation. As stated by Foster & Heeks (2013), social innovations aiming to create well-being for the people at the Bottom of the Pyramid (BoP) are good first steps to reducing poverty. People living in the BoP market are those who face challenges with essential goods and services (Dembek, 2019). Prahalad coined the term "BoP market" and introduced it in the social and economic literature; he defined BoP as the group of people (approximately 4 billion people) living on less than \$1,500 per capita (or earning less than \$4 a day).

The authors of novel approaches to addressing these issues have formed new types of innovation over the past decade (Prahalad, 2010). Frugal, reverse, inclusive, and Gandhi innovation are good examples of these phenomena, whereas all of these terms are related to innovations that arise in emerging markets (Rosca, 2017; Brem, 2014). George et al. (2012) used the terms "inclusive innovation" and "innovation for inclusive growth" interchangeably when referring to innovations that generate unique opportunities for those at the BoP to enhance their well-being. Inclusive innovation is characterized as any innovation designed to improve the welfare of the people at the BoP (Foster, 2013; Gold, 2013). Therefore, it relates to innovative models and tools focused on marginalized people and involving new technologies (Heeks, 2014). Inclusive innovation has been emphasized by the United Nations (UN) and the governing bodies of developing countries as an essential measure to combat poverty across the globe, particularly in developing countries. (Prahalad, 2010).

An inclusive approach to innovation can be effectively applied to the broader context of emerging economies as a way to explore previously unknown and undervalued opportunities. First, innovation is seen as developing and implementing new ideas. The definition includes all forms of innovation, whether relating to new purposes involving products, services,

processes, institutions, business models, supply chains, or new combinations (Prahalad, 2004; Schumpeter, 1982).

Second, social and economic well-being opportunities in certain parts of society are known to be structurally altered to prevent the attainment of well-being. Hence, the removal of financial, geographical, social, and other structural barriers that previously blocked access to opportunities could result in actions that improve inclusiveness. These barriers can occur at many levels, including for employees, owners, and business customers. In this study, the process of inclusive innovation is identified from its results. It is further recognized that aspiring to the ideal of inclusiveness is useful even if the opportunity is not ultimately realized (George, 2012).

## 1.1 Research objectives and gaps

The purposes of this research were to (i) understand and (ii) explore the notion of the inclusive innovation process through non-governmental organizations (NGOs). This study was designed to investigate the role of NGOs through their comprehensive services for marginalized communities. For instance, one of the points of interest had to do with how they get more attention from companies, investors, and customers. The first objective was to investigate inclusive innovations from the NGOs' perspectives through appropriate primary data from interviews. The second objective was to understand how selected NGOs perform fundraising, improve their services, improve activities on the global scale, and identify the challenges they face.

Most research on inclusive innovation and its impacts on deprived members of societies is related to large multinational enterprises (MNEs). For example, Unilever, General Electric (GE), and Tata Nano are operating with very high level of success (Immelt, 2009). In addition, Peerally et al. (2018) argued that MNEs in developing countries have succeeded, to some extent, in fulfilling the social needs of the people through achievements involving inclusive innovation. Sengupta (2016) argued that there is a gap between the Indian government's expectations and the Indian people's expectations in implementing inclusive innovation. In this regard, the role of governmental bodies and the understanding of community needs are both important to fostering inclusive innovation. The most cited paper on inclusive innovation is from the work of Foster & Heeks (2013) on the topic of the mobile phone handset in Kenya, showing the role of inclusive innovation in poverty alleviation.

However, research on inclusive innovation is limited in the context of Iran relating to the role of NGOs. In this thesis, I wish to explore and understand the process of inclusive innovation and the challenges of NGOs in developing countries such as Iran.

To address the research gap referenced above, this research can be designed to address the following research questions:

1. *What is the process of inclusive innovation, from NGOs' perspectives?*
2. *How do NGOs overcome constraints on inclusive innovation?*

## 1.2 Report structure

This thesis is split into 7 sections in order to achieve the study's objective, each showing a distinct phase in the research process.

**Chapter 1** Provides the research background followed by background, discussion of issues, and questions of purpose and research.

**Chapter 2** Provides a better understanding of inclusive innovation and appropriate theories through an in-depth literature review.

**Chapter 3** Provides the thesis research model framed from the section of the literature review.

**Chapter 4** Focus on this study's research design and the methodology used to address the objectives of this thesis.

**Chapter 5** Provides the results of the empirical studies.

**Chapter 6** Provides the thesis analysis and discussion on the basis of the results.

**Chapter 7** Provides final conclusion and implementation and management recommendations accompanied suggestions for future research.

## 2 Literature review

*In this chapter, the author will perform a literature review to gain an understanding on the current research that are relevant for inclusive innovation. After doing the review the author will close this section by developing a conceptual model which is extracted from the literature. This model will help to gather the interview data from the NGOs as it shows which areas can be the focus of the interview.*

### 2.1 How to produce affordable goods and services

“Affordability” is defined as the willingness of a customer to pay a given price for a product or service (Mortazavi et al., 2019). In developing markets, affordability is the extent to which goods or services of an enterprise are attractive to consumers at the lower end of the market. We must reach the new “who” — consumers who do or do not consume because of low incomes. Plenty of consumers survive on daily wages in developing markets, which means that cash flow is a problem. Companies are expected to offer products at a price point that enables even the poorest consumers to consume them (Anderson, 2007).

Innovation comes from the word “innovate,” which means to create the capability of using new ideas and thoughts to leverage knowledge, creativity, skills, management, and technical experience in developing new products, processes, and services to satisfy and address market requirements. From an economic point of view, innovation means novel ideas are being developed into modern ideas for financial objectives to gain more opportunities for business. Hence, innovative activity can cause changes in the economies, resources, and structures of a population (Bhatti, 2012).

Concepts relating to frugality include “economical” and “sufficient.” These refer to high quality, efficiency, affordability, and accessibility of products for individuals. The terms describe the economic features of a resource with a first and low-cost approach. Frugal activity shows that a product can do more and be more functional at a lower cost (Bhatti, 2012). Bhatti and Ventresca (2013) argued that frugal innovation is a business strategy for delivering affordable products to underserved customers under environmental constraints and factors such as lack workers’ knowledge, insufficient investments, scarcities of resources, and limited materials.

The inclusive aspect of frugal innovation is focused on trying to integrate excluded people into the formal economy as well as considering poor populations not only as consumers but also as producers and suppliers. Merging the poor into the formal economy enhances their living standards by developing an arena for economic exchange (Mair, 2012). The principle of inclusiveness speaks to a market-based approach that has evolved from scarcity and vulnerability to deliver value in areas that are most important to poverty reduction (Nari Kahle, 2013). The inclusive view of markets underlines requirements for market-based solutions, which allows the poor to improve their skills and productivity (Prahalad, 2009). Therefore, widening the scope of regular market activities and increasing the welfare of the poor will ultimately help them sustainably break the cycle of poverty (Bradley, 2012; Acosta, 2011).

According to Rahman (2002), many NGOs are able to work more effectively through support from local communities (volunteer support of skilled people) by improving the technical, physical, and economic capabilities resulting in upgrading the infrastructure of the NGOs. Adding to this, it can be argued that linking NGOs, multinational corporations (MNCs), and other actors in the community (actors can also be the people who need help) will result in inclusiveness (Nari Kahle, 2013).

## 2.2 How to initiate social empowerment

Scholars argue that behind the scenes of rapid worldwide economic growth, it is vital for corporations to think about their role in society beyond financial returns (Ansari, 2012; Delios, 2010; Guthrie, 2008; Hinings, 2002). Today, the world is faced with wide-ranging, deep-seated socioeconomic and environmental issues such as poverty, hunger, and social injustice. These factors are partly due to corporate activities; businesses are increasingly being asked to use their organizational ingenuity to provide innovative solutions to these issues (Margolis, 2003).

According to Mahajan and Banga (2006), proponents of the 86% solution argue that mainstream theories taught through business schools primarily apply to just 14% of the developed world and that the new, market-based approach is a timely solution to the requirements of developing countries. Therefore, for poverty alleviation, many of these market-based approaches are focused on the BoP (Prahalad, 2002). BoP approach advantages include helping companies dramatically reduce poverty and fundamentally improve the lives of billions of people by selling affordable products and services to low-income customers, as well as providing jobs and business opportunities (Simanis, 2008). However, Ansari et al. (2012) argued that this approach has a limited capacity in developing social skills, changing real living

standards, and improving the welfare of local communities (Radojević, 2014; Hall, 2012). As a result, the approach of proceeding from the bottom to inclusive growth was developed based on building intangible assets of local wealth creation capabilities, local project ownership, and joint commitments. In line with this view, current empirical contributions imply that inclusive business initiatives in BoP communities have been useful. In delivering inclusive growth, it depends on the extent to which such efforts have become more community-centric, committed to skills development, and focused on maintaining local social capital. (Heeks, 2014; Bradley, 2012; Ansari, 2012).

In this context, a marginalized community is a group of people facing vertical and horizontal inequalities that separate them from advantages (Cozzens, 2009). According to Woodson et al. (2019), the vertical difference usually describes income and wealth inequality. Likewise, horizontal inequality among groups of people is based on factors such as age, religion, gender, and race.

Wealth creation is the central part of reducing poverty but if social development researchers and NGOs focus only on reducing poverty, other factors such as social empowerment issues will be under-researched. For instance, Brazilians who have a lighter skin color are treated preferentially in comparison to those who are darker (Telles, 2004). To effectively solve inequality, social development researchers also need to develop solutions to address horizontal disparities. Horizontal inequality receives less attention than vertical variation; inclusive innovations could address this dimension (Stewart, 2005).

“Inclusive business” can be defined as a viable business that helps reduce poverty by involving poor communities in financial planning and operations and providing solutions to their social, environmental, and economic problems (Weidner, 2010). Unless large and small firms, governments, civil society organizations, development agencies, and the poor themselves work together with a shared agenda, the opportunities at the BoP cannot be accessed (Prahalad, 2004). As stated by Nahi (2018), researchers have pointed out that inclusive business initiatives can significantly benefit from the knowledge (Hahn, 2014), capabilities (Dahan, 2010), contacts (Webb, 2009), and legitimacy (Seelos, 2007) of NGOs. Scholars argue that NGOs with long-term experience working with people from poor backgrounds can provide practical knowledge of the business environment and the requirements, expectations, and practices of people with low incomes; thus they can support the acknowledgment of entrepreneurial opportunities at the BoP (Webb, 2009).

Second, some NGOs are capable of being useful for inclusive businesses. Examples are often mentioned as NGOs that distribute products or services to towns and slums, contribute to marketing, and provide training (Reficco, 2012). Third, plenty of NGOs could facilitate contact with prospective business partners. This is indispensable since BoP market information is frequently scarce and businesses build on social networks (Halme, 2016; Perez- Aleman, 2008). Eventually, partnering with respected and confident NGO partners offers legitimacy to companies as development actors and helps to address any reservations made by officials and those from low-income communities (Hahn, 2014; London, 2010; Webb, 2009; Rivera-Santos, 2009).

### 2.3 How to generate localization for local communities

Inclusive innovation can be seen as the desired outcome of innovative initiatives that help organizations and institutions engage in social innovation activities for the development and implementation of novel ideas. These ideas and activities create unique opportunities for deprived individuals and communities that enhance social and economic well-being (George, 2012).

New understandings of localized innovation in developing countries seem to encapsulate diverse, inclusive, and socially relevant views on innovation. They have been made the center of attention on innovative localized methods of diversification that were underplayed earlier (Foster, 2014; Sutz, 2012; Singh, 2011; Dutz, 2007). In this context, innovation is expressed as emerging in a unique set of low-income circumstances, practices, and constraints, where low-income communities are using their knowledge and understanding to resolve problems and share local solutions. Therefore, in definitions of inclusivity, this work has started to emphasize the critical role played in developing countries by innovation arising from more localized contexts (Foster, 2013).

According to Bradley et al. (2012), the availability of financial capital, networks, and trained workers (Knight, 2011) has been essential for the research of firm survival and performance according to the literature in economic (Holtz-Eakin, 1994), development (Demirgüç-Kunt, 2008; Patrick, 1996), and entrepreneurial (Bates, 1995; Cooper, 1988) fields. Financial resources provide time for product identification or development and finding a desirable market position. They can also signal the viability of a company to potential customers and suppliers (Bradley, 2012; Eisenhardt, 1996). In contrast, financial capital is not a needed and adequate condition for inclusive innovation. However, financial capital can serve as a helpful innovation

trigger and provide the foundation for novel ideas and opportunities (George, 2012; Bradley, 2012). Networks offer entrepreneurs with a range of information and their ability to recognize and use business opportunities (Hoang, 2003). Systems supply access to resources such as business finance, marketing advice, and channels of distribution (Bradley, 2012; Hansen, 1995). Hence, market networks can enable producers to approach users and improve circular knowledge and learning flows. Stronger relationships need to be strengthened where there is less distance between producers and low-income markets (Foster, 2014). Finally, education and skill development are part of the development of human capital; this is well known as a powerful predictor of social and economic well-being, as it empowers people to pursue new opportunities and create a better livelihood (George, 2012; Sachs, 2005). Also, for achieving inclusive growth, some resources such as human knowledge and skills play the leading role (Peerally, 2018).

Inclusive embeddedness is one pillar of inclusive innovation in the integrative framework of organizations. The performance of an organization is heavily dependent on the level of embeddedness it establishes with different market players (Mortazavi et al., 2019). Access to resources such as knowledge, capital, human resources, and other valuable assets is provided by traditional actors such as NGOs (Burt, 2009). However, organizations need to realize the importance of non-traditional actors such as NGOs in poor markets (Hart and London, 2005). As stated by Levin et al. (2004), clear linkages between NGOs and organizations could generate valuable knowledge for both distribution and production activities. In developing economies, this can also be of particular benefit by bringing growth and stability to these markets (Khayesi et al., 2011).

Organizations and NGOs can perform an orchestrating role in developing countries that lack existing innovation structures (Pitelis et al., 2018). Developing innovation channels while solving infrastructure problems embedded in different local structures and promoting social entrepreneurship, through collaboration, will help organizations and NGOs address social needs, contributing to value development for the poor (Weber et al., 2017). The value derived from collaboration and networking is defined as the sum of the benefits extracted from the exchange of resources between organizations and NGOs (Caldwell et al., 2017). The cross-border joint venture is a standard method of networking and cooperation between organizations and NGOs. These ventures involve networking between international organizations and local NGOs in the host country to accelerate learning; hence, the final objective is increasing the impact of resource sharing as well as risk reduction (Park et al., 1997).

## 2.4 External barriers to inclusive innovation

External environment such as governmental bodies are important settings for operating in developing nation (Bremermann et al., 2019) External barriers come from the external environment of a firm and appear when a firm interacts with economic and innovation systems as well as other organizations and players such as partners and governments (Hölzl, 2012; Stanisławski, 2010; Hadjimanolis, 1999). External constraints include the usual lack of institutions and infrastructure; these are the main reasons for the failure of the BoP market. Overcoming these external barriers will help firms in their attempts to develop and commercialize products and services that are available and affordable to the poor (George, 2012). Furthermore, external barriers to innovation are dynamic because their presence and relevance tend to differ across the innovation process (Das, 2018; Alexiev, 2016; Hung, 2013). These external innovation barriers have harmed the ability of owners to recognize, evaluate, and access relevant technological information, institutional finance, and qualified personnel (Segarra-Blasco, 2008).

Scholars have broken the innovation process into a series of phases divided through control checkpoints or gates that require predetermined outcomes (Cooper, 1990). According to Patrick Das et al. (2018), these processes help firms to achieve innovation results through driving new products and services faster and having fewer mistakes from idea to market. The innovation process of firms has been stopped by many challenges, impediments, and obstacles (Chandy, 2000). Barriers can act on the innovation process at one or more points. If this process is viewed as a simplified, linear series of phases from innovation adoption through implementation, it is likely that the impact of a barrier will be more significant in one stage rather than another. For instance, the lack of finance is expected to have a more potent effect on the implementation stage (Nassar, 2015).

Scholars have demonstrated that there are significant differences in barriers to innovation in terms of costs, institutional constraints, human resources, organizational cultures, information flows, policies of government, high prices of innovation, the lack of financial assets, high economic risks, the lack of skilled personnel, the lack of technology, the lack of market information, the lack of customer responsiveness, and the lack of government regulations (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002).

Many internal and external aspects of a firm play a primary role in developing and launching innovations effectively. For instance, a company needs to be able to explore and integrate new

technologies, implement new innovation-oriented practices, and adapt internal mechanisms that enable new ideas to be explored and developed (Das, 2018). The ability to succeed in innovation is affected by both internal and external barriers for the company (Piatier, 1986). Also, differentiating internal and external barriers enables us to recognize the ones that a company can influence and those that temporarily or permanently overcome its impact (Piatier, 1986).

