

DISASTER MANAGEMENT: BUILDING DYNAMIC CAPABILITIES THROUGH CROSS-SECTOR PARTNERSHIPS

Case study of Finnish SMEs in disaster market

Master's Thesis in International Business Kansainvälisen liiketoiminnan pro gradu -tutkielma

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1 INTRODUCTION

In this chapter, an introduction to the background and the objectives of the study is presented. This chapter is divided into three sections. In the first section the background of the research topic is introduced. The purpose of the study is explained in the second section. Lastly, the chapter ends with the overview of the contents of this study.

1.1 Background of the study

Rapid population growth have led to a crowded world and pressures of urbanization, increase in consumption and massive production has had huge impact on the climate change. All these have led to the consequences of more frequently occurring disasters – natural and man-made disasters. Natural disasters are acts of nature and man-made disasters are caused by humans due to terror or error. Man-made disasters present more fundamental problems for disaster responders because of the nature of the disasters (Demiroz & Kapucu 2012, 93). Man-made disasters do not include wars. Most of the humanitarian organizations do not get involved while the fighting continues (Van Wassenhove 2006, 475). A number of authors have attempted to define a disaster and a crisis with the purpose to improve the understanding of this phenomena. However, so far there is no definition of disaster or crisis that has been accepted universally. The reason is that the definition is dependent upon the discipline using the term.

Disasters vary in many ways. The type (e.g. earthquakes, airplane accidents or coup d'état), time frames (sudden-onset or slow-onset), intensity, geographical location (e.g., urban or rural), and people affected (loss of human lives) determines a disaster (Henderson 2004, 104). A disaster and a crisis are usually defined as two different events, nevertheless, they are simultaneously related (Shaluf et al. 2003, 31). Parker (1992, 6) define disaster as "an unusual natural or man-made event, including an event caused by failure of technological systems, which temporarily overwhelms the response capacity of human communities, groups of individuals or natural environments, and which causes massive damage, economic loss, disruption, injury and/or loss of life". The United Nations state that there will be greater global demand for humanitarian assistance in the near future (P. Goffnett et al. 2013, 161).

Year 2016 was the year of earthquakes. Nearly 300 major natural disasters affected millions of people across the globe and among them were many earthquakes with massive magnitude. In 2016 the worst disasters were mainly natural disasters but a disaster that received most publicity was the Syria's crisis, still after five years of the war. Hurricane Matthew brought devastation across Caribbean, and Ecuador's magnitude-7.8 earthquake

was extremely destructive. These large scales of disasters affect many lives and influenced countries both economically and socially as they lead to massive loss of life, dislocations, and loss of livelihood. Disasters have a devastating impact on development as the cost of damages is extremely high. The greater concern, as natural disaster are more severe lately, is the human misery (Chakravarty 2014, 146).

More often poorer nations (developing and the least developed countries) are affected by different kind of disasters because of geographical location, the poor infrastructure, lack of preparedness, and the population concentration patterns (Coppola 2011, 18; Lu et al. 2013, 149). Due to these natural calamities, wars, and political strife, humanitarian organizations have to assume an even greater role in the future (Lu et al. 2013, 149). Third sector operations are mainly fund-based. Consequently, they do not have the possibility to invest on RDI (Research, Development and Innovation) in terms of time and money, in order to find better solutions to the challenges they are facing in disaster areas. In recent years third sector have been more engaged with private sector. There has been more partnerships between aid agencies and companies with business-driven innovations (Zyck & Kent 2014, 1).

The private sector has long been a major contributor to humanitarian action across the world (Zyck & Kent 2014, 5). Business in disaster areas is a growing business sector where private companies produce solutions to prevent, manage the crisis, and rebuild in areas where natural disasters or conflicts occurs. Social entrepreneurship is also an option but this should not be confused with disaster business. Social entrepreneurships are aiming do develop and implement solutions to social and environmental issues and using the profit to return back to the society.

Many big countries have already entered and are leading the disaster market. Finland has a negligible role in the market even though Finland is remarkable with its offerings. The Globalist 2016 study of the most innovative countries in the world shows, that Finland is one of the top countries whose policies support global innovation the most on a per-capita basis (Ezell 2016). According to Kuuluvainen (2011, 31-32) it is vital to gain valuable experience on exporting and operating in international markets, since it plays a major role when small and medium size enterprises (SMEs) are developing their dynamic capabilities. Author also state that this could explain Finnish companies' weak performance on the international market. In Finland, Ministry for Foreign Affairs of Finland is the main supporter for SMEs to enter international markets (especially disaster areas). Finland is active in humanitarian aid with many actors. However, private companies are missing from the picture. The phenomena is multifaceted by nature which makes business operations even harder (Hensgen et al. 2003, 67).

Cross-sector partnerships are collaborations across sectors (public, private, and third sector) in order to tackle public problems that are not successfully addressed when operating alone (Bryson et al. 2015, 1). Cross-sector partnerships include non-governmental

organizations (NGOs), governments and quasi-governmental associations (such as Finpro in Finland), and private companies. Cross-sector partnerships are effective way for governments and humanitarian organizations to engage with private sector and deliver services and assets with the aim of increasing quality and providing better value for money (Auzzir et al. 2014, 808). Cross-sector partnerships are wide, well-known and trustworthy cooperation networks that together create large solutions for local needs. Partnerships can be divided into two main category: commercial and non-commercial partnerships.

New technology developments have enabled better mitigation and preparedness to disasters and better overcome disasters' negative consequences. New technology improvements have correspondingly brought along vulnerability to new types of threats such as communication system breakdowns and bio-nuclear terrorism (Demiroz & Kapucu 2012, 93). Van Wassenhove (2006, 475) state that by being better prepared for natural disaster can also diminish the effects of man-made disasters. Although most of the disaster can be predicted by some means, such as forecasts and frequencies (e.g. floods during monsoon), disasters are accompanied by a high degree of uncertainty. This is because there is uncertainty of how big the disaster will be, how many people it will affect and for how long. This uncertainty create a lot of challenges for governments, humanitarian organizations, and private companies to prepare for a disaster. Disaster management can be described as a cycle with four phases that keeps circulating. The phases are mitigation, preparedness, response, and recovery. The most difficult aspects of disaster is the preparedness and recovery phases (Demiroz & Kapucu 2012, 93). The academic literature focuses mostly on response and recovery phases because private companies are more engaged during these phases since the business market is much bigger (Hensgen et al 2003, 67).

As mention earlier on, one mutual terminology is not accepted universally, which results in authors using different terms. In most cases it is disaster or crisis, however, the word emergency also arise in several cases. It is also worth stating that catastrophes are the severest type of disasters. Other related terms are e.g., hazard, incidents, accidents, chaos, and terrorism. The used term depends on the cause and the matter of perception. Natural crises are natural disasters, environmental phenomena that are caused by, for example, earthquakes, volcanic eruptions, tornadoes and hurricanes, floods, landslides, forest fires, tsunamis, storms, and droughts. Man-made disaster on the other hand are, for instance, terror attacks, sabotage, chemical accidents, or any other disasters that are consequences of actions of human beings (Demiroz & Kapucu 2012, 93). The table below shows the differences between natural – man-made and sudden-onset – slow-onset disasters.

Table 1 Types of disasters (Van Wassenhove 2006, 476)

	Natural	Man-made
Sudden-onset	Earthquake Hurricane Tornadoes	Terrorist attack Coup d'état Chemical leak
Slow-onset	Famine Drought Poverty	Political crisis Refugee crisis

Furthermore, disaster management itself refers to the actions at prevention, preparation, response, and recovery of crucial threats to human lives and the livelihood of a society and protection of the environment (Demiroz and Kapucu 2012, 92). Disaster management is also known as emergency response or emergency management, especially when it is associated with natural disasters. Natural disasters are most frequently occurred than any other types of disasters and consequently natural disasters cause the most destruction per year (Chakravarty 2014, 146). According to Carter (2008, 5) the world worst disasters tend to take place between the Northern Tropic and Southern Tropic. Poorer countries are located in that area. As these countries suffer major damages, they repeatedly face setbacks to progress and they remain within the developing category. Thereupon, disasters can be a strong factor in differences between wealthy and poor nations (Carter 2008, 6). In tables 2 and 3, the occurrence of natural disasters from years 2015 and 2016 are listed with the number of total deaths, the number of affected people and the cost of damages. The numbers are collected from The International Disaster Database. In 2016 there were less disasters compared to 2015, however, more people were affected and the costs were much higher. The total damage in 2015 was almost 73 billion USD while in 2016 it reached over 92 billion USD. This indicates that the economic damage of natural disasters has increased and are impacting a greater number of people. The effects of disaster, whether natural or man-made, short-term or long-term, have bad consequences to developing economies. The disasters cause damage to essential economic inputs such as land or capita assets (Henderson 2004, 112).