## 2.5 Internal barriers to inclusive innovation

Due to the great competition in the global market place it is crucial to understand how the internal operations of a firm is (Oghazi et al., 2016). These days, firms' efforts in gaining internal funds, technical expertise, organizational culture, and human nature are the main factors leading to firms being exposed to internal barriers to innovation (Durmusoglu, 2018). Firms, such as small- and medium-sized enterprises (SMEs), are often exposed to internal barriers because of their size. Access to financial resources is becoming more and more difficult for SMEs (Madrid- Guijarro, 2009). Furthermore, they are less likely to undertake formal technical, commercial, and financial assessments and therefore have less trustworthy information on the potential rate of innovation return (Hewitt-Dundas, 2006). Also, the lack of management time, triggered by the manager of the firm attempting to do everything on their own (Hadjimanolis, 2003), or the lack of access to financial resources can prevent the timely and efficient implementation of innovations (Rush, 1992). These internal barriers are the main reasons that firms are less inspired to engage in innovation (Durmusoglu, 2018).

### 2.5.1 Financial resources

Internal constraints include problems relating to the failure of small firms and large firms to concentrate on low-margin markets requiring attention and resources over a long period of time (George, 2012). Financial constraints and feeble access to financial capital significantly reduce firms' likelihood of innovation (Savignac, 2008). Affluent firms are more likely than those with financial constraints to take advantage of new opportunities and invest more in innovation. Likewise, the lack of financial resources, which exceed those required for basic operations, have had an impact on firms' innovation (Hoegl, 2008).

Financial resources can provide competitive advantages even they are not unique or difficult to imitate by themselves (Peteraf, 1993). This is because firms with financial resources can gain new and unique opportunities and they are better prepared to address threats from their

environments (Demirkan, 2018). According to Santoro and Chakrabarti (2002), financially improved firms can invest more in processes that enable them to produce new products.

Furthermore, studies show that organizations with greater financial resources can take more risks and can more easily absorb the costs of failure (Wischnevsky, 2005). Financial resources encourage innovation because more money means more flexibility in testing new ideas, creating more and better-skilled people to develop ideas, supporting more customer surveys, and testing prototypes, all of which potentially drain finances (Hoegl, 2008).

### 2.5.2 Human resources

Human resources are the fundamental management function of any organization, creating the most critical conditions for organizational performance. The management of human resources is a process that helps organizations recruit, select, and develop organizational staff (Batti, 2013). According to Stanley and Albin (2013), human resource management (HRM) is defined as a management function inside organizations concerned with people and their working relationships.

The basis of HRM is ensuring that everyone in the organization is capable of performing at expected levels. It is the fundamental responsibility of management to set up systems and structures to motivate performance (Batti, 2013). The objective of a human resource framework is to build an organization with the 'right persons' in the 'right positions' and at the 'right time' (Batti, 2013).

Some of the local NGOs are working with an emphasis on project planning, which means that human resource capacity building and staff retention initiatives are low priorities due to the short-term nature of the projects (Bromideh, 2011). Therefore, these NGOs are unable to have the right staff at the right time and place (Batti, 2013).

Moreover, many local organizations are small. Many do not have an HR unit or an HR manager in an organization and this may not be a practical idea due to the cost implications as well (Batti, 2013). Therefore, the HR role is performed in these NGOs by either a project manager or other staff who may not have the requisite skills (Bromideh, 2011). This lack of HR skills affects the day-to-day management of NGOs. For example, in some cases, there has been a conflict in responsibilities between management and staff regarding who should carry out what activities (Batti, 2013).

## 2.6 Conceptual model

From the literature review above, we can extract the idea that inclusive innovation consists of several steps. Affordability, Social empowerment, Localization, Barriers until the final inclusive innovation is restored. This model (Figure 1) will be refined through the interview data, which will be presented in the later stages of this thesis. Lastly, the author will highlight the new findings, which can be added to the model in the conclusion section of this work.

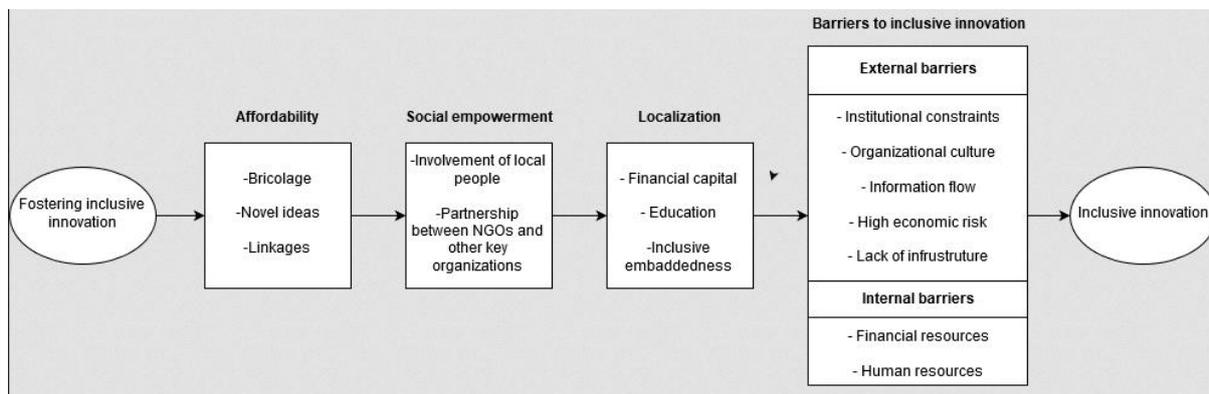


Figure 1: Research model

### **3 Methodology**

*The objective of this chapter is to explain and persuade the methodology used for this study to analyze the conceptual framework and to answer the purpose and research questions. Also, the chapter intends to motivate the approach of research and provides validity, reliability, operationalization table, and guide design for interviews. Finally, the section will provide readers with a summary of the chapter on methodology.*

#### **3.1 Research approach**

The research approach is described as the path by which a researcher chooses to answer the research questions and purpose of an academic study (Bell, 2018). For the reasons mentioned in the following sections, an abductive qualitative approach used in this thesis.

##### **3.1.1 Qualitative method**

Qualitative and quantitative methods are two various research lines with different data collection and analysis styles (Bell, 2018). Both methodologies are expected to increase awareness of the research problem in the atmosphere and to achieve a better understanding of how people, groups, systems, institutions are performing and their impact on others (Sogunro, 2002).

Quantitative research has shown that the results are measurable and certified in the form of numbers and statistics with the goal of generalizing the outcomes based on the results of the investigations (Saunders, 2009). Furthermore, the quantitative study is appropriate for testing theories/hypotheses by collecting survey-based data from a large group of participants and illustrating results through the diagram, charts as well as graphs (Bell, 2018).

In contrast, the method of qualitative data collection concentrates more on words, photos, descriptions, and narratives (Saunders, 2009). Also, the qualitative approach aims at acquiring a better understanding of the problem and empirical data when the background of the investigation is less known. Likewise, the research seeks the answer "how," "why" and "what" types of research questions, qualitative method is suitable (Boris, 2005). Moreover, adequate quantities of information are collected from many variables, but generally from a small number of individuals or units (Neuman, 2003).

The author has selected a qualitative path for this thesis because our research question begins with how. Also, the author aims to investigate the process of inclusive innovation from the NGO perspective as well as its constraints. Finally, two large Iranian NGOs are willing to provide primary data for this investigation.

### 3.1.2 Abductive research method

There are some preconceptions in the abductive approach within the framework of the case, but researchers need to go back and forth between the theory and empirical data throughout the entire research process to better understand both (Timmermans, 2012; Van Maanen, 2007). According to Eisenhardt (1989), the main idea is that researchers continuously compare theory and data to a method that closely fits the data. The abductive approach allows the most unusual results to be matched to an explanatory framework (Tavory, 2014). The first method to build a theory based on empirical data should be through the abductive approach (Timmermans, 2012). Also, Van Manaen et al. (2007) argues that abduction gives the empirical world supremacy, but in the service of theorization. Therefore, the abductive approach is the only sensible approach that enables scholars to generate data-based theory (Tavory, 2014).

The abductive method is shown to be useful, particularly if the study seeks to discover something new, such as new variables or relations, instead of merely promoting previous theories (Dubois, 2002). According to Dubois (2014), the objective of the abductive approach is to provide context-specific reasons for the situational fit between the hypothesis and the empirical data. For instance, feasible barriers to NGOs were first recognized from the literature, then from the empirical data and then compared. Hence, a comprehensive understanding of the existing literature formed the basis for the research, and the literature was returned during the qualitative method, enabling the theory to be likened with empirical data, to find unforeseen discoveries from both sides.

Eventually, in the abductive approach, the challenge is to improve the case without losing mythological as well as theoretical standards (Tavory, 2014). For these considerations iterating between empirical data and literature, it is claimed that the abductive approach offers new and useful insight into the limited theory of NGOs perspectives in the inclusive innovation process.

### 3.2 Research design

Research design is the method in which the researcher intends to conduct all the study to address the objective and research questions (Saunders, 2009). Also, Kent (2007) argue that the research could be classified according to the objective and the methods used to accomplish the research objective. Moreover, research design as a technique for responding to research objectives through the appropriate structure (Bell, 2018).

In business studies, there are different methods of categorizing research designs according to their primary objectives, Saunders et al. (2009) claim that research designs can be categorized as descriptive, exploratory, and explanatory methods. However, it should be noted that it is not necessary to use only one of these methods, Robson (2002), argue that the question of research can be both exploratory and descriptive.

Exploratory research design is intended to assist in gaining basic understanding in a problem area (Saunders, 2009). Also, the exploratory approach is frequently used if the objective of the research is uncertain and it is difficult to justify the decision of theories (Robson, 2002). According to Saunders et al. (2009), there are three methods of conducting exploratory research; exploring appropriate literature, interviewing field specialists and lastly conducting focus groups.

According to Robson (2002), a descriptive approach to study is appropriate when the research problem and objective are organized. This descriptive research aims to portray a person, event, or situation accurately. In this respect, the descriptive approach is appropriate when the objective of the study is to clarify the characteristics of a particular group or to approximate the number of persons in a specific population with similar backgrounds or events to frame precise forecasts (Churchill, 2006). This method is mainly used in quantitative studies in which the researcher intends to collect large amounts of data (Bell, 2018).

Saunders et al. (2009) argue that, explanatory research design is conventional in the study of causes as well as symptoms. Also, in the context of an explanatory approach, the aim is that relationships be found between factors when the researcher has a precise understanding of the issue already explored and defined (Saunders, 2009). Moreover, according to Reynolds (1971), one of the critical reasons for the selection of explanatory studies is to develop theories that can be used to explain empirical findings by the descriptive approach. Plus, the purpose of the

explanatory approach is to provide clear explanations of specific events that subsequently illuminate how these arguments can be extended in other contexts (Yin, 2017).

The authors decided to choose an exploratory research design to address the problems of this research, as it seeks to understand the problem through primary (interviews) and secondary data (literature reviews) appropriate to this paper. Saunders et al. (2009), argue that exploratory research intends to collect as much information from a subject as possible using the secondary and primary data collection methods. Also, exploratory research in qualitative studies as well as case studies is widely used (Saunders, 2009).

### 3.3 Data sources

Researchers can gather data from two primary and secondary sources, and in some cases, they can use both sources (Saunders, 2009). The researcher can complement secondary data by using primary data (Saunders, 2009). Furthermore, primary data is collected from people, firms, and organizations through questionnaires, surveys, or one to one interview to respond to the objective of the study (Bell, 2018). Likewise, according to Boris et al. (2005), secondary data are the existing literature and the materials collected in the research context and will assist the researcher in answering the study objective. It can be concluded that primary data is gathered when the researcher is striving to collect data from the population best suited to the nature of the research; secondary data are collected where there are available existing literature and pre-studied material for research purposes (Boris, 2005).

The author used both primary and secondary sources for this thesis. For a better understanding of the problem and topic, secondary sources are used to conduct a literature review of existing research in the field of inclusive innovation. The literature review subsequently presented the conceptual research framework that could be used as a frame for collecting primary data from the sample group.

### 3.4 Research strategies

The research strategy should be based on three features: how the research question was framed, how the control classification of behavioral events was required, and, ultimately, whether the events were contemporary and part of the present or not (Yin, 2017). According to Saunders et al. (2009), philosophical understanding of research, the quantity of time, resources as well as the amount of existing knowledge should be assessed before the research strategy is chosen.

Likewise, researchers can implement seven research strategies: case study, survey, experimental, grounded theory, ethnography, action research, and ultimately archival research (Saunders, 2009).

- *Case study* is a strategy category that enables the researcher to research real phenomena and life cases (Bell, 2018). Also, to carry out this strategy, the researcher needs to have multiple sources from cases like firms, organizations, events, or phenomena that have already occurred (Bell, 2018). Boris et al. (2005) argue that it is possible to use a case study in both explanatory and exploratory approaches. Furthermore, according to Yin (2003), researchers can choose either a single case study, multiple case study, holistic case study, or embedded case study when conducting case studies. The single case study may be carried out when the researcher intends to study specific phenomena such as event, firm, organization or individual (Saunders, 2009). Likewise, multiple case studies are appropriate where the researcher is seeking several cases (events, firms, organizations, and people) to generalize the results by comparing them with other findings (Saunders, 2009). Furthermore, Yin (2017), argues that the holistic case study is where the researcher primarily focuses on the collection of data from an organization overall, while an embedded case study concentrates on the analysis of an organization with its sub-units.
- *Survey strategy* is mainly used in deductive and quantitative methods, to collect data from a large number of resonances utilizing the survey (Saunders, 2009). Furthermore, this tactic is helpful in testing theories or hypotheses by the researcher (Saunders, 2009).
- *Experimental strategy* is valuable if the researcher seeks to learn the relationship between the independent variable and dependent variable; for example, if the change in independent variable results is changed in another dependent variable (Hakim, 2000).
- *Grounded theoretical strategy* is regularly used in an inductive approach to develop new theories (Saunders, 2009). Also, without any original theoretical basis, this tactical data is collected (Saunders, 2009).

- *Ethnography strategy* is most useful in an inductive context with the objective of producing new theories, and it must also be addressed that ethnography is anthropological (Saunders, 2009). Moreover, the objective of this strategy is to demonstrate and emphasize the impact of the social world by the full participation of the researcher in the studied environment (Saunders, 2009).
- *Action research strategy* was first introduced by Kurt Levin in 1946 to solve a real threat to research in the context of contentious planning and evaluation until the final results have been achieved (Saunders, 2009).
- *Archival research strategy* allows the researcher to use administrative records and documents as the primary data source as a framework to analyze research (Bell, 2018). Besides, this approach enables researchers to formulate historical analyzes and generate time-consuming research questions (Bell, 2018).

The author of this thesis, as mentioned earlier, intends to collect qualitative data from two large Iranian NGOs (two cases). Hence, the strategy used in this thesis is a holistic approach to a multiple case study. Yin (2002), argues that multiple case studies are appropriate for the qualitative approach because the researcher concentrates on collecting further in-depth data. Furthermore, this method could be used to generalize research findings for exploratory and explanatory approaches (Yin, 2017).

### 3.5 Sample studies

Sampling is the method by which representatives of the target population are extracted from the researcher for primary data sources (Bell, 2018). Furthermore, Boris et al. (2005) argue that the population as, the total number of entities or units existing in a geographical area. Moreover, in this respect, the sampling procedure is classified into two categories, either probability or non-probability (Boris, 2005).

Probability sampling occurs when random selections are made for each entity in the population, which means that each unit is equally probable to be selected from the sample (Saunders, 2009). Conversely, Saunders et al. (2009) define, non-probability sampling arises when population unit selection (or sample selection) is not random.

The sample could be distinguished in three phases, sample population definition, sample frame presentation, and sample size decision (Bell, 2018). According to Marshall (1996), probability sampling is not appropriate for qualitative methodology, as well as quantitative study often requires a high rate of respondents without concern for complicated issues and behavioral investigation. Also, in the non-probability approach, there are fewer choices, and the researchers target to obtain in-depth data by interviews (Gray, 2016).

According to Bryman & Bell (2018), a sampling of non-probability is classified into three categories: convenient judgmental, and theoretical.

For convenient sampling, the researcher chooses the most easy-to-reach units of the target population, and this technique is often used when it comes to cost savings and time efficiency (Saunders, 2009). In the following, Saunders et al. (2009), claims that judgmental samples arise when the researcher selects the most appropriate samples for his / her experiment or purpose; while theoretical examples are focused on theories that will be checked.

In this thesis, non-probability and judgmental sampling were chosen since the author selected two Iranian NGOs that are actively involved in the care and educate patients as well as people in Iran and can provide the critical analytical data for this research. The two NGOs are Mahak and Payam Omid.

Some NGO members want to stay anonymous; hence, we cannot mention their names in the research. Nonetheless, many members are all right to share their names and places.

The author aims to list the following in table 1 below; an indication of the participants ' affiliation (position and number), the date of each NGO interviews. Eventually, mark each participant with a number that makes it easier to identify the reputable interviewees in the empirical section.