Continent	Occurrence	Total deaths	Total affected	Total damage
Africa	68	2 132	35.27 million	\$4.06 million
Americas	96	1 407	4.36 million	\$25.98 million
Asia	177	16 373	68.14 million	\$34.49 million
Europe	29	3 856	224 274	\$4.69 million
Oceania	24	66	2.89 million	\$3.52 million

Table 3 Natural disasters in 2016 (source: International Disaster Database)

Continent	Occurrence	Total deaths	Total affected	Total damage
Africa	54	925	10.07 million	\$469 000
Americas	65	1686	9.08 million	\$40.10 million
Asia	141	4585	357.69 million	\$46.10 million
Europe	24	378	92 031	\$1.35 million
Oceania	13	51	482 433	\$4.37 million

The climate change with extreme weather is emerging which makes the safety predictions particularly difficult (Murphy 2009, 283). That being said, the danger of climate change or occurrence of natural incident, such as earthquakes or typhoons in particular part of the world is not uncertain. Admittedly, the consequences are uncertain. The aftermath of the Indian Ocean earthquake and tsunami in 2004 revealed many weaknesses in humanitarian operations and disaster management (Goldschmidt & Kumar 2016, 1). There were general lack of logistical expertise, and the supply chain infrastructure was behind the times and very labor-intensive. At the time, there was limited collaboration and coordination among NGOs (Thomas & Mizushima 2005, 60), which revealed many flaws in the system of cross-sector partnerships. There was enormous gap in communication. There was no comprehensive list for private companies to follow and see what was needed and by whom. Neither did the humanitarian organizations have any information of what private companies could offer and where (Thomas & Fritz 2006, 116). Since then, there has been major strategic and operational changes in humanitarian organizations consequently improving the response to disasters (Goldschmidt & Kumar 2016, 1). This demonstrate that the phenomenon is practically growing in relevance and there is still so much to learn from. This also indicates that there is room for creating more theoretical insights.

Even though humanitarian organizations have improve their way of operating, they cannot work as a lonely players, because they are lacking of resources, in terms of time and finance, which indicate that actors from private sector are badly needed. During the last couple years, the number of actors has increased continually (Immonen & Rantanen 2011, 13). Disaster management is becoming more difficult and more important. In the

disaster environment, the humanitarian organizations aim to secure the peace, rebuild and develop the affected area to a better place for people to continue their lives after a disaster.

For private companies, the best way to develop the flexibility of response capacity is achieved through dynamic capabilities. Dynamic capabilities are processes that have impact of company's internal and external resources and thus creating a new set of valuable resources to handle challenges in a changing environment (Kaltenbrunner & Beerens 2012, 58). After Teece, et al. (1997), most notable contribution to dynamic capabilities and most cited are Eisenhardt and Martin's (2000), Zahra and George's (2002), Zollo and Winter's (2002) articles, respectively (Di Stefano et al. 2010, 1192).

1.2 Purpose and the objective

The frequency of disasters is increasing globally and number of affected people and the cost is higher than ever before (Goldschmidt & Kumar 2016, 10). It has been criticized that humanitarian response is lacking of aid effectiveness (Haavisto & Goentzel 2015, 300). The private sector has a lot to offer, such as expertise, human resources, and innovation that could benefit the third sector and public sector greatly. It is evidential that third, public and private sector should collaborate. In disaster management, the aim is to turn disasters into prosperity together.

Solutions that will require fewer natural resources, consume less energy, are more durable, and efficient recycling process, will optimize the development of the disaster afflicted society (Mikkola 2015). Finland has a good reputation as reliable partner with great offerings but the biggest challenge for SMEs is the fact that big operations are not going to come to a small company looking for a product or service. SMEs needs to offer themselves (Kuopio Innovation's annual publication 2014, 6). This study provides a conceptual overview of disaster management and describes some challenges private companies face when entering disaster affected areas. This study will be conducted systematically based on both theoretical background and empirical assessment. The literature review is conducted from theories and concepts of disaster management, cross-sector partnerships and dynamic capabilities. The empirical data is gathered by using qualitative research method and interviewing three Finnish SMEs that are operating in disaster afflicted areas.

Human Security Finland's expert, Jyri Wuorisalo, state there are many Finnish SMEs that are desperately needed in crisis areas due to their excellent products and solution models (Kuopio Innovation's annual publication 2014, 6). The focus in this thesis is on Finnish SMEs that are doing business in crisis areas. One of the reasons for choosing SMEs instead of large companies is due to their dynamic environment. SMEs are usually less structured than large companies and because of their size they also need to overcome

more barriers when entering international markets. That being said, large companies and SMEs do have things in common as well, such as that they are all profit-driven organizations and are setting goals for themselves. SMEs also play an important role in economic growth in all countries (Singh et al. 2008, 525). SMEs are offering jobs and positively influence country's GDP. In the distribution chain, SMEs act as supplier of goods and services to large organizations. SMEs have the great ability to react to changes on the market rapidly and flexibly (Kubickova & Procházková 2014, 131).

Many SMEs are not yet active in disaster afflicted areas because developing countries are struggling with challenges in technical and economic infrastructure, education, financial resources, and cultural differences (Pitta et al. 2008, 400). As an assumption, this same reason could explain Finnish SMEs' passive activity in the market. It may be that Finnish SMEs are not aware of the opportunities and the potential of market. Another reason could be lack of experience of international business operations and unconsciousness of the money flow operations. In an imagined situation where a Finnish SME has decided to enter the market, some barriers could obstruct them, such as the lack of resources to find applicable domestic and international partners and not knowing which could be most suitable entry mode for them. Other affecting factors could be concern about human security and in some cases even the Finnish culture.

For the purpose of this study, crisis will be mentioned from a disaster management perspective and the terms disaster and crisis will be used interchangeably. The development process of natural disasters and man-made disasters are different but they both have same destructive effects (Shrivastava et al. 1988, 287). They all cause major damage to human life, and natural, social and economic environments. This thesis focuses on both disaster types in disaster relief stage. Furthermore, crisis management can be divided into two different groups: military crisis management and civil crisis management. This thesis focuses on civil crisis management in disaster afflicted areas since humanitarian organizations are not operating in conflict areas nor private companies are willing to enter conflict areas. This study has excluded non-conflict situations such as economic crisis. The phenomena is researched from dynamic capabilities perspective since disaster relief market is changing constantly and the best way to gain a competitive advantage is through developed resource base of the company. Dynamic capabilities are suitable approach in disaster management since dynamic capabilities are detailed, analytic, and stable processes with predicted outcome (Eisenhardt & Martin 2000, 1105).

The competition in disaster market is increasing and for private companies, cross-sector partnership is the best solution. Cross-sector partnership alliances are ideal in disaster markets since it enables a co-creation of resources with participating organizations. Collaborating organizations develop resources through generic resources, such as money or positive reputation, or organization-specific resources, such as knowledge, capabilities,

networks, or infrastructure (Austin & Seitanidi 2012, 729-730). Cross-sector organizations usually hold diverse resources and capabilities and together they can create a collaborative advantage and shared value which leads to a win-win situation (Dentoni et al. 2016, 35). Therefore, cross-sector partnerships are suitable approach when studying how private companies can create dynamic capabilities in constantly changing environments. However, it is worth noting that the biggest challenge in cross-sector partnerships is the fact that participating organizations are different in nature in many ways, for instance, they have different operating principles and goals. In these situations building strong relationship based on trust is crucial in order to avoid any conflicts (Le Ber & Branzei 2010, 141). In this thesis, the focus is on commercial partnerships and not on charitable partnerships. Throughout this thesis, partnership, relationship, and collaboration are used symbiotically. This study aims to understand the creation of dynamic capabilities through cross-sector partnerships in disaster management and to answer the following research questions:

1. Why operating through cross-sector partnership in disaster market?

It is a fact that in order to ensure the continuity of business, it is important to take care of real competitiveness. SMEs need to develop constantly and response to social changes in order to succeed and to compete. With the first research question, the aim is to find out why cross-sector partnership is the best strategy in disaster management and what is the added value for private companies.

2. What are disaster management capabilities?

As mentioned earlier on, managing a disaster is very complex and the environment is changing constantly. With the second research question, this study will focus on finding out what are the disaster management capabilities.

3. How do cross-sector collaboration in disaster market and the capabilities developed over time lead to dynamic capabilities?

After finding out why cross-sector partnerships are ideal for effective disaster management and addressing the critical disaster management capabilities, the linkage between these two and how they influence on creation of dynamic capabilities is examined through third research question. To better understand why cross-sector partnerships are the best approach, is to measure whether cross-sector partnerships help private companies to create dynamic capabilities and thus maintain the competitive advantage as dynamic capabilities are the highest form of capability a company can have.

To answer the research questions, this thesis focus on those dynamic capabilities that allow companies to easily adapt to changing environments by effectively sensing, interacting with, learning from, and changing based on stakeholders. Private, public and third sector organizations play all an important role in cross-sector partnerships in disaster management and therefore the impact of cross-sector partnerships is relevant for the society as a whole and hence an important topic to study. The co-creation of dynamic capabilities through cross-sector partnerships is studied very little and this thesis aims to fill that gap.

Dynamic capabilities is suitable theoretical perspective to explain cross-sector partnerships in disaster management since dynamic capabilities are the highest form of capability a company can have and those capabilities are very valuable in uncertain and changing environments such as in case of disasters. Resource-based view theory as explanation is rather narrow and is neglecting the influence of market dynamism and long-term competitive advantage (Eisenhardt & Martin 2000, 1105). Therefore, this thesis aims to explain cross-sector partnerships in disaster management and how the collaboration lead to the creation of dynamic capabilities. The figure below exemplify the focus of this study.

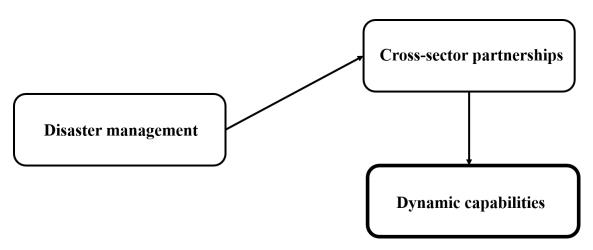


Figure 1 The focus of the study

1.3 Structure of the study

This thesis is divided into six chapters. This first chapter has introduced the topic, the motivation and the objectives with the research questions of this study. The remainder of this research is organized as follows. The second chapter will develop deeper understanding of the subject with literature review. The chapter is further divided into five parts, starting with the concept of disaster management in order to gain a thorough understanding of the topic. The explanation of disaster management and its cycle is illustrated. The roles of all three economic sectors (public, private, and third sector) are also described in order to get the overview of the actors in disaster management. Then, the focus is on

cross-sector partnerships and their nature. The second chapter continues with deeper explanation of dynamic capabilities. The chapter ends with a synthesis of literature review.

The third chapter will provide a description and discussion of the research methodology used in this study. The chapter starts with the discussion of the research approach and then continues to the data collection methods. The participation selection as well as the interview guide design is outlined in this chapter. Then, the strategy for analyzing the empirical data is described. The third chapter is concluded with the evaluation of this research.

In the fourth chapter, the results of empirical data is presented. In the penultimate chapter, the conclusions of literature and research findings are gathered. The first section is theoretical discussion followed by managerial implications. The third section consist of recommendations for further study. Finally, a conclusive summery of the study is provided in the last chapter.

2 LITERATURE REVIEW

In this chapter, the focus is on three major themes which are disaster management, cross-sector partnerships and dynamic capabilities. The literature review starts with the concept of disaster management, followed by the description of the actors involved in disaster management. In third section, the concept of cross-sector partnership and different forms of partnerships are explained. This chapter also discusses about the disaster management capabilities. The chapter continues by emphasizing on the dynamic capabilities. Dynamic capabilities approach is suitable when doing business in uncertain and competitive environments. In this chapter, companies' ability to build dynamic capabilities in disaster relief market will be discussed. This order was chosen since an understanding of cross-sector partnerships acts as a basis of understanding and investigating the role of dynamic capabilities and their effect on success in disaster market. The chapter ends with synthesis of the literature review.

2.1 Disaster management cycle

Disasters are complex events (Goldschmidt & Kumar 2016, 5) and every event is different and unique. Therefore, one straight forward strategy does not exists. That being said, all disasters go through similar management cycle. The length of time for each phase does vary for each disaster. Figure 2 represent a disaster management cycle. There are four phases in the cycle, disaster being in the middle:

- 1. Prevention and mitigation
- 2. Preparedness
- Disaster
- 3. Response
- 4. Recovery

The phases can be categorized into two stages: development and relief. First two phases are part of development stage and the latter two are part of relief stage. The development phase can also be termed as pre-disaster phase and relief phase as a post-disaster phase (Zhang et al. 2002, 372). In the academic literature, the phases that focus on response and recovery receives much more attention that the phases that focuses on prevention and preparedness (Goldschmidt & Kumar 2016, 4). However, this does not indicate that any of the phases are ignored. This bias towards post-disaster phases could be attributed to the fact of increased unexpected disasters recently. Learning process is throughout the cycle (Hensgen et al. 2003, 72). Understanding the pattern of a disaster will be beneficial for organizations, since it will help them to anticipate the potential problems and respond

to them accordingly. Understanding the pattern of a disaster will also help private companies to assess in which phase of a disaster their expertise can be utilized.

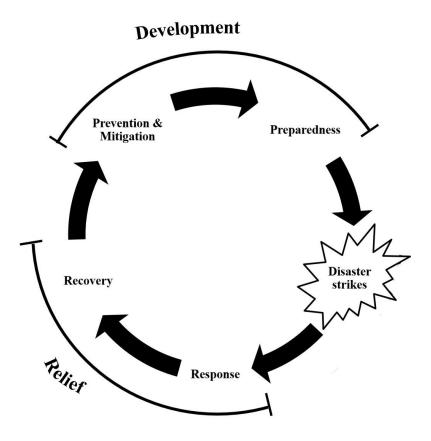


Figure 2 Disaster management cycle (adapted from Tomasini & Van Wassenhove 2009, 45; Hensgen et al. 2003, 72; Zhang et al. 2002, 372)

2.1.1 Pre-disaster, the development stage

The development stage includes two phases which are prevention and mitigation, and preparedness. Mitigation is a pro-active approach to reduce the vulnerability of the population and property in case a disaster strikes. The actions are taken before the disaster by using laws and mechanisms, such as establishing codes and restrictions to ensure that houses are built in areas less disposed to disasters (Tomasini & Van Wassenhove 2009, 45). Equally important in development stage is disaster preparedness where the aim is to prevent a bad situation from becoming worse by preparing for and reduce the effects of disasters. For example, cities have fire departments that are prepared to act if needed (Tomasini & Van Wassenhove 2009, 46). Commitment with stakeholders should be done in development stage since it will save time during the response phase where time is crucial. Having an effective communication during disaster requires good relationships with stakeholders before the disaster strikes (Demiroz & Kapucu 2012, 94). When operating

in disaster afflicted areas, it is essential to be willing to work together and share same mission and vision.