Table 1: Participant names and NGOs

NGOs	Affiliation (position and number)	Time and date of the interviewee
Payam Omid	-IP 1: Public relations manager -IP 2: CEO	- 45 minutes Skype interviewee (2nd of September 2019) - 45 minutes Skype interviewee (8th of September 2019)
Mahak	-IP 3: public relations and international affairs manager -IP 4: public relations and international affairs manager -IP 5: Psychological and social department manager -IP 6: Psychological and social department manager -IP 7: Development and innovation department manager	- 50 minutes WhatsApp (10th of September 2019) - 1 hours WhatsApp (11th of September 2019) - 35 minutes WhatsApp (12th of September 2019) - 35 minutes WhatsApp (13th of September 2019) - 35 minutes WhatsApp (13th of September 2019) - 50 minutes WhatsApp (13th of September 2019)

*Note: the name of all interviewees are anonymous.*

### 3.6 Data collection method

There are numerous opinions as to how a researcher should gather his/her primary data, thereby concentrating on the approach that is suitable for the research objective and context (Bell, 2018; Yin, 2017). Bryman and Bell (2018), argue that implementation of the specific method of primary data collection is crucial for the results as several picks may lead to biased results (Bell, 2018). Moreover, according to Bryman and Bell (2018), four types of data collection methods are available; in-depth interviews, surveys, content analysis, and focus groups.

Boris et al. (2005) categorize in-depth interviews into two semi- or unstructured interview groups. The interviewer mainly asks questions from the questionnaire list in semi-structured interviews to have discussions primarily on topics, on the other hand, the unstructured method has fewer constructs, and the researcher is free independent of the questionnaire list if needed (Boris, 2005).

It can be noted that semi-structured interviews are less flexible while the interviewer can primarily ask questions from the questionnaire while in unstructured interviews, they are more dynamic, which means it enables the interviewer to ask questions based on the responses (Saunders, 2009). Furthermore, Johnson and Christensen (2019), argue that focus groups can be held when the researcher wants to seek small group views (frequently between 6 to 12 people). Also, the moderator should address the focus group with a particular topic and encourage people to express their opinions and create an open discussion (Johnson, 2019).

Content analysis can be used to evaluate documents and texts to generate text based on different categories (Bell, 2018). Surveys could be administered when the researcher plans to evaluate primary data from high population samples to demonstrate the findings through means statistical elaboration (Yin, 2017).

According to Bryman and Bell (2018), in-depth interviews for qualitative studies are widely used. Furthermore, semi-structured interviews are based on a set of theories formulated interview questions (Bell, 2018). Likewise, the researcher can ask follow-up questions in semi-structured interviews if this enables to collect further accurate data (Boris, 2005).

The author chooses one to one semi-structured interviews for this thesis to collect primary data with greater flexibility and accuracy.

### 3.7 Data collection procedure

As noted earlier, the purpose of this research is to collect qualitative data from two major Iranian NGOs (Mahak and Payam Omid) through semi-structured interviews. One week before the interview, the interview questionnaire was sent to the participants, so they could have ample time to prepare the responses and get prepared.

For this dissertation, Mahak and Payam Omid were the two main NGOs that agreed to provide data. Collecting data for Mahak NGO was made a face to face interview, and other interviews took place through Skype, the telephone. Also, the interview atmosphere and conversation conducted were not formal; hence, it makes the interviewers feel comfortable. As shown in the sample studies (section 4.5), the author has managed to perform 7 qualitative semi-structured WhatsApp and Skype interviews with qualified people at each NGO.

To interview the right people, the author chose the departments that directly deal with patients at each NGO. Each NGO allocated a certain number of people to the author based on their availability. Ultimately, the author made appointments and interviews with the participants of each NGO.

NGOs like Mahak could contribute more to the data collection process (5 interviews from Mahak) while Payam Omid gave fewer interviews (2 interviews from Payam Omid) than the people were eventful. The author did his best to gather data from an equal number of participants in each NGO, but this was not possible.

### 3.8 Data collection instrument

Bryman and Bell (2018), argue that validity and reliability are two of the most important considerations that require to be tackled in the right order in data collection and analysis (the following sections will explain in detail). An operationalization table has been planned to improve the validity and reliability of this thesis, listing the items or concepts taken from the section on the literature review. The table of interview guide design (see Appendix A for the interview guide design table) has been generated, including interview questions that have been derived from the operationalization table. Bryman and Bell (2018), claim that questions should be constructed from appropriate materials literature to establish credible academic research reliability and validity. Also, the author notes that the most popular way to generate questions is from the operationalization table.

## Table of operationalization and interview guide design

The table of operationalization is a process in which the researcher transforms the theory and the object into real terms (Bell, 2018). Moreover, according to Mahlotra and Birks (2007), the operationalization table includes six steps to succeed; the phases are as follows: the selection of theories interpretation of the idea selected, clarification of the measure of concepts, description of the measure to analyze the chosen concepts, careful analysis of items or concepts and, furthermore, testing before collection of data.

The following table (Table 2) is the established operationalization table designed by the author based on the concepts included in the section of the literature review.

*Note: the interview questions are located in the appendix (A).*

Table 2: Table of operationalization

Concept	Concept definition	Operationalization definition	Measure and Question numbers(Q)
How to produce affordable goods and services	Affordability is a result of Bricolage, Novel ideas and linkages between organizations.	These notions aim to help the author understand how NGOs make goods affordable.	1) Bricolage (Anderson and Markides, 2007). Q6 2) Novel ideas (Bhatti, 2012). Q20, Q21 3) Linkages (Bradley, 2012; Acosta, 2011; Rahman 2002). Q5, Q9
How to initiate social empowerment	Empowerment is better done through partnership and involvement of the local people	These notions aim to help the author how the NGOs gain social empowerment.	1) Involvement of local people (Heeks, 2014; Bradley, 2012; Ansari, 2012). Q7, Q8, Q10 2) Partnership between NGOs and key organizations (Nahi, 2018; Halme, 2016; Hahn, 2014; Reficco, 2012; Dahan, 2010; Webb, 2009; Seelos, 2007). Q11, Q12, Q14

How to generate localization for the local communities	Localization can be generated through financial capital, education and inclusive embeddedness	These notions aim to help the author gain understanding on how NGOs gain localization.	1) Financial capital (Bradley et al., 2012; Bradley, 2012; Eisenhardt, 1996). Q4 2) Education (George, 2012; Sachs, 2005). Q15 3) Inclusive embeddedness (Bradley, 2012). Q2
External barriers to inclusive innovation	External barriers for innovation revolve around, institutional constraints, organizational culture, information flow, high economic risk and lack of infrastructure.	These notions aim to measure and understand the external barriers that NGOs' face.	1) Institutional constraints (Swaans et al., 2014). Q19, Q21 2) Organizational culture (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q19, Q21 3) Information flow (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q3, Q19, Q21 4) High economic risk (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q19, Q21 5) Lack of infrastructure (George et al., 2012). Q18
Internal barriers to inclusive innovation	Financial resources and human resources are may be seen as internal barriers for NGOs.	These notions aim to understand what external barriers does NGOs' face.	1) Financial resources (Demirkan, 2018; George et al., 2012; Savignac, 2008; Hoegl, 2008; Wischnevsky, 2005; Chakrabarti, 2002; Peteraf, 1993). Q17 2) Human resources (Swaans et al., 2014; Dutz, 2007). Q17

### 3.9 Method of analysis

The analysis is a process in which the researcher can modify the data and make the empirical studies rationale (Ghauri, 2003). In this respect, Yin (2017) suggests five methods of analysis while performing a qualitative multiple case study. The approach, therefore, can be selected by the researcher based on the intent of the research:

- Cross-case synthesis (often used in multiple case studies, examining the case separately through theoretical and empirical linkages).
- Explication building (scholar investigates a case study to form an explication against the situation).
- Logic models (matching the incidents observed with the theoretical forecast events in an empirical study).
- Pattern matching (comparison of observations with empirical or theory).
- Analysis of time series (Analysis of tests or quasi-experiments, the study can also be used with the support of chronological sequence).

Yin (2017), argue that cross-case synthesis analysis is a method most widely used in multiple case studies. The researcher should analyze each case separately and link the results with the theories (Yin, 2017).

The author has used the cross-case synthesis method of analysis for this dissertation, as this approach is the most appropriate case study system and suits the aim of this study. The author will analyze Mahak and Payam Omid separately as well as provide the reader with a summary of the cross-case analysis.

### 3.10 Quality measurement

The quality and validity of findings are essential in all fields of academic research and must be measured by validity and reliability (Saunders, 2009). The author will address these two issues in this final section of the methodology chapter as well as the effort made to ensure the quality of the study is up to standard.

### 3.10.1 Validity

Validity is when the findings are really about what they seem to be, Saunders et al. (2009), argue that validity can be divided into three types, content validity (or face validity), construct validity as well as external validity. In this regard, Bryman and Bell (2018), claim that content validity as, the process of ensuring that the measuring device (in this example the measurement questions of the questionnaire) addresses the question of the investigation. This is typically done by pre-testing the questionnaire and its aims through having a group of experts in the field to judge and comment (Boris, 2005).

For this reason, the author did the pre-test through sending a questionnaire to two researchers at LUT University and the University of Tehran in the field of management as well as to three managers of large NGOs. After receiving feedback from the pre-test experts, the author carefully resolved the remarks and updated the questions. Likewise, the expert's comments were often on the clarity of the questions as well as arrange the questions.

Construct validity is used to determine whether the table of constructs or items (the operationalization table in this research) measures what it requires to measure (Saunders, 2009). In this respect, through pre-testing, the author sent the operationalization table to the same field experts and addressed all the remarks accordingly.

According to Boris et al., (2005), external validity teaches include in which your research design and the final results are generalizable, in particular, whether the research can be extended and implemented to other study settings and organizations. Furthermore, generalizability refers primarily to the number of cases and the characteristics of the research undertaking (Yin, 2017).

According to Saunders et al. (2009), due to a limited number of cases, it is not possible to generalize the study result to the entire population in qualitative multiple case studies (in this research, the NGOs). Also, the results of the researcher are based on qualitative terms and are valid for the specific setting of the research being conducted (Saunders, 2009). However, Boris et al. (2005) argue that the robustness of the concluding remarks can be checked externally in a qualitative multiple case study through a follow-up study in other research settings. Nevertheless, the reputable author adds that the researcher must avoid generalizing the findings at the conclusion in a qualitative setting.

Hence, researchers may conduct a follow-up study and test the research findings or even conduct quantitative research to generalize the conclusion, but this particular study covers a few cases and is not generalized by the author.

### 3.10.2 Reliability

Reliability testing is carried out to ensure consistent results are retrieved from the data collection technique or analysis (Boris, 2005). According to Saunders et al. (2009), reliability can be achieved by the repeatability of research and data collection through other field researchers to recognize if the data extracted are transparent and accurate. Furthermore, internal consistency should be checked for reliability to determine whether constructs and items measuring what they require to measure (this was done in pre-testing) (Saunders, 2009). Moreover, according to Johnson and Christensen (2019), the researcher should follow these four phases appropriately; subject and participant errors, picking the right time for the interviews, interviewees may respond in a manner that the interviewer needs to hear (which the fault should be observed), various ways of framing the questions and performing the interviews, different ways of interpreting the answers (the bias should be noted).

To ensure the reliability of this thesis, the author sent the questionnaire one week earlier to the participants to give them the time they require. Furthermore, the time and appointments were chosen to have been decided upon by the respondents. Lastly, the questions and the table of items were also checked before the meetings to make sure they are all right.

### 3.11 Methodology summary

The author will demonstrate the final remarks of the methodology section in this segment by presenting table 3 below:

Table 3: Methodology summary

Sample	7 interviews (2 NGOs)
Sample detail	Large Iranian NGOs services process
Research approach	Qualitative research –Abductive approach
Research purpose	Exploratory research
Research strategy	Holistic Multiple case study
Data sources	Primary source
Data collection technique	In-depth-semi-structured interviews
Data analysis method	Content analysis
Quality criteria and measurement	Validity, Reliability

## 4 Empirical investigation

*In this chapter the author will provide case description of the NGOs which participated in our interviews.*

### 4.1 Payam Omid

Payam Omid charity is an NGO that started informal activities in 1997 and official actions in 2003. It was built to reflect a set of human skills and abilities aimed at creating equal opportunities to realize inalienable human rights. Its working period has involved helping welfare institutions and preparing weddings for the needy. The charity also helped the Bam earthquake survivors (Bam is the capital of Bam County, Kerman Province, in Iran) and assisted underprivileged families.

The mission of Payam Omid is divided to three major activities: manufacturing, education, and assistance. Manufacturing groups are composed of people who dreamed of setting up a public manufacturing workshop to generate employment for the needy and expand the culture of production and entrepreneurship. The group has always sought to encourage trainees to work by creating internal motivations such as financial independence and increased well-being. Families covered by Payam Omid make the goods and their income belongs to their families. Women who are the head of their families participate in workshops and start their work for producing goods with the raw materials provided by the charity. Moreover, after producing products made by clients, Payam Omid tries to support them by distributing them.

The Payam Omid education group provides a range of services, including psychology courses and counseling services. Its leaders seek to improve the educational status of children covered by the charity. The training group takes every opportunity to establish intimate communication with those it serves. Hence, these children do not see the Payam Omid only as a charity; they see them as a friend, supporter, and companion and feel that they are getting help along the way to improve their situation. The focus of the services received in one group is to integrate more appropriate and quality services, provide more effective planning, and empower families.

The author will demonstrate Payam Omid charity in brief by presenting table 4 below:

Table 4: Payam Omid charity in brief

CEO	Mr. Siavash Shafiei
Type of NGO	Support and educate poor families

Employees	26 staff, 400 volunteers
Revenue	Fundraising by donors and people
Funders	Unknown in 1997

Source: (Payam amid.com, 2019)

#### 4.1.1 Primary data from Payam Omid

##### How to produce affordable goods and services

When asked about the services of Payam Omid for poor people in Iran, two interviewees (IP 1 and IP 2) started talking about their charity services and how they provide their services to the heads of families. IP 1 stated that they offer 80% of their services for free and in cases where they do not provide services for free (such as the cost of a sewing machine), for example, the price of a sewing machine is 1000€, or a specific sewing machine price is 1800€, Payam Omid pays part of this amount that means their charity pays around 800€ or 1500€ for sewing machine respectively. Furthermore, low-income families that receive support and services through Payam Omid charity sometimes need more than 80% of their expenses to be covered. For instance, if the cost is 10000€, Payam Omid pays approximately 8500€ and the families pay the remaining amount. However, in a specific situation, the charity pays for everything and that family returns a 15% share to the charity by installment with long-term, interest-free repayment terms. IP 2 also added about the cases where some low-income families have overused charity services; the charity only pays a percentage of their student's university tuition fees. Payam Omid gives loans to these students, but they can return the amount in a long-term installment plan.

When asked about novel ideas, all the IPs mentioned that Payam Omid must be more active in recruiting donors to contribute to charity operations because peoples' awareness plays a critical role in fundraising. Also, IP 2 stated the charity should work on expanding international relationships, especially with multinational companies, as well as Iranians who settled in Europe and the US.

In this regard, when the author asked about a future recommendation for other NGOs, IP 1 emphasized some charities have good earnings, are volunteer-centric, or have good branding, including a well-known and robust advertisement group that can invite bands or famous singers to hospitals or their charities. Moreover, it is important to provide human resources to volunteer services, for example, with painting the schools in marginalized areas. These kinds of charities

must have the right human resources to offer and execute their functions. Therefore, these charities should be dynamic, with skills training and providing services to low-income people or patients. The positive aspect of these charities is that they teach people about teamwork.

However, IP 2 stated that NGOs need to be transparent in their operations because this contributes to more trust among society members. Moreover, the increasing number of NGOs disperse donations and this is the leading cause of decentralizing organizations. If more NGOs focused on sharing resources and creating synergy, they could achieve their objectives precisely. For example, Payam Omid's partnership with Nikan charity enabled them to be more successful in helping the poor people in the Sistan and Baluchistan provinces. The partnership also enabled them to provide significant funding for the project.

Moreover, when asked about linkages between Payam Omid and other charities or people how linked to Payam Omid, both interviewees (IP 1 and 2) mentioned about initial introductions through word of the mouth, colleagues' charities, calls, and referrals of poor people to the charity's office, as well as connections between poor communities and the charity through social media. They also talked about the process of accepting applications based on the family's condition. They described how Payam Omid has two groups; the first one is a research group and the other is a diagnosis group. The mission of these two groups is to evaluate the families that have been introduced to the charity. In this regard, after the investigation the charity decides whether the family is qualified for support and services. Payam Omid considers the family's level and standard of living; who is the head of the family; and whether the family has anyone in school or at the university. Furthermore, in the new cases, they try to do project-based services; that means they consider a family as a project and seek to provide the minimum requirements for them to reach the empowerment stage and finalize the process.