2.1.2 Post-disaster, the relief stage

The relief stage consist of response and recovery phases which are reactive approaches. As previously mentioned, every disaster is different in its own way and one single routine procurement does not exists. The timing, location, and the impact of disaster creates a unique scene with own requirements (Balcik & Ak 2014, 1028). After a disaster has occurred, the immediate response requires many different competences and actions. Firstly, the evaluation of disaster severity needs to be assessed in order that the planning, training, and storing can be done quickly. Correspondingly, specific warnings to local authorities in the disaster area needs to be addressed immediately to reduce the effects on resources and the population (Zhang et al. 2002, 371). No matter how well the preparedness is implemented, the future remains largely unknown. Not knowing where, when, how big the next disaster will be and how many people will be affected, makes the response very complex (Tomasini & Van Wassenhove 2009, 46).

Since disasters are unpredictable, the majority of relief supplies are purchased after a disaster has occurred. Trade is conducted with both local and global suppliers. Most organizations use a competitive bidding procedure which is very time-consuming process (Balcik & Ak 2014, 1028). Moreover, not having a functional logistics infrastructure will delay the relief efforts even further (Knemeyer et al. 2009, 141). In disaster management, time is crucial. Time is especially crucial in response phase since it is improving human survival (Chakravarty 2014, 146).

Recovery phase, also known as rehabilitation, comes after the response where the society seeks of returning to the state of normality. This phase also includes risk identification and vulnerability assessment. The learning process is ongoing during the whole disaster management cycle, however recapping and reporting especially during the recovery phase is very important.

2.2 Actors in disaster management

The economic system can be divided into three sectors: public, private, and third sector. There are three main goals in humanitarian assistance: to save lives, decrease human suffering, and contribute to development (Haavisto & Goentzel 2015, 314). The increase of disasters and the severe damages they cause has drawn attention of professions from all

different fields: business executives, engineers, scientists, information technology experts, doctors, and social scientists (Gupta et al. 2016a, 1611). In disaster situations, different actors respond to different needs and areas. Most of the disasters cannot be stopped, however, the impacts can be limited by both public and private sector (Ritchie 2004, 669). One single actor cannot manage a disaster alone. Managing a disaster is a teamwork that includes public and private organizations, local, national and international governments, and nonprofit humanitarian organizations (Grupta et al. 2016a, 1611). The disaster management cycle presented earlier in this chapter show five different phases. Usually different stakeholders are involved in different phases, and they are not involved in all phases.

Immonen and Rantanen (2011, 56) have suggested four different approaches private companies can operate in disaster management's, ICT business opportunities', value chain. All four approaches can be used in all business fields. First approach is the customer relationship directly to end-users. The key to success from external supplier's point of view to offer a service or a product either directly or indirectly to the individual or the community suffering from a disaster. Another approach is to offer a service or a product, for instance, to a non-governmental organization or through them to individuals or to the community. Here, the financier would be a third party, e.g., various international financial instruments. In this customer relationship it is essential to consider both the financier's and the stakeholder's goals. In the third approach, the products or services are offered through local suppliers. This approach will add more value by creating new employment opportunities to the local community. Here the customer relationship is multi-layered where the education, implementation and technical support has a significant role. This approach could be as part of company's corporate social responsibility, yet still profitable action. Several researchers have pointed out that the local communities are the key stakeholders when managing a disaster (Sheppard 2013, 25). The fourth approach is suitable in situations where the disaster is multi-dimensional. In this approach, a network of experts from different fields is built in order to form a strong support in rebuilding and developing the society in crisis areas. In figure 3, the value chain of disaster management with all phases is illustrated.

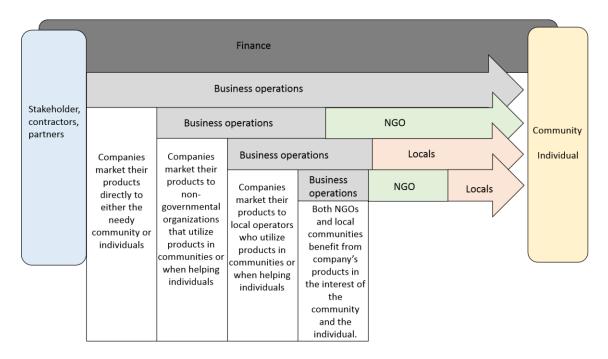


Figure 3 Disaster management value chain (adapted and modified from Immonen & Rantanen 2011, 57)

Since disaster management is a complex phenomenon (Haavisto & Goentzel 2015, 301), actors in humanitarian operations have identified the effectiveness of cluster model. The aim of a cluster model is to gather actors that are operating in the same area and develop a cooperation network in order to improve predictability and follow-up in international humanitarian disasters. In addition, the purpose is to enhance work divisions and define the roles and responsibilities in different operation areas. Clusters would ensure that information reach its target faster. This would enable quicker response to a disaster (Altay & Pal 2014, 1015). External actors are rather heterogenic group. Some of them interact with each other on daily basis, while some are involved only under certain boundaries and even then only temporarily, very short period of time and usually in haste (Immonen & Rantanen 2011, 15).

Large-scale disasters are very complex processes and therefore are involving many stakeholders. In the figure below stakeholders, both those with needs and those with capacities, in large-scale disasters are listed.

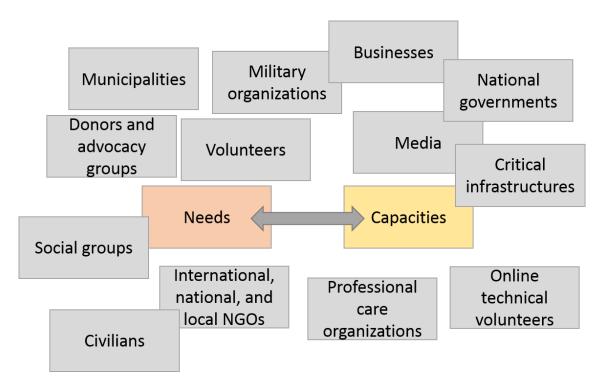


Figure 4 Stakeholders involved in large-scale disasters (van den Homberg 2014)

The first priority in the response phase for humanitarian organizations and national governments is to provide essential survival kit such as shelter, food, and medicine for people in need, support personnel, and acquire equipment. However, they cannot preposition large inventories because there is a risk that the assets might be underused. This creates another challenge: integrating prepositioned inventory with real time deliveries (Chakravarty 2014, 146). This challenge is something that private companies also face.

Third sector organizations

Third sector organizations, also known as nongovernmental organizations, non-profit organizations or civil society, can be described as organizations that aims to benefit and enrich the society with little or no government intervention (Martin & Thompson 2010, 18; 199). However, in many cases governments support third sector organizations in the delivery of services on all levels.

After a disaster has occurred, the disaster environment is chaotic. There are hundreds of humanitarian organizations all with different political agendas, ideologies and religious beliefs. At the same time, they are all fighting for media and donor attention. The most important task is to align them without bargaining their mandates or beliefs (Van Wassenhove 2006, 477). Enabling faster respond to disasters, humanitarian organizations are collecting, analyzing, storing, and communicating facts and figures, and then make operational decisions. The challenging part here is that everything have to be done within a short period of time (Zhang et al. 2002, 371).

Sustainable development is very important especially for third sector organizations. Neglecting sustainability aspects can do harm in the communities where private companies operate, for instance, in Afghanistan in 2009 a huge waste problem was formed after water was distributed to beneficiaries in small plastic bottles (Haavisto & Goentzel 2015, 312). After realizing the damage, there was an innovative initiative where the shipping pallets and the empty plastic water bottles were reused to create temporary shelters for locals.

Non-profit organizations need the involvement of private sector in disaster relief market and they are assisting businesses in order to manage disasters more efficiently. United Nations Office for the Coordination of Humanitarian Affairs (OCHA) is connecting business initiatives in disaster sector. They support companies to take risk assessment and aim to speed up productivity. Other important players are European Community Humanitarian Office (ECHO), the US Agency for International Development (USAID), and Voluntary Organizations in Cooperation in Emergencies (VOICE) – a network of 85 NGOs active in humanitarian aid worldwide.