### How to initiate social empowerment

Participants were asked to explain how Payam Omid empowers poor people or local people in Iran. IP 1 stated they cover family caregivers, women who have no husbands, or women whose husbands who have died or who have a degree of disability. They are members of our charity and are trained on tailoring and embroidery at a unit called the Craftsmen, after which they can buy a sewing machine and work at their home. Payam Omid pays a fixed salary to these people each month. Once every three months, they give them grocery packages like rice, chicken, meat, and other necessities. Now they pay these expenses physically or with a credit card equivalent and can buy from some specialty stores.

Part of the focus of the Payam Omid charity is related to education and employment of low-income families' children. Kids are covered through their charity for educational expenses such as tuition and stationery. If they are talented, the charity pays the costs for their sports training or extracurricular classes. Furthermore, Payam Omid supports and helps these families with required housing deposits or rent payments as well as renovations to their home. They help with health problems as well.

IP1 added they have training centers in the charity, but in some cases where some low-income families live in the same neighborhood, they rent a particular work office for them. When they have finished their training, Payam Omid buys sewing machines for them and works on orders from other organizations or centers they receive. However, the charity does not have another official center or organization for training clients.

Moreover, for involving local people, IP2 stated an example. In addition to the charity training and empowering women as the head of families, they are contributing to building schools in deprived areas of Sistan and Baluchistan provinces. However, the charity's central office is in Tehran and it is not possible for all charity members to travel to all of the deprived areas of the provinces regularly because of some problems such as travel expenses and time. Payam Omid has some direct relationships with local people in these areas; they are a primary source of assistance in facilitating services.

When asked about the partnership between NGOs and critical organizations, both participants agreed that Payam Omid has bilateral relationships with many NGOs, especially related to events and charity markets. IP 1 stated that when a natural disaster such as an earthquake or flood happens in a different part of Iran, many NGOs get united in a charity market for helping people who were hurt by the natural disaster. Moreover, they have intelligence cooperation with other NGOs since this helps prevent a person from using the same, parallel services from other NGOs. This enables the charity to support and cover more low-income families. Also, IP 2 gave a persuasive reply; he stated the partnerships among Payam Omid and other organization and NGOs make relationships stronger, particularly in charity markets and they may gain funds from these companies. For instance, this year Snapp Food paid around 15000€ to provide grocery packages to low-income families who were supported by Payam Omid charity. During charity festivals, some companies such as LG, Goldiran, Media Home Appliances, and several others sponsored the NGO. These companies paid a fee to Payam Omid and provided them an advertising place to advertise or sell their products as well as

services. Likewise, the largest international and local companies who sponsor Payam Omid charity are LG and Snapp Food, respectively.

IP 1 added that Payam Omid has close relationships with governmental organizations such as the Imam Khomeini Relief Foundation; they have a formal collaboration. They mainly collaborate when they want to check the names of low-income people to make sure they do not use the same services from different NGOs.

### How to generate localization for the local communities

Participants were asked to mention how Payam Omid helps localization for the local communities in Iran; for financial capital, both participants started talking about the charity's primary income resources. IP 1 argued that people and donors are the prime resources of the charity. Funds are dropped in donation boxes and the charity collects them. "Even the donation boxes can somehow help us with advertising," IP 1 said. Also, other donations are online, but they still have about 2,000 to 3,000 donation boxes in the hands of people, and the charity staff collects these donated amounts every month.

Furthermore, IP 2 stated that the charity's total capital resources are from the charity markets they hold once or twice a year. Payam Omid has a series of booths in which funding is obtained from sponsors and several visitors or the firm's managers who come to the charity market to advertise their products. Also, Payam Omid informs their visitors through the use of social media, announcements on the Payam Omid website, the sending of text messages, the use of field advertising, and word of mouth for the exact date of the charity market. Mostly because of effective advertisements, approximately 5,000 visitors come to Payam Omid charity markets. Also, he added the third way for fundraising is based on case plans. They share the right amount of money that is needed to supply appropriate equipment or treatment costs of a person in need. This is done with a specific code instead of the name of the person on the Payam Omid website or social media such as Instagram and Telegram. For example, they share the person's need with a code of 125 which indicates she needs 1000€ for buying a sewing machine. Furthermore, they share these data on some crowdfunding websites too.

When asked about how Payam Omid educates low-income families, both participants agreed that these two elements are essential for teaching. IP 1 stated that tutors conduct individual

psychology classes and sessions with all of these people. Throughout the year, tutors speak with and mentor people, only in private meetings, not in conferences or group classes.

In this regard, IP 2 mentioned that their charity supports any novel idea from staff or volunteers because these ideas have a high potential for fundraising. For example, they intend to launch a startup for selling charity products because this method facilitates charity services to low-income families. Moreover, Payam Omid has launched online shopping. However, they do not copy any ideas; they take inspiration for promoting online shopping.

When asked about realizing the importance of non-traditional actors, such as NGOs, it was mentioned that in poor markets linkages between NGOs and organizations could generate valuable knowledge for both distribution and production activities. IP 1 again mentioned that the Payam Omid charity is a relatively young NGO in comparison with other NGOs. However, it has close collaborations with other organizations for sharing resources when a natural disaster such as an earthquake or a flood happens in a different part of Iran. Furthermore, Payam Omid and other NGOs such as the Nikan charity share their experience and valuable knowledge for helping impoverished communities.

IP 2 stated that Payam Omid has attempted to make a joint database with other NGOs. They have collaborated with governmental organizations such as the State Welfare Organization of Iran and the Imam Khomeini Relief Foundation for identifying poor communities in order to facilitate giving better services to people in need.

### External barriers to inclusive innovation

When asked about the external barriers that Payam Omid faces in Iran, both participants started talking about the recession in Iran. IP 1 stated that in Iran, the people of the middle class are included among the leading supporters for fundraising. Unfortunately, they are getting weaker day by day. Work and funding for our projects have been made more difficult, with little public assistance. Moreover, two years ago, because of the recession, the number of charity sponsors declined and these challenges have increased the number of low-income families.

IP 1 and IP 2 mentioned another external challenge for Payam Omid is related to obtaining licenses for charity markets. This means they are not sure that they can get charity market licenses each year (from a place or from Ministry). For instance, in previous years, Payam

Omid had been negotiating for a salon or showroom with the owner of the facility, and they agreed to a low bargain price, but this year, it has increased several times; hence, the expenses of our charity have increased dramatically.

In this regard, IP 2 added, “When people are happier, they spend more money.” Licenses are one of the main external barriers for the charity because for launching any charity market or festival, they have to receive permission from the Ministry of Culture and Islamic Guidance, so this process takes much time and energy because of the administrative hierarchy. Also, Payam Omid has cultural barriers for celebrations and festivals. Because of this kind of limitation they cannot execute the types of entertainment that are common to many countries worldwide.

### Internal barriers to inclusive innovation

When asked about internal barriers that Payam Omid faces in Iran, both interviewees (IP 1 and IP 2) started talking about internal constraints from different perspectives. IP1 stated that the main problem of the Payam Omid charity is human resources such as volunteer forces, meaning they need volunteer forces. However, Payam Omid does not have considerable volunteer forces that can carry out the responsibility continuously. For example, most people in Payam Omid are former staff and volunteers who have worked with the charity from the beginning but other volunteers have come for a short period. Volunteers have launched and promoted a project over the course of a year but have left the organization after one year because of educational commitments, immigration conditions, time limitations, or personal problems.

However, IP 2 had a different answer as he stressed the main internal barriers of the charity are related to the lack of management knowledge. They have had people who have done correctly in their field of operations or who have even had great experiences. However, they have not been able to utilize the knowledge of these people efficiently. Hence, the next person who is placed in the same position has to resume his or her duties from scratch.

Also, he added, the Payam Omid charity has weak performance in the public relations department. Since this department of the charity failed to continuously track the assistance provided by companies and failed to make them permanent partners, the charity could not take permanent support from Mellat Bank.

#### 4.1.2 Empirical summary from Payam Omid

*In this section, table 5 offers an insight full empirical summary from Payam Omid NGO. These empirical summary are based on secondary data from the literature review as well as primary data provided by interviews from Payam Omid NGO.*

Table 5: Payam Omid’s primary data summary

Concept	Concept definition	Operationalization definition	Measure and Question numbers(Q)	Primary data from Payam Omid
How to produce affordable goods and services	Affordability is a result of Bricolage, Novel ideas and linkages between organizations.	These notions aim to help the author understand how NGOs make goods affordable.	1) Bricolage (Anderson and Markides, 2007). Q6 2) Novel ideas (Bhatti, 2012). Q20, Q21 3) Linkages (Bradley, 2012; Acosta, 2011; Rahman 2002). Q5, Q9, Q12	1) Supportive package and giving loan 2) Expending international relationships, transparency in NGOs operations, dynamic and flexible charity, team works, convince large organizations for funding 3) The word of mouth, other charities (Other NGOs) linking client to each other
How to initiate social empowerment	Empowerment is better done through partnership and involvement of the local people	These notions aim to help the author how the NGOs gain social empowerment .	1) Involvement of local people (Heeks, 2014; Bradley, 2012; Ansari, 2012). Q7, Q8, Q10 2) Partnership between NGOs and key organizations (Nahi, 2018; Halme, 2016; Hahn, 2014; Reficco, 2012; Dahan, 2010; Webb, 2009; Seelos, 2007). Q11, Q12	1) Charity educational programs and workshops to the needy communities 2) Use local people as a work force in every city or rural area they operate in rather than communizing with workers from the capital
How to generate localization for	Localization can be generated through financial capital,	These notions aim to help the author gain	1) Financial capital (Bradley et al., 2012; Bradley, 2012;	1) Donors, sponsors, charity markets, and donation boxes

the local communities	education and inclusive embeddedness	understanding on how NGOs gain localization.	Eisenhardt, 1996). Q4 2) Education (George, 2012; Sachs, 2005). Q14, Q15, Q16 3) Inclusive embeddedness (Bradley, 2012). Q4	2) Regular workshops for staff and volunteers, behavioral workshops, human resources workshops, psychology workshops, 3) voluntary services and spreading the word of the mouth
External barriers to inclusive innovation	External barriers for innovation revolve around, institutional constraints, organizational culture, information flow, high economic risk and lack of infrastructure	These notions aim to measure and understand the external barriers that NGOs' face.	1) Institutional constraints (Swaans et al., 2014). Q19, Q21 2) Organizational culture (Talegeta, 2014; Silva, 2008; Baldwin, 2002). Q19, Q21 3) Information flow (Talegeta, 2014; Silva, 2008; Baldwin, 2002). Q3, Q19, Q21 4) High economic risk (Talegeta, 2014; Silva, 2008; Baldwin, 2002). Q19, Q21 5) Lack of infrastructure (George et al., 2012). Q18	1) International relationships for foreign donors, lack of a prepare payment system from abroad 2) Cultural barriers for holding charity markets 3) Lack of effective advertisement in social media 4) Finding more donors and large firms for fundraising 5) Few supports from the middle-class of society because of recession, getting the license for charity markets
Internal barriers to inclusive innovation	Financial resources and human resources are may be seen as internal barriers for NGOs	These notions aim to understand what external barriers does NGOs' face.	1) Financial resources (Demirkan, 2018; George et al., 2012; Savignac, 2008; Hoegl, 2008; Wischnevsky, 2005; Chakrabarti, 2002; Peteraf, 1993). Q17 2) Human resources (Swaans et al., 2014; Dutz, 2007). Q17	1) Failed to make sponsors as a permanent partnership 2) Lack of management knowledge, human resources such as lack of volunteers' forces

## 4.2 Mahak

The Society to Support Children who have Cancer, commonly known by its abbreviation, Mahak, was established in 1991 as a non-governmental and non-profit organization. Over two decades, the Mahak charity has attracted ever-increasing public support and accomplished a large part of its mission to provide comprehensive support for children with cancer. Therefore, the focus is on decreasing child mortality rates and empowering (or creating an environment that empowers) families of children who have cancer.

Mahak got consultative status with the Economic and Social Council of the United Nations (ECOSOC). It joined a concerted global effort to achieve the strategic MDGs set by the United Nations Member States and the World Cancer Declaration by 2025.

The unprecedented drop in cancer-related child mortality rates in Iran from more than 80% before Mahak to less than 15% today underscores the fact that the fourth MDG, namely a reduction in child mortality, has primarily been achieved in Iran in the field of pediatric cancer.

Mahak is philanthropically established with the charitable and kind objective of serving humanity by combating pediatric cancer nationally and internationally with medical care, research, and support services. Mahak is a non-profit, non-governmental, non-political charity, dependent solely on public support provided in the form of funds, goods, services, and technical expertise.

Mahak provides comprehensive services to children with cancer and their families, offering the most advanced and appropriate treatment services. While complying with the International Charter of Patients' Rights, the charity employs up-to-date scientific advances and has set up a new research group to help identify the causes of childhood cancer and its preferred diagnostic and prevention methods.

In contributing to the decrease in pediatric cancer rates in Iran, Mahak has adopted a unique approach by investing in awareness-raising and prevention education. Intending to make appropriate use of human resources, volunteers and staff work in close cooperation to ensure that humanitarian aims meet the highest standards. Access to the latest technology helps to develop critical capabilities further. By addressing pediatric cancer in this way, Mahak embraces the ideal of assisting fellow human beings. Also, transparency, recognition, and accountability are the most valued principles of Mahak.

Mahak is a multi-disciplinary charity with one of the most significant specialized hospitals in the Middle East. Moreover, its commitment to and transparency in providing comprehensive services under one roof under international policies and procedures, makes it the most reliable organization for individual and organizational benefactors who believe in the ideal utilization of scarce resources as measured.

Mahak believes that parents should have no other concern than the rehabilitation of their children and the charity also assumes that with the parents present, the children will pass the care processes more efficiently, with more optimism. Thus, both children and parents can shift their attention from living or not living to a focus on the lives they will lead in the future.

Mahak ensures that all children with cancer and their families receive adequate and coordinated care across the country. The charity provides new treatment facilities in line with national and international standards. By increasing education and awareness, a valid diagnosis is made at an early stage and support is provided from the first moment the diagnosis is made. Mahak seeks to provide the public with the latest information on cancer, using articles, resources, and guidelines and expanding its collaboration with national and international medical research centers. Furthermore, it uses the most effective methods of cancer treatment, thereby reducing the rate of pediatric cancer.

The author will demonstrate Mahak charity in brief by presenting table 6 below:

Table 6: Mahak charity in brief (Author`s elaboration)

CEO	Mr. Arasb Ahmadian
Type of NGO	Support children with cancer
Employees	421 staff, 260 Mahak hospital staff
Revenue	Fundraising by donors and people
Funder	Saideh Ghods in 1991

(Source: mahak-charity.org, 2019)

#### 4.2.1 Primary data from Mahak

##### How to produce affordable goods and services

When asked about the services of Mahak to children with cancer in Iran, several interviewees (IP 3, IP 5, and IP 7) started talking about their charity services and how they provide their services to the children with cancer and their families. IP 3 and IP 5 stated that Mahak considers an exclusive supportive percentage for every patient. However, last year, this favorable percentage was more than 95% for every child with cancer, which means it is the negligible amount that Mahak charity does not take charge for treatment costs. Cancer treatment is a prohibitively expensive process; hence, they believe this group of families should not lose their self-esteem because of cancer treatment costs. IP 5 stated that the charity follows a reasonable objective for this negligible percentage because they want to share all of the stages of treatment with families who have a child with cancer; they take more responsibility in this process. “Psychologists believe that when the parents do not participate in the treatment process of their children with cancer, they do not realize the importance of medicines and treatment processes or medical advice.”

Also, IP 3 added, cancer has negative impacts on children and their families’ lives. Hence, the Mahak charity has supports and services for families who have a child with cancer because sometimes, cancer has a devastating impact on members of the family. For instance, the father, as the head of the family, might have to change his job or work more hours to afford to pay for treatment costs. In this regard, Mahak covers these families’ expenses, including foods, clothing, and a percentage of their home rent.

Moreover, IP 5 mentioned that in some cases, the charity covers 100% of treatment costs because these days in Iran, the economic condition is not stable and children’s parents are unemployed. Thus, Mahak takes responsibility for treatment costs, but if parents of patients are able to pay expenses, this supportive percentage will reduce.

IP 7, on the other, stated that cancer is a disease that needs a long time for the treatment process even it is possible some parents to pay treatment costs for the first year, but for longer terms such as two to five years, they need financial support. Therefore, the Mahak charity supports all of the children with cancer and their families even after the treatment process. For example, if a person goes to school or university, but his or her parents are not able to pay the college or university tuition fees, Mahak will cover all of those expenses.

When asked about novel ideas, several participants (IP 4, IP 6, and IP 7) agreed that these days, the number of NGOs increases more and more in one area. However, if all of the NGOs joined a bigger one to contribute to all of the processes of helping, it could be more useful for services to patients or people in need. For example, In Tehran, they have some NGOs which support children with cancer; if they joined the Mahak charity like a union, they could concentrate on the main objective as well as give extra services to children with cancer and their families. Also, IP 6 added, if some NGOs work together in the form of unions or if they merge, they can be more productive and successful in their field of activity. This is because NGOs can share their experience and concentrate more on their objective for better service to patients or people in need.

Moreover, IP 4 stated, she had meetings with many NGOs in which they were referred to Mahak for its experience and knowledge because they wanted to find the best solutions for facilitating their services to people in need. These NGOs must focus on their objectives; this means that with this process, 80% is concentration on purpose and 20% is on the operation. They should know what they want, what they want to do, and before any action, these NGOs need to be assessed for better functioning. Hence, these NGOs do not start their activities with emotions since it will be only for a short time, and after a while, because of a lack of any remarkable achievement, they get disappointed. In this regard, IP 6 added that Mahak stakeholders and staff are part of Iranian society and they deal with the patients' problems. Mahak dedicates a different budget for children with cancer in three conditions such as regular times, critical situations, and emergency cases. That means the charity can analyze positions of children with cancer and their families to get ready to provide the best services to patients.

Lastly, IP 6 mentioned that these days all modern organizations and NGOs have continuous evaluation systems for their operations and the Mahak charity is no exception. Thus, Mahak set up this system for the evaluation of external and internal factors that have a direct impact on its process. Moreover, Mahak can invest more in their innovation and development department because they need novel ideas for better services for children with cancer and their families.

When asked about how people linked to the Mahak charity, several interviewees (IP 3, IP 5, and IP 7) had the same response. IP 5 stated that Mahak has defined a statement in its vision and mission that no child with cancer throughout Iran should lose his or her life because of poverty and inadequate access to health care. However, in practice, that cancer can lead to

death in some people, and some people are saved from cancer, but death should not be due to poverty and the deprivation of treatment. Therefore, Mahak has to be well informed and present in society, so that children with cancer can be quickly diagnosed and begin their treatment. Under this policy, one of the Mahak activities since its inception has been the systematic and widespread presence of volunteers and staff members in hospitals.

IP 7 stated that the main sites for diagnosing cancer are the departments of blood and child oncology in hospitals all over the country. “These hospitals are including all private hospitals, state hospitals, as well as universities of medical sciences.” Mahak assistants and volunteers are present in the departments of blood and child oncology in these hospitals, where they introduce these patients to the charity. Also, Mahak has direct connections with hospital staff such as doctors, nurses, and experts, in which all of those communications facilitate services. IP 7 added that in Iran they have volunteers in 39 hospitals and universities of medical sciences in children’s blood and oncology divisions. When patients refer to these healthcare centers for cancer treatment, most of them have a financial problem. “Mahak charity supports all of the children with cancer who have financial problems or not.” Nurses who work in these hospitals add all of the patients to the Mahak charity. Thus, nurses and volunteers are like a communication bridge between hospitals and Mahak charity support services.

When asked about how many hospitals and health care centers Mahak developed that are under their supervision, IP 3 gave a comprehensive answer about Mahak’s hospital history and services. She stated that the charity has only one hospital; it is a pediatric cancer research and hospital center established and organized by the charity. The 120-bedroom complex was designed for its workers to concentrate on the treatment and rehabilitation of children and provide support to their families during treatment.

When established, Mahak was only a small charity managed by founders and volunteers for helping children with cancer. Documentaries in the Mahak archive explain that the founder’s biggest wishes were to build and establish excellent healthcare service in an equipped hospital.

In the 1990s, Mahak stakeholders and volunteers thought they should establish a residence for the accommodation of children with cancer and their families who come to Tehran, the capital of Iran, from other big and small cities. Hence, they bought land with 4,000 square meters in Darabad, Tehran, and they built a residence for patients and their families. However, a few years later, they got familiar with an Iranian donor who had built some schools for students in Iran’s deprived area. The donor’s spouse was under treatment because of cancer and she asked

her husband to establish a specialized hospital for patients with cancer in Iran. Therefore, they came to Iran from France for an investigation about NGOs and organizations that supported patients with cancer. They founded Mahak as a pioneer NGO that supports children with cancer. Hence, this donor paid all of the costs for establishing a subspecialty hospital for children with cancer and for a single residence for patients and their families. It changed to a subspecialty hospital with equipped homes and expanded from 4,000 to 18,000 square meters. It was established in 2007 with donor funds for supporting children with cancer. IP 5 added that during these years, they accepted many children with cancer for treatment as well as many personnel, such as qualified pediatricians, nurses, or volunteers, who started their work in Mahak hospital today. Moreover, in Iranian hospitals and universities of medical sciences, they have only 500-bedroom facilities for children in the blood and oncology units; more than one-fifth of this capacity is available in Mahak Hospital.

Regarding Mahak charity as the most significant Iranian NGO, participants were asked about Mahak's collaboration with governmental bodies and other internal and international NGOs. All participants highlighted the charity's international standpoints. IP 4 stated that Mahak has always sought to function following international standards and has always been prone to having various aspects of its performance audited by international organizations that assign standards worldwide.

Therefore, they can speak about Mahak's global achievements such as holding the first rank in the world by Société Générale de Surveillance (SGS) NGO Benchmarking Audit in 2018 and being the recipient of the "Top Ten Award International Network" Gold Award in 2017. Additional achievements include collaborations such as educational cooperation with Relief International since 2016 and holding consultative status with the United Nations Economic and Social Council (ECOSOC) in 2001. The charity has been a member of the United Nations Global Compact since 2016 and the Union for International Cancer Control (UICC) since 2008; it has been a part of joint projects with international institutes such as the Institute Gustavo Rouse.

Moreover, IP 6 mentioned that Mahak has bilateral relationships with governmental organizations such as the Ministry of Health because they need to gain licenses for Mahak charity activities and permission for public welfare services. IP 7 added that Mahak is a member of the Iranian Cancer Association (ICA) and the CEO of Mahak received a 'quality' award from fifth national festival for commending 'Quality' achievers. The Mahak defined some tasks

in its mission, such as empowering other NGOs. For instance, Mahak helped two NGOs in Isfahan and Mashhad establish their charity and Mahak shared its experience with these young NGOs that enabled them to provide better services to patients with cancer. Furthermore, the charity helped Kurdistan Save the Children (KSC) in a project to launch the ARA sector for children with cancer. This project was quite successful.

Lastly, IP 6 added, Mahak works based on international standards because they have relationships with international organizations such as the UN and they are required to exchange information and share other NGOs' experience.

### How to initiate social empowerment

When asked about the role of social empowerment in inclusive innovation, all interviewees start talking about the involvement of local people as well as the partnership between NGOs and the organizations. Moreover, participants described how the Mahak charity empowers local people and organizations. IP 5 stated that Mahak empowers patients in different ways; one is related to the patient's life skills and another is rehabilitation. The patients' life skills include education and sports; they support children by paying their university tuition fees after the cancer treatment process so that they can continue their education. When they are interested in any field of sports the charity helps them to gain a valuable certificate or become a professional athlete.

After the cancer treatment process patients may have some physical and mental problems. Therefore, the Mahak charity helps them with psychological assistance or sends them to rehabilitation centers to regain their abilities. Hence, Mahak's services to children with cancer and their families go beyond cancer treatment as they support children economically and socially. IP 3 gave an example regarding this issue and added that, the Mahak charity increases the quality of life for children in several ways. For instance, they offer play therapy, occupational therapy, music therapy, and counseling practices to address the continual follow-up needs that exist even after improvements in patients' health. When a child is one member of the Mahak community, the charity is committed to him or her.

Lastly, IP 7 argued that at Mahak charity utilize some families' experiences who had children with cancer as voluntary groups. These groups help patients and their families during the cancer treatment process. Mahak volunteers teach these families how they should assist Mahak during the cancer treatment process, or ways to possibly increase life expectancy among children with

cancer and their families. Therefore, this empowerment is related to improving the quality of life for these patients and motivating them to fight cancer.

Participants were asked to mention how organizations or entities work under Mahak; they agreed Mahak does not have any branches. IP 5 stated that Mahak empowers other NGOs and organizations. For example, it has close cooperation with other Iranian NGOs in the Khorasan and Isfahan provinces. It works with the Taskin charity in Tabriz, in the East Azerbaijan Province. Mahak supports these NGOs by sharing charity experiences and giving recommendations. They implement all of Mahak charity's instructions for their services to children with cancer. However, they are independent charities and not branches of Mahak; they only utilize their experience and guidelines to facilitate their services. IP 7 added that many independent organizations and charities have a collaboration or bilateral relationship with Mahak in which they share knowledge and experience.

Participants were asked about the role of the local people in helping Mahak reach out to the children with cancer and their families. IP 3 stated that Mahak charity belongs to people and grew with people's support; that means that people made Mahak and have managed it. People play a critical role in the charity and they support it with their funds so they may continue services without interruption. Furthermore, Mahak survived and remained in adverse conditions such as the recession when other NGOs could not keep their services to people in need because of the shortage of financial resources. Hence, supporting children with cancer knows neither war nor sanctions nor peace; it must continue in all circumstances. However, IP 5 interestingly mentioned they increased our advertisements in public places and social media so that more people know about the importance of cancer treatment processes and services. Since the establishment of the charity, more than 32,000 children have been helped with all of their treatment expenses covered by other people.

When asked about the role of partnership between Mahak charity and other vital organizations, many of the interviewees (IP 4, IP 6, and IP 7) mentioned Mahak's close relationships with large firms and organizations. IP 4 stated that Mahak cooperates with some international organizations such as ISBC in the USA; IKKH in Germany; and Omid in Canada. These organizations help Mahak with fundraising. However, Mahak does not have permanent sponsorships; different companies have been involved over the years. Many companies have collaborated with Mahak within the framework of their corporate social responsibility (CSR) project. Sometimes Mahak asks them for support; sometimes those companies do it voluntarily.

For instance, a couple of years ago, they set a contract worth 200,000 euros with Bahman Motor Company to establish a stem cell bank in Mahak Hospital.

IP 6 and IP 7 stated that many local and international companies support Mahak charity for funding; these include Kalleh (Iranian dairy, food and drink company), Samsung, and Nestle. Many companies help and support Mahak charity voluntary or in the frame of their CRS projects, but these companies do not want their names to disclose.

Also, IP 6 mentioned Mahak achievements that it earned due to collaboration with international NGOs and organizations. For instance, in 2007, Mahak won the SGS NGO benchmarking, which was the first NGO in the Middle East to do so. Besides, Ms. Saideh Ghods, Mahak's founder, won awards from the International Development Bank (IDB) and the United Nations Women's Guild (UNWG) to purchase hospital equipment for women's contributions to development during 2008 and 2009. The achievements of Mahak were not limited to these previously mentioned awards: Mahak also won the Global Industry Classification (GIC) standard in 2011. The charity cooperated with international organizations and institutes for experiments and exchanging information regarding childhood cancer. Two of these organizations were the Union for International Cancer Control (UICC) and St. Jude Children's Research Hospital.

### How to generate localization for the local communities

When asked about how Mahak generates localization for the local communities, all participants started talking about financial resources. IP 3 gave a comprehensive response and stated that are Mahak's financial resources are from donors and people's funds. "Whether in the form of individual or organization, in the way of real and legal, the only financial sources of Mahak people funds."

Furthermore, she stated that many of these resources for fundraising are in the form of CRS projects and sponsorship projects from firms and organizations. Also, some organizations dedicate their facilities to supporting Mahak. For example, an advertising company allows its billboards to be used for free. In some cases, this help is specialized support; for instance, some organizations share their knowledge and advisory groups with the charity.

IP 3 stressed practical ways that help Mahak with fundraising. She mentioned that the charity strives to provide the most straightforward and most accessible methods at any given time to donors. There are several subdivisions in the support units such as donation boxes, membership

units, income project units, and symbol units. “The symbol of sympathy is a banner to extend your condolences and congratulations to your loved ones and contribute to the cost of medicine and treatment for children with cancer.”

She added that Mahak is close to 32 offices throughout Tehran province; these offices collect donations from people. Sometimes the donations are non-cash items such as meat packs and foodstuffs. Mahak sells some products made by charity volunteers, such as calendars, bracelets, greeting cards, and handicrafts.

In this regard, a membership unit means that people are paid a fixed amount every month to help children with cancer; this membership is both individual and group. For example, a group of employees from an organization agreed that colleagues would pay Mahak 30 euros per month for up to one year. This kind of business membership brings sustainable and programmable revenue to the charity. Mahak has a big amphitheater and conference room which can be host concerts, exhibitions, and a variety of charitable schemes that benefits the charity because of the rent income from these halls.

IP 7 gave an example regarding this issue and added that Mahak does not receive funds from the government or specific organizations. Sometimes, however, private and state organizations like to help. For example, a state bank employee might dedicate a certain percentage of their salary per month for a specified period. Some firms and organizations help Mahak in the frame of their CSR projects; these companies include food companies and pharmaceutical companies.

IP 5 gave another example regarding this issue and mentioned that donors support Mahak hospital by their services and products, as, for instance, when one of the charity stakeholders made windows for the hospital.

When asked about how Mahak can educate local communities or patients and their families, many of the interviewees (IP 4, IP 6, and IP 7) started talking about how Mahak programs inform people. IP 6 stated the basic needs of people’s awareness in society and mentioned that most Iranians are emotional people, for whom talking about childhood cancer is like a taboo. However, after several years and comprehensive research in society, they could prove to people that cancer among children is a serious and significant problem. Mahak has many activities to break the taboo in the community by raising awareness in public centers, schools, universities, and even kindergartens.

Moreover, IP 4 stated that every two years, Mahak holds an international Congress of Blood and Child Oncology called Professor Vosough Congress in Iran. At this congress, experts in the field of blood and cancer come to Iran and share their knowledge and experience about the disease. Also, scientists share the latest medical protocols, so this is a unique opportunity for doctors and nurses to update their knowledge. It is one of the more significant congresses in the field of cancer.

IP 4 added that in the field of general hygiene, Mahak charity shares information about the symptoms of children's cancer and they do this under various pretexts. They share data on the Mahak website and Instagram account. At different conferences and via mass media they make announcements. At conferences, they invite all of Mahak's volunteers, specialists, and psychologists in hospitals, institutions, and universities of medical science to teach them how to treat with children with cancer and their families when diagnosing, recovering, or dying.

IP 7 stressed how Mahak's charity communication department attempts to inform people about children with cancer. She mentioned that Mahak has fixed programs for events because, through these events, the charity can introduce its services to people and donors as well as fundraise. Mahak is continuously attempting to perform a proactive role in organizing national and international cancer conferences, seminars, and symposiums to share its knowledge, achievements, and experiences in the fields of research regarding treatments of all types of cancer affecting children. For instance, the first international and the third national congress on support services and NGOs focusing on psychological-social work interventions was held at the Mahak charity. Also, this congress was attended by managers, social workers, psychologists, psycho-oncologists, specialists, university professors, researchers, students, and those interested in the topic of supporting services.

When asked how Mahak can perform an orchestrating role in Iran, a country that lacks an existing innovation structure, all participants shared common ground regarding this matter: They all talked about the systematic approach that helps Mahak achieve its objectives.

In this regard, IP 4 stated that charities in Iran were quite traditional rather than systematic; Mahak was itself a charity that shifted from the conventional system in an orderly, strategic, and modern way. After Mahak established a hospital, its leaders realized that it could not run a hospital in the traditional manner.

She also added that traditionally, charities advertise, receive help, and turn donations into services or deliver services to people in need. However, with the systematic approach, the issue

begins elsewhere, namely with a needs assessment. In the first step, the organization or charity reviews the target group's needs. That means it does not deliver any help or services that come to the target group, though the charity's objective is to provide these services for that target group. Hence, it requires assessment, planning according to target group needs, and, based on regular planning and NGO indoor facilities, running the projects for helping and providing better services to people in need. The most significant advantage of the systematic method is that value is added for organizations and it saves time and energy.

In this respect, IP 6 and IP 7 had the same point of view; they mentioned that Mahak charity began to expand its organizational dimensions and due to the volume of its activities, it needed to establish several infrastructures and systems. Mahak utilized skilled consultants and models but all of the patterns had been optimized for businesses, not charities. Therefore, 15 years ago, its leaders began to study the systems, namely global trends, made those patterns indigenous, and created models for itself.

IP 7 added that Mahak has continuous monitoring units, such as the R&D unit and the international relations unit. Mahak charity experts maintain their relationships with organizations outside Iran, update their knowledge to grow their ideas, and utilize other novel ideas but not copy them (since it is opposed to Mahak's regulations). Thus, the Mahak charity experts foster novel ideas and make those patterns indigenous for itself.

### External barriers to inclusive innovation

When asked about the external barriers that the charity faces in Iran, all participants started talking about the constraints that come from the external environment. They mentioned these barriers on a case-by-case basis because some were confidential. IP 6 stated that Mahak dedicates a different budget for children with cancer in three conditions such as regular times, critical situations, and emergency cases. The greatest challenges for Mahak are to improve the efficiency of charity staff and department hires; to evaluate promotions; and to assess applicants for different positions that are offered, following their skills and capabilities.