Public sector organizations

The public sector is also a non-profit sector. The public sector consist of organizations that are owned and operated by the government. Public sector organizations' main aim is to provide services for its citizens. The organizations usually exist at three levels: metropolitan (federal or national), regional (state or provincial), and local (municipal or county) levels (Sellers & Lidström 2007, 609). Some examples of public sector services are healthcare, police services, education institutions, and waste management. One of the biggest method in raising funds for such services is through collecting taxes (Sellers & Lidström 2007, 619).

Finland is a constitutional republic and the highest elected bodies are the Parliament, the President of the Republic and the Government. The Government is consisted of the Prime Minister's office and eleven ministries. The Ministry for Foreign Affairs, Ministry of Economic Affairs and Employment, the Ministry of Education and Culture, and quasi-governmental organizations are reinforcing Finnish SMEs by offering them services through Team Finland network to promote exports and internationalization. In public sector, there are also quasi-governmental organizations, which are supported by the government but managed privately. Examples of a quasi-governmental associations in Finland that are supporting companies to enter disaster relief market are Finpro, Tekes, Finnpartnership, Finnfund and Finnvera. Finpro's mission is to bring growth to Finland and they are aiming to foster internationalization of Finnish companies. Tekes and their Beam programme is supporting innovations. Finpro and Tekes are merging, and from the beginning of year 2018, the quasi-governmental organization is called Business Finland.

Finnparthenship is financially supporting companies in partnership building that are seeking long-term business in developing markets. Finnfund provides long-term financing for Finnish companies that are planning to do business in developing countries. Finnvera protects companies against export risks. They are offering loans, guarantees, venture capital investments and export credit guarantees, to strengthen the operating conditions and competitiveness of Finnish companies.

Private sector organizations

The third economy sector includes all for-profit organizations that are not owned or operated by the government. That being said, sometimes private companies wants to play a more collective role together with government and UN system. Managing a disaster effectively is only possible by new innovative technological means. Without combining third, public, and private sectors, it will not work. Private companies entering disaster afflicted areas need to have straightforward objectives. Development challenges can be a great business opportunity for private companies but only profit-driven incentives are not in favor in a long-term and do not converge with the development objectives. Private companies should explore business opportunities and contribute through the development of their core business models (Izumi & Shaw 2015, 4). They should also understand the dynamics of third and public sectors. By understanding the dynamics, an effective partnership is possible among the sectors (Thomas & Fritz 2006, 116). The partnership is not just the input and output but the whole operation, from the beginning to the end (Van Wassenhove 2006, 475). Companies should take the need of the individuals that are suffering from the crisis as their starting point. The key principles of the operations in disaster management is sustainable development that is basis of local people's needs. It is also vital to take into consideration the local culture, religion, and history. The challenges in disaster management can only be tackled if governments, humanitarian organizations, and the private sector work together (VOICE 2016, 6).

Several insurance companies are active in non-conflict situations but for them the profit remains the objective (VOICE 2016, 5). Private companies do not have good reputation among the people who are working with humanitarian organizations since they are focusing on helping people rather selling to them and gaining profit (Thomas & Fritz 2006, 117). Generally, the biggest motive that is guiding private sector activities is to earn money. The motivation of the companies when entering disaster market is very important (Immonen & Rantanen 2011, 44). Doing business in disaster relief is not a short-time strategy. Fast profit gaining does not produce long term results, but instead private companies should commit to support local operations which has proven to produce pleasing results from business point of view as well (Immonen & Rantanen 2011, 62). Therefore regular dialog and open communication is vital when building trust between private companies and humanitarian organizations. When private companies do business in disaster

afflicted areas as they turn disaster contexts for people into a market opportunity, the question on which ethical basis the cross-sector partnerships are best established is something that needs to be openly discussed for everyone's benefit. Information sharing and cooperative communication are mechanisms for collaborations (Altay & Pal 2014, 1015). It is worth noting that the stakes for private companies and humanitarian organizations is not the same. A loss of reputation is undesirable situation for both, but for humanitarians it can deeply affect their ability to save lives (VOICE 2016, 5).

Finnish companies have a lot to offer in expertise when managing a disaster. In disaster relief there is a great need for companies from ICT sector, water and waste management, solar systems (e.g., solar water systems), healthcare (e.g., birth delivery process), education, and building buildings (e.g., schools and hospitals). The ICT knowledge in Nordic countries is excellent. They have good data management and data collection systems, which could be used when managing a disaster and make the process more efficient. Water and waste business is very accurate and important way to go forward. There are many Finnish business initiatives where drinking water is made with the use of solar power. Finnish companies have also presented solutions for waste management without water. In order to minimize human suffering in crisis areas, proper hygiene in all levels is crucial. Nordic countries have been forerunners of healthcare for last 15 years and their expertise is urgently needed. Finland is known for its good education system. Education is a great business opportunity to export, for instance, most of refugees in refugee camps are children. The need to continue the education after a disaster strikes is essential for the wellbeing of the society. Finnish companies have used digitalization to foster learning. Few Finnish companies have entered disaster market to offer different kind of education services for people in disaster areas.

2.3 Cross-sector partnerships in disaster management

"Unity is strength... when there is teamwork and collaboration, wonderful things can be achieved."

- Mattie Stepanek

Partnership is an association of two or more people, organizations, or countries that are working together as partners. As there is no internationally accepted definition for disaster or crisis, there is none for cross-sector partnerships either. Majority of researchers would define cross-sector partnership as an arrangement where organizations from different sectors (public, nongovernmental, and private) work together in pursuance of providing public assets or services for communities. The agreement is usually a long-term contract. In most of the countries these kind of collaborations are called public-private partnerships

(PPPs, 3P, P3), but for instance in United Kingdom they prefer the term Private Finance Initiatives (PFI). Public-private partnership term is usually more legally defined, and the name itself exclude the third sector. Cross-sector partnerships, on the other hand, are more flexible in nature and involve organizations across sectors in order to tackle public problems that public sector cannot successfully tackle alone (Bryson et al. 2015, 1). Partnering can give a competitive advantage to companies when used effectively and efficiently. Cross-sector partnerships, also known as multi-stakeholder collaboration or inter-sector partnership, between third sector, public sector, and private sector can be possible only when the needs for mutual benefits are acknowledged. Intra-sector partnerships are contrary to cross-sector partnerships, where relationships are formed within same sector (Rondinelli & London 2003, 62).

According to OCHA's Financial Tracking Service, during the first half of year 2017, most humanitarian aid funds came from certain governments. There were five governments who donated over \$500m. Largest donors were United States, Germany, the UK, Canada, and Japan, in descending order, respectively. Syria crisis is still affecting large part of the world. Big part of the donations have went to Syria, Iraq, Turkey, and Lebanon.

During the last few decades, there has been a lot of changes in public procurement environment that has created various public-private partnership options (Torvinen & Ulkuniemi 2016, 58). Innovation is not important just for private sector but also to public sector (Hartley 2005, 27). Binder and Witte (2007, 19) state that those private sector companies that are commercially active in humanitarian work depend greatly on government contracts. Some companies also sign contracts directly with traditional humanitarian aid organizations, such as United Nations or other NGOs.

Companies are highly selective when identifying and choosing their partners. One of the most important selection factors are competence and the reputation for efficiency. In cross-sector collaboration, as in collaboration in general, organizations share the risks and their chances of survival increases in the long run (Dentoni et al. 2016, 38). Private sector companies would rather choose partners that fit into their branding strategies and would improve their brand image (Binder & Witte 2007, 12). Companies' decision when choosing a proper form of partnerships depends on their goals. Whether they are short-term operative goals or long-term strategic goals (Haavisto & Goentzel 2015, 301). Cross-sector partnerships can be classified into two main sub-category: commercial and non-commercial partnerships. Furthermore non-commercial partnerships can be divided into philanthropic and integrative partnerships. In the table below, different cross-sector partnerships are categorized.