IP 4 talked about the high costs of advertising in mass media that could help Mahak with fundraising. She added that Mahak is using traditional and modern methods to inform people about events and charity markets; these include such as sending an email, sending newsletters, and sending text messages.

Lastly, IP 4 stated that one of the most critical factors that can develop Mahak charity is consideration of its prospects for the future. That means they should not be satisfied with the current position but rather work to gradually improve their operations based on global standardization. This was the concern of Mahak founders and staff 28 years ago; the new generation of volunteers and staff must pick up this attitude.

### Internal barriers to inclusive innovation

When asked about the external barriers that Mahak charity faces in Iran, all participants started talking about the obstacles that come from sanctions. IP 4 stated that external barriers have direct impacts on the charity's performance. These barriers include fluctuations in exchange rates because of inflation and the recession in Iran. Hence, they require more funds for supplying medical equipment and medical costs. Furthermore, because of political issues due to cruelty sanctions, they have limitations for financial transactions. While the charity gains some funds from donors abroad due to these reasons, they must spend more time and energy transferring money.

IP 6 added that the lack of medicine is one of the main concerns during a patient's treatment processes. Children with cancer need specific attention in each stage of treatment because their body is weak and sensitive to pain and chemotherapy. Thus, they require medicine in all of the steps of cancer treatment processes; otherwise, treatment will not be successful. Sanctions are the main reason for the lack of medicine and sometimes there are problems with transferring money. Other times there are limitations on importing medicines. However, attempts are made to provide for patients' needs in any condition and up to now, Mahak has been successful in giving the best services to children with cancer.

Participants were asked about human resources barriers Mahak faces when providing services. IP 6 stated that Mahak is not just a simple NGO because they have a specialty hospital for children with cancer, and this hospital has different units. Also, More than 400 people work in the Mahak hospital with various specialties such as psychologists, social workers, oncologists, radiotherapists, and nurses who take training courses each month throughout the year. Furthermore, they send some of the staff and managers to international congresses and conferences to keep their knowledge up to date.

She added that Mahak invites professors to share their knowledge and experience to facilitate services to patients. This is because education and training are among the top concerns for

Mahak and they evaluate all personnel based on their coursework and the knowledge they have to have for work in their respective fields.

IP 4 stressed that everyone hired at Mahak is trained on how to communicate with other staff and clients. Mahak has an independent organizational policy to promote staff culture. For ease of communication in the hierarchy of the charity, Mahak uses special codes for faster connections. Hence, employees gain the needed training to use communication codes (code of ethics) and organizational culture.

In this regard, she commented, “These pieces of training include Mahak charity fundamental values such as transparency, accountability, aesthetics, and gratitude, which all of these values facilitate our services to patients as well as increase mutual trust between Mahak and children with cancer and their families.”

Lastly, IP 7 clearly stated that in Mahak, the department of human resources is responsible for attracting, training, and mentoring human capital in line with the latest scientific findings. This has been the case since 2008. Mahak minds its employees as human capital, meaning that Mahak describes their potential and seeks to fulfill and enhance their full potential. Precisely at this point is the remarkable difference between the role of the human resource department and other administrative departments.

#### 4.2.2 Empirical summary from Mahak

*In this section, table 7 offers an insight full empirical summary from Mahak NGO. These empirical summary are based on secondary data from the literature review as well as primary data provided by interviews from Mahak NGO.*

Table 7: Mahak’s primary data summary

Concept	Concept definition	Operationalization definition	Measure and Question numbers(Q)	Primary data from Payam Omid
How to produce affordable goods and services	Affordability is a result of Bricolage, Novel ideas and linkages between organizations.	These notions aim to help the author understand how NGOs make goods affordable.	1) Bricolage (Anderson and Markides, 2007). Q6 2) Novel ideas (Bhatti, 2012). Q20, Q21 3) Linkages (Bradley, 2012; Acosta, 2011;	1) Exclusive supportive percentage 2) NGOs in a same field work in a union or merge together, planning for dedicating budget in different condition, NGOs

			Rahman 2002). Q5, Q9, Q12	use their capability for marketing, continuous evaluation system 3) The presence of Mahak volunteers in hospitals
How to initiate social empowerment	Empowerment is better done through partnership and involvement of the local people	These notions aim to help the author how the NGOs gain social empowerment.	1) Involvement of local people (Heeks, 2014; Bradley, 2012; Ansari, 2012). Q7, Q8, Q10 2) Partnership between NGOs and key organizations (Nahi, 2018; Halme, 2016; Hahn, 2014; Reficco, 2012; Dahan, 2010; Webb, 2009; Seelos, 2007). Q11, Q12	1) Cooperation with NGOs in other cities, keep the children in routine life, teaching life skills, advertisements for children with cancer in public places 2) The holding of a series of training lectures, conferences, and congresses, utilize traditionally and systematic approaches for helping target groups, used skilled consultants, establish and expanding R&D unit.
How to generate localization for the local communities	Localization can be generated through financial capital, education and inclusive embeddedness	These notions aim to help the author gain understanding on how NGOs gain localization.	1) Financial capital (Bradley et al., 2012; Bradley, 2012; Eisenhardt, 1996). Q4 2) Education (George, 2012; Sachs, 2005). Q14, Q15, Q16 3) Inclusive embeddedness (Bradley, 2012). Q4	1) Donors, sponsors, charity markets, donation boxes 2) Cancer symptoms of cancer in brochures, entertainment facilities for children in Mahak hospital, special game rooms with social workers or psychologists for better support, particular workshops for parents 3) local people can help with donations
External barriers to	External barriers for innovation	These notions aim to measure and	1) Institutional constraints	1) Analyze charity positions in

inclusive innovation	revolve around, institutional constraints, organizational culture, information flow, high economic risk and lack of infrastructure	understand the external barriers that NGOs' face.	(Swaans et al., 2014). Q19, Q21 2) Organizational culture (Talegeta, 2014; Silva, 2008). Q19, Q21 3) Information flow (Talegeta, 2014; Silva, 2008; Baldwin, 2002). Q3, Q19, Q21 4) High economic risk Talegeta, 2014; Silva, 2008; Baldwin, 2002). Q19, Q21 5) Lack of infrastructure (George et al., 2012). Q18	different circumstance 2) ----- 3) High cost of advertising, introducing charity activities and services to target groups by social media, sending email, newsletters, text messaging for fundraising. 4) Continuous assessment of internal and external factors 5) Improve Mahak operation based on global standardization, social issues like patient's family problems
Internal barriers to inclusive innovation	Financial resources and human resources are may be seen as internal barriers for NGOs	These notions aim to understand what external barriers does NGOs' face.	1) Financial resources (Demirkan, 2018; George et al., 2012; Hoegl, 2008; Wischnevsky, 2005; Chakrabarti, 2002; Peteraf, 1993). Q17 2) Human resources	1) lack of medicines, financial transfers, fluctuations in exchange rates 2) Lack of skilled personnel and volunteers

## 5 Analysis and discussion

*In this chapter, the analysis and discussion section of this thesis will be provided. The analysis summary table (Table 8) offers an insight full summary of the findings from Mahak and Payam Omid NGO. In table 8, I shall explain the linkages between the literature (Secondary data) and the interview data (Primary data) offering the readers a brief way of comparing the findings from each case supplemented with the theoretical background.*

Concerning affordability, from the literature it was seen that concepts such as Bricolage (Bhatti, 2012), novel ideas (Anderson and Markides, 2007) and efficient linkages between organizations (Bradley, 2012; Acosta, 2011; Rahman 2002) are tools that can help companies or other organizations to gain affordability in the market. These notions from the literature are similar to the interview findings. Regarding bricolage, Payam Omid offers supportive packages (Including training programs and part of the educational costs for the children) as well as offering financial loans to their clients. However, Mahak only offers supportive packages (Which includes, free health care, medical costs, supporting the family members through therapy). Novel ideas in the NGOs help significantly with both Mahak and Omid Iran. For instance, Omid Iran puts efforts into expanding its relationship with the Iranian communities living abroad (Sending Financial aids). Moreover, transparency as the main factor help to charity gains the trust of the donors, efficient teamwork with the employees (Sharing knowledge and experience to divide the tasks more effectively), finding ways to convince companies such as large and medium firms both locals and internationals. Lastly, finding compatibility to work with other NGOs and partners in emergencies (Such as earthquake and flooding). Mahak, on the other side, aims to work with other NGOs in the same field through by becoming united, finding ways always to have funds for different emergency conditions (If the economy of the country is facing a meltdown, or if the patient requires international travel for treatment). Also, charities can use their best capability for marketing and always evaluating their performance failures to improve themselves.

Concerning linkages, Payam Omid sees the role of linkages through two significant ways: 1: the word of mouth (When other people in the community know about a person's illness, and they inform the NGOs on their behalf), 2: Other charities (Other NGOs) linking client to each other (If a charity sees that a client they have can be gaining benefit from other charities, the first charity will direct its client to the second charity). However, Mahak takes advantage of

the linkage concept by having representative volunteers in several hospitals to identify the people in need of their services.

Social empowerment has been cited in the literature, and several tools were provided for enhancing the social empowerment of the poor communities. Involvement of local people (Heeks, 2014; Bradley, 2012; Ansari, 2012) and partnership between NGOs and critical organizations (Nahi, 2018; Halme, 2016; Hahn, 2014; Reficco, 2012; Dahan, 2010; Webb, 2009; Seelos, 2007) are vital tools that can be used by NGOs to increase social empowerment. Payam Omid relies mostly on offering educational programs and workshops to the needy communities. Also, to save transportation costs and provide more social empowerment, Payam Omid tends to use local people as a workforce in every city or rural area they operate in rather than communizing with workers from the capital. Similarly, Mahak tends to focus on educating the kids with life skills after the treatment phase and also offering educational training to other NGOs so that they can help more effectively. Moreover, Mahak uses a unique advertising skill to spread the word on kid's cancer and educate local people through their different outlets (I.e., TV, website, social media).

Regarding the partnership with other entities, Omid Iran works with other NGOs to find creative ways to expand its fundraising and also improving their idea generation. Besides, they work with other MNEs and local companies to support their services even more. Likewise, Mahak has collaboration with other international NGOs, plus they work closely with MNEs and large companies in the CSR programs they have. Also, they offer a wide range of conferences, lectures, and training programs to educate the people.

Localization in the literature is made through sufficient financial capital (Bradley et al., 2012; Bradley, 2012; Eisenhardt, 1996), education (George, 2012; Sachs, 2005), Inclusive embeddedness (Bradley, 2012). Regarding financial capital, Both Mahak and Payam Omid rely mostly on Donors, sponsors, charity markets, and donation boxes. Education is also tremendously helpful for Payam Omid as they carry intensive courses for their hired staff. Mahak educated people on the symptoms through brochures, workshops for parents as well as training their staff.

Both NGOs also support inclusive embeddedness. Payam Omid and Mahak rely on using the local people for their services as much as possible. For instance, local people can help with a donation, voluntary services, and spreading word of mouth.

External barriers are categorized by the literature in the following order: Institutional constraints (Swaans et al., 2014), Organizational culture (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002), Information flow (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002), High economic risk (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002), Lack of infrastructure (George et al., 2012). Both NGOs faced several external barriers. Payam Omid had the following external barriers, lack of a prepare payment system from abroad to Iran due to sanction, cultural barriers (Not every type of celebration when organizing charity markets is accepted in the culture of Iran.). Lack of effective advertisement in social media, finding more donors, and large firms for fundraising, little support from the middle-class of society because of rescission, getting the license for charity markets. On the other side, Mahak talks about the lack of finding more effective internal strategies to the uncertain economy; no cultural barriers were seen. Furthermore, the high cost of advertising, facing challenges to cope with the international standards as Mahak, a fully licensed NGO, and family issues of the potions can be problematic for Mahak.

Lastly, in regards to internal barriers literature refers to two main issues one being financial issues within the organization (i.e. Lack of sufficient funds) Demirkan, 2018; George et al., 2012; Savignac, 2008; Hoegl, 2008; Wischnevsky, 2005; Chakrabarti, 2002; Peteraf, 1993) and the compatibility of the right human resources in the organization (Swaans et al., 2014; Dutz, 2007). Both Mahak and Payam Omid face both of these challenges but in slightly different angles. Payam Omid fails to gain permanent donors to keep the funds up and running all the time. Also, Mahak sees sanctions as a barrier because they have some problems with receiving international funds. Mahak also talks about the shortage of medicine in the market and high exchange rates due to the economic recession. Both Mahak and Payam Omid have internal human resource problems. Both NGOs find it challenging to find skilled personal while, but Payam Omid also has shortages of volunteer forces.

Table 8: Table of analysis

Concept	Concept definition	Operationalization definition	Measure and Question numbers(Q)	Primary data from Payam Omid	Primary data from Mahak
How to produce affordable goods and services	Affordability is a result of Bricolage, Novel ideas and linkages between organizations.	These notions aim to help the author understand how NGOs make goods affordable.	1) Bricolage (Anderson and Markides, 2007). Q6 2) Novel ideas (Bhatti, 2012). Q20, Q21 3) Linkages (Bradley, 2012; Acosta, 2011; Rahman 2002). Q5, Q9, Q12	1) Supportive package and giving loan 2) Expending international relationships, transparency in NGOs operations, dynamic and flexible charity, team works, convince large organizations for funding 3) The word of mouth, other charities (Other NGOs) linking client to each other	1) Exclusive supportive percentage 2) NGOs in a same field work in a union or merge together, planning for dedicating budget in different condition, NGOs use their capability for marketing, continuous evaluation system 3) The presence of Mahak volunteers in hospitals
How to initiate social empowerment	Empowerment is better done through partnership and involvement of the local people	These notions aim to help the author how the NGOs gain social empowerment.	1) Involvement of local people (Heeks, 2014; Bradley, 2012; Ansari, 2012). Q7, Q8, Q10 2) Partnership between NGOs and key organizations (Nahi, 2018; Halme, 2016; Hahn, 2014; Reficco, 2012; Dahan, 2010; Webb, 2009; Seelos, 2007). Q11, Q12	1) Charity educational programs and workshops to the needy communities 2) Use local people as a work force in every city or rural area they operate in rather than communizing with workers from the capital	1) Cooperation with NGOs in other cities, keep the children in routine life, teaching life skills, advertisements for children with cancer in public places 2) The holding of a series of training lectures, conferences, and congresses, utilize traditionally and systematic approaches for helping target groups, used skilled

					consultants, establish and expanding R&D unit.
How to generate localization for the local communities	Localization can be generated through financial capital, education and inclusive embeddedness	These notions aim to help the author gain understanding on how NGOs gain localization.	1) Financial capital (Bradley et al., 2012; Bradley, 2012; Eisenhardt, 1996). Q4 2) Education (George, 2012; Sachs, 2005). Q14, Q15, Q16 3) Inclusive embeddedness (Bradley, 2012). Q4	1) Donors, sponsors, charity markets, and donation boxes 2) Regular workshops for staff and volunteers, behavioral workshops, human resources workshops, psychology workshops, 3) voluntary services and spreading the word of the mouth	1) Donors, sponsors, charity markets, donation boxes 2) Cancer symptoms of cancer in brochures, entertainment facilities for children in Mahak hospital, special game rooms with social workers or psychologists for better support, particular workshops for parents 3) local people can help with donations
External barriers to inclusive innovation	External barriers for innovation revolve around, institutional constraints, organizational culture, information flow, high economic risk and lack of infrastructure	These notions aim to measure and understand the external barriers that NGOs' face.	1) Institutional constraints (Swaans et al., 2014). Q19, Q21 2) Organizational culture (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q19, Q21 3) Information flow (Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q3, Q19, Q21 4) High economic risk	1) International relationships for foreign donors, lack of a prepare payment system from abroad 2) Cultural barriers for holding charity markets 3) Lack of effective advertisement in social media 4) Finding more donors and large firms for fundraising 5) Few supports from the middle-class of	1) Analyze charity positions ion different circumstance 2) ----- 3) High cost of advertising, introducing charity activities and services to target groups by social media, sending email, newsletters, text messaging for fundraising. 4) Continuous assessment of internal and external factors

			Talegeta, 2014; Silva, 2008; Mohnen, 2005; Baldwin, 2002). Q19, Q21 5) Lack of infrastructure (George et al., 2012). Q18	society because of rescission, getting the license for charity markets	5) Improve Mahak operation based on global standardization, social issues like patient's family problems
Internal barriers to inclusive innovation	Financial resources and human resources are may be seen as internal barriers for NGOs	These notions aim to understand what external barriers does NGOs' face.	1) Financial resources (Demirkan, 2018; George et al., 2012; Savignac, 2008; Hoegl, 2008; Wischnevsky, 2005; Chakrabarti, 2002; Peteraf, 1993). Q17 2) Human resources (Swaans et al., 2014; Dutz, 2007). Q17	1) Failed to make sponsors as a permanent partnership 2) Lack of management knowledge, human resources such as lack of volunteers' forces	1) lack of medicines, financial transfers, fluctuations in exchange rates 2) Skilled personnel and volunteers

## 6 Conclusion and implications

*In this final section, the author will give the final concluding remarks. By offering the final key outcomes and highlighting some of the important findings of this thesis reflecting upon our primary data and secondary data. Also, I shall offer a brief theoretical contribution followed by managerial implications and future research.*

### 6.1 Answering the research questions

As was stated earlier in this study, the objective of this thesis is to identify the process of inclusive innovation from NGO's perspective in developing countries such as Iran and how they overcome these barriers. In order to carry out this study, the author used large Iranian NGOs and investigated their services procedures to poor communities and children with cancer, as this was a new and convenient context for the author. Moreover, since this thesis was based on only two cases (two large Iranian NGOs, Mahak and Payam Omid), it is not possible to generalize the results since the sample of the study is too little. However, the findings give indications and insights.

*Note: the author will only figure out the process and barriers affecting NGOs while providing services to poor communities and patients in Iran. (For all the barriers and barriers the readers can also refer table8)*

#### *1. What is the process of inclusive innovation, from NGOs' perspectives?*

Reflecting on the first research questions, which was also formed, it was evident that inclusive innovation is a process that consists of affordability, empowerment, localization, and overcoming external and internal barriers (As explained more in-depth in the analysis and discussion). Besides, several types of internal and external barriers were found for the NGOs, which was described and labeled clearly in the analysis. Generally, it can be seen that the barriers of innovation are part of the process of inclusive innovation, and the NGO will always face these challenges. For a Mahak and Payam omid to gain Inclusive innovation and offer

inclusion, they had first to find ways to deliver affordability for their clients so that they can use their services. Both NGOs offered support packages so that people can use their services affordably. Empowerment and localization were mostly achieved through educational programs, hiring locals, and treating the needy people. External and internal barriers are mainly concerning the uncertain economy of Iran and legal challenges as well as lack of sufficient skill among the employers of the NGOs.

## *2. How do NGOs overcome constraints on inclusive innovation?*

In order to NGOs overcome the inclusive innovation constraints associated with have several operational solutions for each barrier. In order to address the barriers the NGOs (two NGOs for this thesis) imply the following:

- **Political and legal barriers:** Working with flexibility through the local communities and establishing close relationships with the partners. Furthermore, following the following international foreign relations and regulations and educating the staff regarding Iran are essential measures for these barriers.
- **Uncertainty barrier:** Establish close relationships with the government sector and following.
- **Financial transaction:** No fixed solution (Iranian NGOs can create channels with International NGOs, especially with humanitarians organizations for financial transactions).
- **Information exchange barriers:** NGOs can make a joint database because they have collaboration with governmental organizations continuously. Also, a joint database can facilitate their services to poor communities or patients since they are able to share their experience and knowledge wit, together easier and faster.
- **Empowering organizations barriers:** NGOs tries to get more flexible in services to people who need help in any condition or set plan for the future and analyze any situation that will happen.
- **Knowledge barriers:** Focusing on local partners and informing staff through trainee programs and CSR courses.

- **Fundraising from abroad:** NGOs can change the recession challenges as an opportunity since many Iranians live in abroad. Therefore, with currency exchange, funds will be a remarkable amount for compensating needed amount.

## 6.2 Theoretical contribution

This dissertation is based on several theories (literature review) to resolve the research questions identified in the first chapter of this research (abductive approach). Moreover, Remenyi and Williams (1998) are in support of that, contribution to literature can be accomplished by expanding our ability to understand phenomena, introducing new ways of smearing present science or theories, refusing to accept inappropriate theories, and providing unifying enlightenment for events and circumstances.

In order to illustrate how this dissertation will contribute to science, the author will argue the main theories that have been appropriate for this study and those that have not been relevant to this context to fill the research gap. Furthermore, the author will attempt to offer some suggestions for future modifications to some theories based on the results of this report.

This thesis also has several theoretical contributions. Firstly, we develop a conceptual model with the help of secondary data and added primary data to the model, which was shown in the analysis table. Secondly, we used the theoretical notions from the literature review section to gain the right form of primary data, but we also added to the literature from the primary data. This thesis has several ideas for future research to add more to the theoretical contribution. Researchers and challenge the theoretical notions of secondary data and use other purposes and make new conceptual models. Also, they can look into specific areas more in-depth rather than a holistic view. For instance, they do more research to understand how the NGOs can overcome the financial constraints or what mechanism can offer social empowerment. Future scholars can go more in detail in the qualitative method and study inclusive innovation with an inductive approach with grounded theory and also provide several propositions, which makes it even possible for quantitative researchers to advance this research area. Quantitative scholars can study this area and test theories and produce generalization.

### 6.3 Managerial implications

This thesis also has several managerial implications. The findings of this study can serve as a guideline for people interested in charity and NGO organization as it expands their vision on how they can operate in Iran. What kind of challenges there is to this work in Iran, and how they can offer aid to the local people more effectively? The notion of inclusive innovation itself can help practitioners to understand the critical role of innovation in supporting the local communities in need of aid and how to use companies as well as donors to gain financial stability.

- Establishing connections and networks are essential for financial transaction, seeking partners, and having a relationship with the government is useful. Mahak has close relations with the international NGOs and organizations and with the governmental sector, while Payam Omid, on the other hand, has close ties with the Iranians donors who live in abroad. Payam Omid should establish secure networks with the governmental sector. This recommendation can also go for Mahak as they are planning to provide better services for children with cancer.
- Payam Omid does not seek much help from consultants and local communities, and they can benefit from local consultants and skilled human resources to solve their issues for better fundraising. Furthermore, Mahak can invest more and develop its innovation department for getting novel ideas that facilitate its services to children with cancer and their families.
- It is essential to follow international foreign relations despite all of the legal restrictions in Iran; the financial transaction issues can also be fixed with the help of many humanitarian organizations and NGOs worldwide. Particularly for Mahak because it is an international NGO and providing many medical services to children with cancer.
- Iranian NGOs can make a joint database because they can share their experience and knowledge more comfortable and faster. Furthermore, they are connected to an integrated local system that provides better services for poor communities or patients who need extra services.

## 6.4 Limitations

Although every measure has been taken to minimize the weaknesses and risks associated with this dissertation, no study is perfect, and this is no exception. Hence, the author will provide some limitations that have arisen in this research to readers and future researchers. Time and financial issues limited this study's broad outcome; some interviewees were living abroad, and the author could not travel to collect the data face-to-face. Besides, during this thesis, the author was unable to collect data from the same number of participants in each NGO as the time was limited for collecting data.

Lastly, due to a lack of time, it was not possible to produce a longitudinal qualitative case study thesis. Besides, it was not possible to convince more people to have access to interviews. It is recommended that researchers start to coordinate with the case organization a lot more in advance.

## 6.5 Suggestion for future research

This thesis aims to shed light on the existing research gap and problems faced by NGOs (in developing countries) when providing services to poor communities or patients also process inclusive innovation from NGOs' perspectives. Iran was chosen as an exciting context for studying these phenomena. Future research may analyze this context and generalize it in quantitative research because, due to the low number of cases, the researcher was not able to achieve generalization. Besides, future studies can also gather data from large and international NGOs and understand their challenges in providing services to local or deprived communities. Likewise, researchers may also coordinate a mixed (qualitative and quantitative) process analysis to take a comprehensive approach to the phenomena.

## References

- Acosta, P., Kim, N., Melzer, I., Mendoza, R.U. and Thelen, N., 2011. Business and human development in the base of the pyramid: Exploring challenges and opportunities with market heat maps. *Journal of World Business*, 46(1), pp.50-60.
- Ajakaiye, D.O. and Adeyeye, V.A., 2001. Concepts, measurement and causes of poverty. *Central Bank of Nigeria Economic and Financial Review*, 39(4), pp.8-44.
- Alexiev, A.S., Volberda, H.W. and Van den Bosch, F.A., 2016. Interorganizational collaboration and firm innovativeness: Unpacking the role of the organizational environment. *Journal of Business Research*, 69(2), pp.974-984.
- Alvesson, M. and Sandberg, J., 2013. *Constructing research questions: Doing interesting research*. Sage.
- Anderson, J. and Markides, C., 2007. Strategic innovation at the base of the pyramid. *MIT Sloan management review*, 49(1), p.83.
- Ansari, S., Munir, K. and Gregg, T., 2012. Impact at the 'bottom of the pyramid': The role of social capital in capability development and community empowerment. *Journal of Management Studies*, 49(4), pp.813-842.
- Baldwin, J. and Lin, Z., 2002. Impediments to advanced technology adoption for Canadian manufacturers. *Research policy*, 31(1), pp.1-18.
- Bates, T., 1995. Self-employment entry across industry groups. *Journal of business venturing*, 10(2), pp.143-156.
- Batti, R.C., 2013. Human resource management challenges facing local NGOs. *Technology*, 2(4).
- Bell, E., Bryman, A. and Harley, B., 2018. *Business research methods*. Oxford university press.
- Bhatti, Y.A. and Ventresca, M., 2013. How can 'frugal innovation' be conceptualized?. Available at SSRN 2203552.
- Bhatti, Y.A., 2012. What is frugal, what is innovation? Towards a theory of frugal innovation. *Towards a Theory of Frugal Innovation (February 1, 2012)*.
- Boris, B., Donald, R.C. and Pamela, S., 2005. Business research methods. *Berkshire: McGraw-Hill*.
- Bowles, S., Durlauf, S.N. and Hoff, K., 2006. Russell Sage Foundation. Poverty traps. Princeton.
- Bradley, S.W., McMullen, J.S., Artz, K. and Simiyu, E.M., 2012. Capital is not enough: Innovation in developing economies. *Journal of Management Studies*, 49(4), pp.684-717.
- Brem, A. and Wolfram, P., 2014. Research and development from the bottom up-introduction of terminologies for new product development in emerging markets. *Journal of Innovation and Entrepreneurship*, 3(1), p.9.
- Bremermanni, L.E., Teplovii, R., Mortazaviii, S., Vääätänenii, J. and Guptaaiii, S., 2019. PUBLIC-PRIVATE PARTNERSHIP AS A MECHANISM TO ENCOURAGE

MNES' CONTRIBUTIONS TO SUSTAINABLE DEVELOPMENT GOALS. *Sustainable Economy and Emerging Markets*.

Bromideh, A.A., 2011. The widespread challenges of NGOs in developing countries: Case studies from Iran. *International NGO Journal*, 6(9), pp.197-202.

Burt, R.S., 2009. *Structural holes: The social structure of competition*. Harvard university press.

Caldwell, N.D., Roehrich, J.K. and George, G., 2017. Social value creation and relational coordination in public-private collaborations. *Journal of Management Studies*, 54(6), pp.906-928.

Chandy, R.K. and Tellis, G.J., 2000. The incumbent's curse? Incumbency, size, and radical product innovation. *Journal of marketing*, 64(3), pp.1-17.

Churchill, G.A. and Iacobucci, D., 2006. *Marketing research: methodological foundations*. New York: Dryden Press.

Cooper, A.C., Woo, C.Y. and Dunkelberg, W.C., 1988. Entrepreneurs' perceived chances for success. *Journal of business venturing*, 3(2), pp.97-108.

Cooper, R.G., 1990. Stage-gate systems: a new tool for managing new products. *Business horizons*, 33(3), pp.44-54.

Cozzens, S. and Sutz, J., 2012. Executive Summary-Innovation in Informal Settings: A Research Agenda.

Cozzens, S.E., Kaplinsky, R., Lundvall, B., Joseph, K., Chaminade, C. and Vang, J., 2009. Innovation, poverty and inequality. Cause, coincidence, or co-evolution. *Handbook of innovation systems and developing countries: Building domestic capabilities in a global setting*, pp.57-82.

Dahan, N.M., Doh, J.P., Oetzel, J. and Yaziji, M., 2010. Corporate-NGO collaboration: Co-creating new business models for developing markets. *Long range planning*, 43(2-3), pp.326-342.

Das, P., Verburg, R., Verbraeck, A. and Bonebakker, L., 2018. Barriers to innovation within large financial services firms: An in-depth study into disruptive and radical innovation projects at a bank. *European Journal of Innovation Management*, 21(1), pp.96-112.

Delios, A., 2010. How can organizations be competitive but dare to care? *Academy of Management Perspectives*, 24(3), pp.25-36.

Dembek, K. and Sivasubramaniam, N., 2019. Examining Base of the Pyramid (BoP) venture success through the mutual value CARD approach. *The Oxford Handbook of Management in Emerging Markets*, p.241.

Demirgüç-Kunt, A., Honohan, P. and Beck, T., 2008. *Finance for all?: Policies and Pitfalls in Expanding Access*. World Bank.

Demirkan, I., 2018. The impact of firm resources on innovation. *European Journal of Innovation Management*, 21(4), pp.672-694.

Dubois, A. and Gadde, L.E., 2002. Systematic combining: an abductive approach to case research. *Journal of business research*, 55(7), pp.553-560.

- Dubois, A. and Gadde, L.E., 2014. “Systematic combining”—A decade later. *Journal of Business Research*, 67(6), pp.1277-1284.
- Durmusoglu, S.S., Nayir, D.Z., Chaudhuri, M., Chen, J., Joens, I. and Scheuer, S., 2018. Barriers to firm service innovativeness in emerging economies. *Journal of Services Marketing*, 32(7), pp.925-944.
- Dutz, M. ed., 2007. *Unleashing India's innovation: toward sustainable and inclusive growth*. The world bank.
- Eisenhardt, K.M. and Schoonhoven, C.B., 1996. Resource-based view of strategic alliance formation: Strategic and social effects in entrepreneurial firms. *Organization Science*, 7(2), pp.136-150.
- Force, M.G.T., 2008. Delivering on the Global Partnership for Achieving the Millennium Development Goals. *United Nations, New York*.
- Foster, C. and Heeks, R., 2013. Conceptualising inclusive innovation: Modifying systems of innovation frameworks to understand diffusion of new technology to low-income consumers. *The European Journal of Development Research*, 25(3), pp.333-355.
- Foster, C. and Heeks, R., 2013. Conceptualising inclusive innovation: Modifying systems of innovation frameworks to understand diffusion of new technology to low-income consumers. *The European Journal of Development Research*, 25(3), pp.333-355.
- Foster, C. and Heeks, R., 2014. Nurturing user–producer interaction: inclusive innovation flows in a low-income mobile phone market. *Innovation and Development*, 4(2), pp.221-237.
- Fukuda-Parr, S., 2016. From the Millennium Development Goals to the Sustainable Development Goals: shifts in purpose, concept, and politics of global goal setting for development. *Gender & Development*, 24(1), pp.43-52.
- George, G., McGahan, A.M. and Prabhu, J., 2012. Innovation for inclusive growth: Towards a theoretical framework and a research agenda. *Journal of management studies*, 49(4), pp.661-683.
- Ghuri, P., Lutz, C. and Tesfom, G., 2003. Using networks to solve export-marketing problems of small-and medium-sized firms from developing countries. *European Journal of Marketing*, 37(5/6), pp.728-752.
- Gold, S., Hahn, R. and Seuring, S., 2013. Sustainable supply chain management in “Base of the Pyramid” food projects—A path to triple bottom line approaches for multinationals? *International Business Review*, 22(5), pp.784-799.
- Gray, D., 2016. *Doing research in the business world*. London: Sage Publications.
- Guthrie, D. and Durand, R., 2008. Social issues in the study of management. *European Management Review*, 5(3), pp.137-149.
- Hadjimanolis, A., 1999. Barriers to innovation for SMEs in a small less developed country (Cyprus). *Technovation*, 19(9), pp.561-570.
- Hahn, R. and Gold, S., 2014. Resources and governance in “base of the pyramid”-partnerships: Assessing collaborations between businesses and non-business actors. *Journal of Business Research*, 67(7), pp.1321-1333.