Table 4 Cross-sector partnerships	(adapted fro	om Balcik	et al.	2010, 27	7-28;	Thomas &
Fritz 2006, 118-121)						

Commercial	Non-commercial		
Commercial	Philanthropic Integrative		
partnerships	partnerships	partnerships	
Long-term	Short-term	Long-term	
	Donation-based Strategic partners		

The most challenging stumbling block in cross-sector partnerships is the different objectives with public sector, private companies, and third sector. According to VOICE (2016, 5) Corporate Social Responsibility (CSR) has been the context in which private companies are involved in disaster relief. Key challenge is to improve the engagement with local populations because they are asset when it comes to managing a disaster (Sheppard et al. 2013, 23). Local public sector workers lack of training, emergency management experience and skills, and usually are very young staff (Henderson 2004, 111). Organizations enter cross-sector partnerships with the prospect of accessing and co-creating new resources and capabilities (Austin 2000, 69). As mentioned earlier on, partnerships with private companies can be divided into two main categories: commercial and non-commercial. The choice of the nature of the partnership is based on the company's strategy line. In the next sections, these partnerships are described in more detail.

2.3.1 Commercial partnership relationships

Commercial partnerships are relationships that involve monetary transactions between third sector, public sector, and private sector companies (Balcik et al. 2010, 27). Humanitarian organizations have dominated disaster relief for decades but private companies have also been engaged in the market for a long time to fill the gaps where humanitarian organizations are lacking expertise, such as in logistics (Binder & Witte 2007, 19). Disaster relief is a multi-billion-dollar market for companies with commercial motives.

Since the frequency and volume of disasters are hard to predict, developing strong relationships with suppliers in advance of disaster has proven to be difficult (Balcik et al. 2010, 27). Systematic supplier coordination is rare in disaster relief and procurement procedures are mostly done through price-based biddings. Different forms of commercial partnerships are being created to meet the demand of the disasters. Most common form of partnerships is vertical relationships, meaning that strategic alliance is with suppliers and transportation providers (Balcik et al. 2010, 27). Most of the interactions with private companies are done in the post-disaster environment, especially the transportation companies usually emerge during the relief stage.

2.3.2 Non-commercial partnership relationships

Philanthropic partnerships take place when private sector interacts with humanitarian relief organizations without profit making (Balcik et al. 2010, 27). For instance, a private sector company may provide monetary or in-kind support such as supplies and staff for humanitarian relief organization. According to Balcik et al. (2010, 27) these donation-based relationships are usually short-term and during the disaster relief phase.

Integrative partnerships, on the other hand, are long-term relationships where private sector companies and humanitarian organizations interact through a form of a strategic partnerships. In these relationships, private sector companies share their expertise and resources in order to have more systematical relief chain logistics (Thomas & Fritz 2006, 120). They involve significant resource commitment and joint planning and therefore are longstanding. Both philanthropic and integrative partnerships may involve multiple companies joining their forces in order to have larger impact (Balcik et al. 2010, 27).

2.3.3 Leadership and trust

In order to manage a disaster effectively, it is essential to identify the owner and the leader of a disaster. These two are the key positions and very crucial, because the lack of coordination and collaboration between the owner of a disaster and disaster management sometimes prevents efficient and high-quality operations and actions in disaster management. Additionally, trust is very important issue in disaster management. Trust between the locals, governments, humanitarian organizations and private companies is the key to a successful collaboration and outcomes. In a time of a disaster, locals are looking the leaders for safety and direction. Leader's responsibility and the challenging part is to bring things back to normal in the most effective and efficient way (Demiroz & Kapucu 2012, 92). Disasters cause considerably great damages in many ways but from a leader's point of view, there is an opportunity to reform institutional structures and use more sustainable solutions, and modernize aged policies to the present time.

There are different competencies when leading before, during, and after disasters. Furthermore, the type of a disaster demand different leadership patterns. Demiroz & Kapucu (2012, 95) state that there are four specific routine functionalities that needs to be in place when managing a disaster. The very first two tasks consist of establishing plan and system with a good communication and proper use of information technologies. Disaster leaders need to adapt to the situation and also bear in mind that good communication is essential asset in disaster relief. New improved technologies create great opportunities but they also create new vulnerabilities which requires better disaster preparation and mitigation

(Murphy 2009, 320). Every situation is unique and the leaders need to identify the problem and gather all the relevant information and according to that conduct a plan of action in a tight schedule (Zhang et al. 2002, 370). The third task is to prearrange decision making procedures. The leaders need to be flexible and creative when it comes to decision making in order to have an efficient process. Lastly, leaders need to formalize cooperation among different agencies (government, NGOs, and private companies) with the aim of effective operations that covers the entire afflicted area. It is all about acting as a team with a shared mission and vision for success, and not act as competitors (Demiroz & Kapucu 2012, 96).

When the disaster strikes, the most reliable and suitable resource for a greater effectiveness and efficiency would be local people. A greater involvement of local people would be very beneficial especially in developing countries but usually that resource remains unused. Even though they would be able to make major contribution to improvements in ongoing practice, especially in logistic functions (Sheppard et al. 2013, 33). Time is very crucial during the disasters because it is about saving lives and millions of dollars. On time delivery is the key element, since time is money. Losing a lot of money in the early stages means cutting off from the reconstructions. That is undesirable situation that stakeholders are trying to avoid the best they can.

2.3.4 Knowledge sharing and communication

Having knowledge, makes the decision making easier and gives the power to act. It is essential to improve the communication and information sharing which will consequently make the workflow much faster, cheaper, and better. In addition, good communication is important since it will also enable various groups to share and reuse different resources (Zhang et al. 2002, 371). The information should be shared also for those who are not participating in everyday operations, since they will also benefit from the information they are receiving. Along with stakeholders having a common communication infrastructure and technology in order for them to communicate successfully, they also need to be willing to cooperate together (Demiroz & Kapucu 2012, 94). In the early stage they need to ensure that they all share the same ideology and understand each other. Thus developing common goals and strategies.

A platform for information sharing and discussions among all stakeholders in disaster relief is crucial but sadly such platforms do not exist in most countries where it is needed the most (Izumi & Shaw 2015, 7). The lack of important information will limit other stakeholders', especially private companies, contributions. According to World Vision, in 2016, there were many "silent disasters" that did not receive much media attention but

many people were afflicted. Since they did not receive much media attention, many private companies were not planning to get involved. Majority of private companies would rather work in well-publicized disasters. They want to enhance their operations with good publicity. Therefore they would choose to get involve in well-publicized disasters instead to help the neediest in less "popular" disasters (Thomas & Fritz 2006, 117). This is an example of potential negative media exposure (Haavisto & Goentzel 2015, 303). The relationship with media in disaster response can best be described as love-hate relationship. Even though media is more and more involved, humanitarian organizations and journalist still do not have clear mutual understanding of their interdependence (Van Wassenhove 2006, 477).

There has been development in the information sharing field but it seems that there are still gaps for the communication to flow smoothly. The creation of Global Disaster Information Network (GDIN) started in 1999 and at the moment it appears that the focus has shifted to other ways of managing and preventing disasters (Zhang et al. 2002, 373).

2.4 Dynamic capabilities

"It is not the strongest of the species that survive, nor the most intelligent, but the one that is most responsive to change."

- Charles Darwin

According to Wiggins and Ruefli (2005, 887) companies' ability to sustain competitive advantage, especially in long-term, has become more difficult than it has been in the past. This has led to a situation where competitive advantages are mostly short-term. In these cases, companies should strategically seize opportunities and create a series of temporary advantages (Eisenhardt & Martin 2000, 1117). In order to gain a sustainable competitive advantage, company's resources and capabilities need to be valuable and rare (Barreto 2010, 259). The best way to tackle the challenges is with the dynamic capabilities approach.

When studying dynamic capabilities, it is important not to forget to also ponder resource based view (RBV) since dynamic capabilities is usually considered as the sister theory for RBV. Resource-based view has been researched for much longer than dynamic capabilities. It was Edith Penrose who introduced the foundations for resource based view of the firm in her book "The Theory of the growth of the firm" in 1959. RBV refers to identifying, evaluating, using, and protecting company's potential key resources (tangible and intangible) in order to achieve competitive advantage (Wernerfelt 1984, 172). RBV approach is unchanging in its nature and insufficient to explain companies' competitive

advantage in changing environments. In 1997, Teece et al. proposed the dynamic capabilities approach as an extension to the RBV in their paper "Dynamic capabilities and strategic management" and hence filled the gap. Dynamic capabilities is a combination of behavioral theory of the firm, evolutionary theory, and resource-based view of the firm (Augier & Teece 2010, 410).

The difference between resources and capabilities is that resources can be defined as "stocks of available factors that are owned or controlled by the firm", whereas capabilities can be defined as "firm's capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end" (Amit & Schoemaker 1993, 35). "Dynamic", on the other hand, refers to the way the resource base is modified in a changing business environment (Teece et al. 1997, 512; Kaltenbrunner & Beerens 2012, 58). Dynamic capabilities are not something that can be bought in the market, they are built and part of the organization (Bowman & Ambrosini 2003, 293).

Authors define dynamic capabilities in many different ways and they stress on different things. Barreto (2010, 271) define dynamic capability as "firm's potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base". All these four dimensions should be taken into consideration. Dynamic capabilities can be described as multidimensional construct since all dimensions are distinct but at the same time they are related to one another, some with stronger correlation among different dimensions and some might be poorly correlated (Edwards 2001, 144; Barreto 2010, 271). In dynamic capabilities, the core is in the change of resources and operational capabilities. Dynamic capabilities are important in high-velocity markets (Barreto 2010, 262). Disaster relief market is very high-velocity market. Dynamic capabilities anticipate environmental changes and hence develop the flexibility of the company. The product itself alone does not guarantee business opportunities. It is necessary for companies to response to technological and market changes (Augier and Teece 2010, 411). Dynamic capabilities increase the competiveness, since they concern to changes in resources, capabilities, operating routines, and to the ability to sense opportunities and threats, as well as decisionmaking abilities (Barreto 2010, 270). Company-specific capabilities can have enormous effect on company's performance. Dynamic capabilities are processes that have impact on resources. Dynamic capabilities deals with both external and internal factors. The role of SME managers in disaster relief is a crucial factor for success. Managers play an important role in identifying and capturing new strategic opportunities and in creating business models and new organizational forms (Augier & Teece 2010, 410). Managers are the ones who direct the operations and decide how resources are used. The central focus in strategic management is how managers are modifying their resource base in order to achieve the organization's goals.

Dynamic capabilities is excellent framework, when used correctly, to understand the processes of opportunity sensing and seizing, and also the processes of strategic renewal. Teece (2007, 1319) divided dynamic capabilities into three core components: sensing and shaping opportunities and threats, seizing opportunities, and transforming. In rapidly changing environments, sensing opportunities and threats requires scanning, searching, and explorative activity (O'Reilly & Tushman 2008, 190). This activity necessitates to invest in research and related activities. Companies need constantly scan, search and explore across technologies and markets. Along with the research activities, it is vital for companies to understand the structural evolution of industries and markers and correspondingly discover the latent demand of the markets. By doing so, companies will also learn about the customer needs, and as a result they will have a numerous of commercialization opportunities (Teece 2007, 1322). After the new opportunity is sensed, companies should use the resources to address the opportunity through new products, processes, or services and simultaneously seizing value from doing so. Seizing activity usually necessitate to invest on development and commercialization activity. It requires maintaining and improving technological competences and complementary assets (Teece 2007, 1326). After that, companies should invest strongly on particular technologies and designs, since it will benefit the company to achieve marketplace acceptance. Companies need to be active in transforming. They need to reconfigure the market opportunities and manage the threats by continued renewal. Teece (2007, 1335) highlights that routines are helping companies to sustain continuity but only until when there is a change in the environment. Developing routines requires a lot of investments, and changing those routines will be costly. Therefore the change should not be done instantly, because it may create apprehension within the company. These three different clusters of activities and adjustments of dynamic capabilities are valuable for companies, since dynamic capabilities determine the direction and the speed of certain resources that can be linked to different requirements and opportunities of the business environment (Teece 2012, 1395-1396).

Wang and Ahmed (2007, 36-37), on the other hand, divided dynamic capabilities into three main components that together can explain company's processes of linking internal resource advantage to external market-based competitive advantage. These components are adaptive capability, absorptive capability, and innovative capability. Adaptive capabilities refers to company's ability to identify opportunities and use them. Absorptive capability is perceived as company's ability to identify external information and use it for commercial purposes. Innovative capability indicates company's ability to develop new products, processes and markets (Wang & Ahmed 2007, 37-38). Wang and Ahmed's model of dynamic capabilities has not taken sensing and seizing into account which are the core of dynamic capabilities and are highly needed to apply dynamic capabilities. In addition, absorptive capability and innovation capability are related to each other and are overlapping (Yassien 2015, 68). Teece's three core components of dynamic capabilities

is more suitable model for disaster management and cross-sector partnerships, since they focus on the essential aspect of succeeding in different and rapidly changing environments.

2.4.1 Processes and routines

Dynamic capabilities are not the same as company's ordinary capabilities. Dynamic capabilities are strategic ones and these capabilities are changing over time. Because of this, dynamic capabilities are not usually associated with routines. A routine is a sequence of actions that are regularly repeated. However, Winter (2003, 991) state that dynamic capabilities are rooted in high-level routines. These change routines require investments and they need to be maintained (Teece 2012, 1397). In order to identify and assess opportunities and threats in dynamic environments, companies need to involve set of resources and routines in their operations, such as a strategy-making process associated with variation and resources that focus on competitive intelligence (O'Reilly & Tushman 2008, 190).

Bowman and Ambrosini (2003, 293) have suggested, building on Teece et al. (1997) three clusters, four principle modes for developing dynamic capabilities that are suitable and beneficial for disaster relief. The following processes, that are company-specific processes, are reconfiguration, leveraging, learning, and creative integration.

In **reconfiguration** process, dynamic capabilities are created by transforming and recombining assets and resources (Bowman & Ambrosini 2003, 293). This usually occurs after an acquisition or a merger, but in disaster relief, dynamic capabilities can be created through reconfiguration by forming cross-sector partnerships. For instance, through collaboration with local service centers. Reconfiguration requires constant observation of technologies and disaster relief market. Disaster relief market is constantly changing. Chance is usually costly, therefore it is essential that companies develop processes in order to minimize low pay-off change. Kaltenbrunner and Beerens (2012, 59) state, that third sector should consider outsourcing some of the operations, especially regarding support functions, since third sector have the tendency to concentrate mainly on the operational level. Authors suggest that suitable outsourcing operations for specialist could be, for example, training for operational capacity building, event management, exercise audits, and IT-support. This is when private companies enter and take over those operations.

For private sector companies, **leveraging** means extending resources into a new domain, for example, by replicating an existing brand to a new set of products. This way the company may extend the resource at low cost, especially if they control a strong brand. Leveraging also involves replicating processes or systems that are operating in one business unit into another units (Bowman & Ambrosini 2003, 294). There are many potential

companies in Finland with good quality products and services with strong brands that could leverage their existing resources and hence enter the disaster relief market. In order for them to succeed in this, they need to know how the brand adds value and also identify where else it could operate as a resource. They should also manage the required changes without reducing the value of the brand (Bowman & Ambrosini 2003, 294).

Teece et al. (1997, 520) define **learning** as "a process by which repetition and experimentation enable tasks to be performed better and quicker". Learning processes include both passive experiential processes, so called "by doing" learning, and cognitive processes. Dynamic capabilities are the result of learning. The learning processes increase the effectiveness and efficiency of the company's performance (Kaltenbrunner & Beerens 2012, 60), since it provides better understanding of any gaps or problems that may occur along the way. Learning occurs in all phases of disaster management and through learning the company create new patterns of activities, processes and routines and support innovative initiatives. Thus improving the quality and the range of the products and services.

Creative integration means to combine all the assets and resources the company bear and this way creating completely new resource configurations (Bowman & Ambrosini 2003, 295). Integration is not only integrating resources within the company, but it is also integrating resources from external resources, such as suppliers and their production processes. Cooperating with others is one of the main sources of product innovation process but currently there is not much creative integration in disaster relief because organizations from all sectors are neglecting any reflection and learning processes (Kaltenbrunner & Beerens 2012, 59).