- Hahn, R. and Gold, S., 2014. Resources and governance in “base of the pyramid”-partnerships: Assessing collaborations between businesses and non-business actors. *Journal of Business Research*, 67(7), pp.1321-1333.
- Hakim, C., 2012. *Research Design: Successful Designs for Social Economics Research*. Routledge.
- Hall, J., Matos, S., Sheehan, L. and Silvestre, B., 2012. Entrepreneurship and innovation at the base of the pyramid: a recipe for inclusive growth or social exclusion? *Journal of Management Studies*, 49(4), pp.785-812.
- Halme, M., Kourula, A., Lindeman, S., Kallio, G., Lima-Toivanen, M. and Korsunova, A., 2016. Sustainability innovation at the base of the pyramid through multi-sited rapid ethnography. *Corporate Social Responsibility and Environmental Management*, 23(2), pp.113-128.
- Halme, M., Lindeman, S. and Linna, P., 2012. Innovation for inclusive business: Intrapreneurial bricolage in multinational corporations. *Journal of Management Studies*, 49(4), pp.743-784.
- Hansen, E.L., 1995. Entrepreneurial networks and new organization growth. *Entrepreneurship theory and practice*, 19(4), pp.7-19.
- Harcourt, W., 2005. The millennium development goals: a missed opportunity?. *Development*, 48(1), pp.1-4.
- Hart, S.L., 2005. *Capitalism at the crossroads: The unlimited business opportunities in solving the world's most difficult problems*. Pearson Education.
- Heeks, R., Foster, C. and Nugroho, Y., 2014. New models of inclusive innovation for development.
- Hewitt-Dundas, N., 2006. Resource and capability constraints to innovation in small and large plants. *Small Business Economics*, 26(3), pp.257-277.
- Hinings, C.R. and Greenwood, R., 2002. ASQ Forum: Disconnects and Consequences in Organization Theory?. *Administrative Science Quarterly*, 47(3), pp.411-421.
- Hoang, H. and Antoncic, B., 2003. Network-based research in entrepreneurship: A critical review. *Journal of business venturing*, 18(2), pp.165-187.
- Hoegl, M., Gibbert, M. and Mazursky, D., 2008. Financial constraints in innovation projects: When is less more?. *Research Policy*, 37(8), pp.1382-1391.
- Holtz-Eakin, D., Joulfaian, D. and Rosen, H.S., 1994. Sticking it out: Entrepreneurial survival and liquidity constraints. *Journal of Political economy*, 102(1), pp.53-75.
- Hölzl, W. and Janger, J., 2012. *Innovation barriers across firms and countries* (No. 426). WIFO Working Papers.
- Hoskisson, R.E., Wright, M., Filatotchev, I. and Peng, M.W., 2013. Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies*, 50(7), pp.1295-1321.
- Hung, K.P. and Chou, C., 2013. The impact of open innovation on firm performance: The moderating effects of internal R&D and environmental turbulence. *Technovation*, 33(10-11), pp.368-380.

- Immelt, J.R., Govindarajan, V. and Trimble, C., 2009. How GE is disrupting itself. *Harvard business review*, 87(10), pp.56-65.
- Johnson, R.B. and Christensen, L., 2019. *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications, Incorporated.
- Keller, W., 2004. International technology diffusion. *Journal of economic literature*, 42(3), pp.752-782.
- Kent, R., 2007. *Marketing Research: Approaches, methods and applications in Europe*. London: Thomson Learning.
- Khavul, S. and Bruton, G.D., 2013. Harnessing innovation for change: Sustainability and poverty in developing countries. *Journal of Management Studies*, 50(2), pp.285-306.
- Khayesi, J.N. and George, G., 2011. When does the socio-cultural context matter? Communal orientation and entrepreneurs' resource accumulation efforts in Africa. *Journal of Occupational and Organizational Psychology*, 84(3), pp.471-492.
- Knight, J., 2011. Education hubs: A fad, a brand, an innovation?. *Journal of Studies in International Education*, 15(3), pp.221-240.
- Levin, D.Z. and Cross, R., 2004. The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management science*, 50(11), pp.1477-1490.
- London, T., Anupindi, R. and Sheth, S., 2010. Creating mutual value: Lessons learned from ventures serving base of the pyramid producers. *Journal of Business Research*, 63(6), pp.582-594.
- Madrid-Guijarro, A., Garcia, D. and Van Auken, H., 2009. Barriers to innovation among Spanish manufacturing SMEs. *Journal of Small Business Management*, 47(4), pp.465-488.
- Mahajan, V. and Banga, K., 2005. *The 86 percent solution: How to succeed in the biggest market opportunity of the next 50 years*. Pearson Education.
- Mahak charity. 2011. MAHAK Society to Support Children Suffering from Cancer. [Online]. [8 December 2019]. Available from: <https://mahak-charity.org/main/index.php/en>
- Mair, J., Marti, I. and Ventresca, M.J., 2012. Building inclusive markets in rural Bangladesh: How intermediaries work institutional voids. *Academy of Management Journal*, 55(4), pp.819-850.
- Malhotra, N.K. and Birks, D.F., 2007. *Marketing research*. Harlow: Dentice Hall. *Pearson Education*.
- Margolis, J.D. and Walsh, J.P., 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative science quarterly*, 48(2), pp.268-305.
- Marshall, M.N., 1996. Sampling for qualitative research. *Family practice*, 13(6), pp.522-526.
- Mohnen, P. and Röller, L.H., 2005. Complementarities in innovation policy. *European economic review*, 49(6), pp.1431-1450.
- Mortazavi, S., Laine, I., Quarshie, A., Väättänen, J. and Gupta, S., 2020. Multinational Enterprise and Inclusive Innovation at the Bottom of the Pyramid: A Systematic Literature Review. In *International Business and Emerging Economy Firms* (pp. 19-47). Palgrave Macmillan, Cham.

- Mortazavi, S., Laine, I., Teplov, R., Vääänen, J. and Gupta, S., 2019. Fostering Inclusive Innovation in Developing Economies: An Integrative Framework for Multinational Enterprises. In *Globalization and Development* (pp. 149-167). Springer, Cham.
- Nahi, T., 2018. Co-creation for sustainable development: The bounds of NGO contributions to inclusive business. *Business Strategy & Development*, 1(2), pp.88-102.
- Nari Kahle, H., Dubiel, A., Ernst, H. and Prabhu, J., 2013. The democratizing effects of frugal innovation: Implications for inclusive growth and state-building. *Journal of Indian Business Research*, 5(4), pp.220-234.
- Nassar, M.L. and Faloye, D.O., 2015. BARRIER TO INNOVATION IN DEVELOPING COUNTRIES' FIRMS: EVIDENCE FROM NIGERIAN SMALL AND MEDIUM SCALE ENTERPRISES. *European Scientific Journal*, 11(19).
- Neuman, W., 2003. Lawrence. *Social Research Methods—Qualitative and Quantitative Approaches*, 5th edition. Boston: A and B, Pearson Education, Inc.
- Nguyen, T.M., Tran, T.Q. and Do, L.T., 2018. Government Support and Firm Profitability in Vietnam. *Comparative Economic Research*, 21(4), pp.105-120.
- Oghazi, P., Rad, F.F., Zaefarian, G., Beheshti, H.M. and Mortazavi, S., 2016. Unity is strength: A study of supplier relationship management integration. *Journal of Business Research*, 69(11), pp.4804-4810.
- Olsen, M. and Boxenbaum, E., 2009. Bottom-of-the-pyramid: Organizational barriers to implementation. *California Management Review*, 51(4), pp.100-125.
- Pansera, M. and Owen, R., 2018. Framing inclusive innovation within the discourse of development: Insights from case studies in India. *Research Policy*, 47(1), pp.23-34.
- Park, S.H. and Ungson, G.R., 1997. The effect of national culture, organizational complementarity, and economic motivation on joint venture dissolution. *Academy of Management Journal*, 40(2), pp.279-307.
- Patrick, H.T., 1966. Financial development and economic growth in underdeveloped countries. *Economic development and Cultural change*, 14(2), pp.174-189.
- Payamomid charity. 2015. Payam Omid charity. [Online]. [8 December 2019]. Available from: <http://www.payamomid.com/>
- Peerally, J.A., De Fuentes, C. and Figueiredo, P.N., 2019. Inclusive innovation and the role of technological capability-building: The social business Grameen Danone Foods Limited in Bangladesh. *Long Range Planning*, 52(6), p.101843.
- Perez-Aleman, P. and Sandilands, M., 2008. Building value at the top and the bottom of the global supply chain: MNC-NGO partnerships. *California management review*, 51(1), pp.24-49.
- Pergelova, A. and Angulo-Ruiz, F., 2014. The impact of government financial support on the performance of new firms: the role of competitive advantage as an intermediate outcome. *Entrepreneurship & Regional Development*, 26(9-10), pp.663-705.
- Peteraf, M.A., 1993. The cornerstones of competitive advantage: a resource-based view. *Strategic management journal*, 14(3), pp.179-191.
- Piatier, A., 1986. Barriers to Innovation. London: Frances Printer.

- Pitelis, C.N. and Teece, D.J., 2018. The new MNE: 'Orchestration' theory as envelope of 'Internalisation' theory. *Management International Review*, 58(4), pp.523-539.
- Prahalad, C.K. and Mashelkar, R.A., 2010. Innovation's holy grail. *Harvard Business Review*, 88(7-8), pp.132-141.
- Prahalad, C.K., 2002. Strategies for the Bottom of the Economic Pyramid: India as a Source of Innovation. *Reflections: The SOL Journal*, 3(4), pp.6-17.
- Prahalad, C.K., 2009. *The fortune at the bottom of the pyramid, revised and updated 5th anniversary edition: Eradicating poverty through profits*. FT Press.
- Radojević, N. and Peerally, J.A., 2014. Reverse Innovation and the Bottom of the Pyramid Proposition: New Clothes for Old Garbs?. In *Quality Innovation: Knowledge, Theory, and Practices* (pp. 32-52). IGI Global.
- Rahman, M.M., 2002. Problems of the NGOs in housing the urban poor in Bangladesh. *Habitat International*, 26(3), pp.433-451.
- Reficco, E. and Márquez, P., 2012. Inclusive networks for building BOP markets. *Business & Society*, 51(3), pp.512-556.
- Remenyi, D., Williams, B., Money, A. and Swartz, E., 1998. *Doing research in business and management: an introduction to process and method*. Sage.
- Reynolds, P.D., 1971. *A Primer in Theory Construction*. New York: The Bobbs-Merrill Company.
- Rivera-Santos, M. and Rufín, C., 2010. Global village vs. small town: Understanding networks at the Base of the Pyramid. *International Business Review*, 19(2), pp.126-139.
- Robson, C., 2002. *Real World Research*. Oxford: Blackwell.
- Rosca, E., Arnold, M. and Bendul, J.C., 2017. Business models for sustainable innovation—an empirical analysis of frugal products and services. *Journal of Cleaner Production*, 162, pp.S133-S145.
- Rush, H. and Bessant, J., 1992. Revolution in three-quarter time: lessons from the diffusion of advanced manufacturing technologies. *Technology Analysis & Strategic Management*, 4(1), pp.3-19.
- Ryan, R.M. and Deci, E.L., 2001. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1), pp.141-166.
- Sachs, J., 2005. The End of Poverty: Economic possibilities for our time. *International Journal*, 60(3), p.849.
- Sandberg, J. and Alvesson, M., 2011. Ways of constructing research questions: gap-spotting or problematization?. *Organization*, 18(1), pp.23-44.
- Santoro, M.D. and Chakrabarti, A.K., 2002. Firm size and technology centrality in industry–university interactions. *Research policy*, 31(7), pp.1163-1180.
- Savignac, F., 2008. Impact of financial constraints on innovation: What can be learned from a direct measure?. *Econ. Innov. New Techn.*, 17(6), pp.553-569.

- Schumpeter, J., 1982. The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (1912/1934). *Transaction Publishers.*—1982.—January, 1, p. p.244.
- Seelos, C. and Mair, J., 2007. Profitable business models and market creation in the context of deep poverty: A strategic view. *Academy of management perspectives*, 21(4), pp.49-63.
- Segarra-Blasco, A., Garcia-Quevedo, J. and Teruel-Carrizosa, M., 2008. Barriers to innovation and public policy in Catalonia. *International entrepreneurship and management journal*, 4(4), pp.431-451.
- Sengupta, P., 2016. How effective is inclusive innovation without participation?. *Geoforum*, 75, pp.12-15.
- Shavinina, L.V. ed., 2003. *The international handbook on innovation*. Elsevier.
- Silva, M.J., Leitao, J. and Raposo, M., 2008. Barriers to innovation faced by manufacturing firms in Portugal: how to overcome it for fostering business excellence?. *International Journal of Business Excellence*, 1(1-2), pp.92-105.
- SIMANIS, E., 2008. The Base of the Pyramid Protocol: Toward Next Generation BoP Strategy Second Edition. <http://www.bop-protocol.org/docs/>.
- Singh, R., Gupta, V. and Mondal, A., 2011. JUGAAD-Not Just “Making Do” but a Low Cost Survival & Coping Strategy at the Bottom of the Pyramids. *Indian Institute of Management Calcutta Working Paper Series, WPS no, 677*.
- Sogunro, O.A., 2002. Selecting a quantitative or qualitative research methodology: An experience. *Educational Research Quarterly*, 26(1), p.3.
- Stanisławski, R. and Olczak, A., 2010. Innovative activity in the small business sector of the textile and clothing industry. *Fibres & Textiles in Eastern Europe*, 18(1), p.78.
- Stewart, F., Brown, G.K. and Mancini, L., 2005. *Why horizontal inequalities matter: some implications for measurement*. Centre for Research on Inequality, Human Security and Ethnicity.
- Talegeta, S., 2014. Innovation and barriers to innovation: small and medium enterprises in Addis Ababa. *Journal of Small Business and Entrepreneurship Development*, 2(1), pp.83-106.
- Tavory, I. and Timmermans, S., 2014. *Abductive analysis: Theorizing qualitative research*. University of Chicago Press.
- Telles, E.E., 2004. *Race in another America: The significance of skin color in Brazil*. Princeton University Press.
- Thomas, K.W. and Velthouse, B.A., 1990. Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. *Academy of management review*, 15(4), pp.666-681.
- Thornhill, A., Saunders, M. and Lewis, P., 2009. *Research methods for business students*. Prentice Hall: London.
- Timmermans, S. and Tavory, I., 2012. Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological theory*, 30(3), pp.167-186.

- Van Maanen, J., Sørensen, J.B. and Mitchell, T.R., 2007. The interplay between theory and method. *Academy of management review*, 32(4), pp.1145-1154.
- Vincent, G.S. and Joseph, G.A., 2013. Challenges for human resource experts in Global scenerio. *International Journal of advancement in Research and Technology*, 2(4), pp.209-214.
- Wagle, U., 2018. Rethinking poverty: definition and measurement. *International Social Science Journal*, 68(227-228), pp.183-193.
- Webb, J.W., Kistruck, G.M., Ireland, R.D. and Ketchen, Jr, D.J., 2010. The entrepreneurship process in base of the pyramid markets: The case of multinational enterprise/nongovernment organization alliances. *Entrepreneurship theory and practice*, 34(3), pp.555-581.
- Weber, C., Weidner, K., Kroeger, A. and Wallace, J., 2017. Social value creation in inter-organizational collaborations in the not-for-profit sector—give and take from a dyadic perspective. *Journal of Management Studies*, 54(6), pp.929-956.
- Weidner, K.L., Rosa, J.A. and Viswanathan, M., 2010. Marketing to subsistence consumers: Lessons from practice. *Journal of Business Research*, 63(6), pp.559-569.
- Wischnevsky, J.D. and Damanpour, F., 2005. Punctuated equilibrium model of organizational transformation: Sources and consequences in the banking industry. In *Research in organizational change and development* (pp. 207-239). Emerald Group Publishing Limited.
- Woodson, T., Alcantara, J.T. and do Nascimento, M.S., 2019. Is 3D printing an inclusive innovation?: An examination of 3D printing in Brazil. *Technovation*, 80, pp.54-62.
- Wydick, B., 2008. *Games in Economic Development*. New York: Cambridge University Press.
- Xun, Z. and Lubrano, M., 2018. A Bayesian measure of poverty in the developing world. *Review of Income and Wealth*, 64(3), pp.649-678.
- Yin, R.K., 2017. *Case study research and applications: Design and methods*. Sage publications.
- Zanello, G., Fu, X., Mohnen, P. and Ventresca, M., 2016. The creation and diffusion of innovation in developing countries: a systematic literature review. *Journal of Economic Surveys*, 30(5), pp.884-912.

## Appendix A: Interview questions

Number	Interview question
1	What is your occupation in NGO, and how many years do you have experience in this organization?
2	Who are your primary target groups, and what services you offer them?
3	How does your organization market its services to the people? (Social media, website, word of mouth)
4	What is your primary income, and which organizations give fund your NGO?
5	How do you get to know about the people who need your services?
6	Do you offer your services for free to the people or at a specific price? How can people afford your services?
7	Are they any organization or entities work under your NGO?
8	How does your organization plan to offer empowerment to the people? (How does your NGO help with creating a job increasing the income of poor people and improving them so they that would not rely on others?)
9	How many hospitals or health care centers have you developed? (How was this process?)
10	What is the role of the local people in helping you to reach out to the poor communities and offering your services?
11	Make any multinational companies, large or small size offer any supports to your NGO?
12	Do you also work governmental bodies or other NGOs? How about international organizations such as the UN?
13	How do you provide sufficient training program for your staff?
14	Do you use other international NGO business models when operating?
15	Do you also educate poor people on how to prevent or cure diseases?
16	Do you offer any training for local people to facilitate operations of your NGO?
17	What are your main internal challenges?
18	What are your external challenges for operating?
19	How do you overcome these challenges? Or how do you think you can address these challenges?
20	What is your future recommendation for other NGOs to be able to help the poor people or groups of people who need treatment?
21	How can your NGO improve itself to become better?