According to Dentoni et al. (2016, 38) the concept 'sustainability' requires the integration of economic, social, and environmental outcomes. Authors also state, that outcomes of traditional dynamic capabilities are often outlined in terms of economic effectiveness. Furthermore, traditional approaches to understand competitive advantage are not focusing on some sustainability challenges, such as firm values, strategic intent, and company's nature of the core business activity (Teece 2007, 1347). Consequently this suggest that cross-sector partnerships' role in co-creating dynamic capabilities depends on how organizations engage with each other (Dentoni et al. 2016, 38).

2.4.2 Environmental uncertainty

Uncertainty occurs when something is unknown or cannot be known (Abbott 2005, 237). People and companies are living with uncertainty every day. Managing a disaster is very uncertain and in most cases, it is not possible to predict a disaster. Therefore it is extremely hard to prepare for it and not knowing the extent of the disaster, makes it even harder. Disaster environment is very uncertain and usually chaotic environment. Logistics

are the biggest concern when managing a disaster. Delivering the products to the needy people on time and not having to go through all the bureaucracy steps, is a big challenge for both private and third sector organizations.

Humanitarian organizations most often operate in unstable environments with uncertainties in the severe of the disaster and the demand (Jahre & Fabbe-Costes 2015, 348; Balcik & Beamon 2008, 102). One challenge, especially for humanitarian organizations, is the competition when purchasing certain types of supplies after the disaster. Depending on the location and timing of a disaster, purchasing large amount of supplies in short period of time may create shortage not only in the local but also in global markets. This sudden increase in demand may inflate prices (Balcik & Ak 2014, 1028). Some believe that doing business with profit making as company's objective in disaster areas, is ethically wrong. In these kind of dynamic environments, private sector should invest building strong relationships between the sectors. Some private companies also hesitate to enter disaster relief market because they are lacking of finance or they are unaware of the payment methods of the target country. Personal security is considered a very important aspect. There is an increase in the numbers of crimes in disaster areas. It has not been researched if it has a big impact on market entry decision making. According to Immonen and Rantanen (2011, 43) every solution to make personal security better, has arouse interest. The United Nation's seven human security subparts are economic, food, health environmental, personal, community, and political security. Security companies have a great potential to find their place in the market.

Private companies' shortsightedness, conflict between long-term and short-term goals, can affect cross-sector partnership deals with third sector. Humanitarian organizations usually work in longer time frames than private companies, for example working out an alliance can take from 12 to 18 months. This might discourage private companies because they have used to get things done in shorter time frames (Thomas & Fritz 2006, 118).

2.5 Synthesis

"The Chinese use two brush strokes to write the word 'crisis.' One brush stroke stands for danger; the other for opportunity. In a crisis, be aware of the danger - but recognize the opportunity."

- Richard Nixon

There are many reasons that drive private sector companies to engage in disaster relief. The most common aims are to improve brand image, corporate social responsibility, motivate staff and attract prospective employees (Binder & Witte 2007, 13). The best disaster

market entry strategy for private companies is to form cross-sector partnerships. The literature review indicates that cross-sector partnerships are very good strategy when doing business in disaster market, since disaster market is such complex environment that private company would not succeed there alone.

Most of the academic literature is focusing on post-disaster stage. This can be explained with the fact that post-disaster market is much bigger than pre-disaster market and private companies can more easily get bigger share of the market after the disaster has occurred. Fixing the damages and rebuilding the society is big business. In addition, it can be marked that all three economic sectors, public, private and third sectors, would rather not invest on something that they are not sure about and whether the risk is worth taking. Biggest challenge is dealing with uncertainty. Many companies have excellent service capabilities or suitable products for disaster afflicted area and they are missing a clear opportunity to use them and raise their revenue (Heaslip 2013, 41). The know-how and the expertise is much more valuable than just donating money. Just the control of resources does not create value, it has more to do with the ability to combine these resources. In order for a company to grow, it is required that the company is continuously able to further develop their expertise, innovativeness, and their entrepreneurial skills (Kuuluvainen 2009, 36). Dentoni et al. (2016, 39) emphasizes that simply the ability to successfully build cross-sector partnership can create dynamic capabilities that furthermore can lead private company to competitive advantage. These capabilities do not exist in individual organizations but relatively are the result of linkage of participating organizations. In other words, organizations in cross-sector relationships co-create higher degree dynamic capabilities and as such are difficult to imitate, hence improving organizations' opportunities for success.

Dynamic capabilities is a wide concept without one universal definition. Dynamic capabilities means company's ability to modify their internal and external resource base by creating, integrating, recombining, and releasing resources (Eisenhardt & Martin 2000, 1116). Dynamic capabilities are strategic capabilities and the best way to achieve and maintain competitive advantage is by focusing on the four main processes that dynamic capabilities entail: reconfiguration, leveraging, learning, and creative integration. Company's ordinary capabilities are usually associated with routines, whereas dynamic capabilities are used in constantly changing environments. Dynamic capabilities develop over time through practice and experience. In figure 5, the four main processes that lead to creation of dynamic capabilities are illustrated. The whole process starts with reconfiguration, forming a cross-sector partnership. The reconfiguration process is about sensing opportunities. Identifying and seeking the potential partners is one of the early steps in reconfiguration process, and then the leadership needs to be defined. Having clear roles improves the effectiveness of the partnership and foster the creation of dynamic capabilities. Between the reconfiguration and leveraging processes, the trust between the partners

should be established. In some cases, the cross-sector partnership may work without trust, but if the aim is to develop dynamic capabilities through a partnership, trust is vital in the whole process. Leveraging is about working effectively with the partners and seizing the opportunities.

Learning process is very important when developing dynamic capabilities, since ultimately, dynamic capabilities are the result of learning. Private companies will not only learn from successful partnerships but they also learn a lot from their partners through unsuccessful partnerships. As disaster environment is constantly changing, learning processes help companies to improve their abilities to adapt to new situations and settings by creating new patterns of activities, processes and routines. Investing time on cross-sector partnership and using company's already existing ordinary capabilities will lead to the creation of dynamic capabilities.

In creative integration process, all the learning is transformed into new resource configurations. The changes are made based on the partners, customers, and local people of the target market. The knowledge sharing and communication is very essential in all processes. The external communication is important especially before forming cross-sector partnerships, since actors in disaster market should know what is needed and by whom. Not having a big communication gap enables finding right partners faster. Good communication is important since it will also enable various groups to share and reuse different resources. When the partnership is formed, then it is vital to focus and invest on internal communication among the partners.

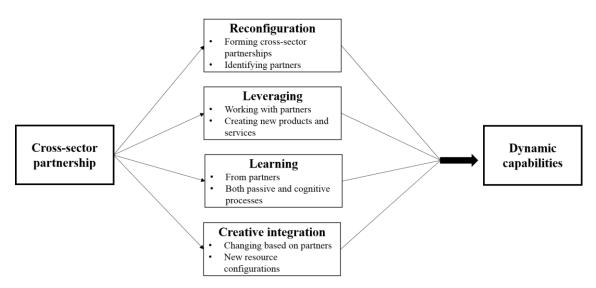


Figure 5 Development process of dynamic capabilities through cross-sector partnerships

To conclude, the literature review answers partly to the research questions. There is barely any discussion in academic literature on how the creation of dynamic capabilities of cross-sector partnerships in disaster management actually is possible in practice. There has not been many research that study private companies operating in disaster market and the

linkage between cross-sector partnerships and development of dynamic capabilities. Literature review shows that there are big players in the disaster market and SMEs may find it difficult, especially in the early stages, to get their share in the market. It is vital for SMEs themselves to be active because big players, such as the UN or governments, do not have enough resources (time and money wise) to go out and look for potential partners. SMEs are the ones who have to make the first move. This research aims to answer all three research questions by interviewing Finnish SMEs that are operating in post-disaster market.

3 RESEARCH DESIGN

In this chapter, the research methodology and used methods are explained and justified. This chapter starts with an explanation of the research approach, then continues to description of data collection with the description of participation selection and the guideline used in the semi-structure interviews. Then, the strategy of analyzing the data is revealed. Furthermore, the trustworthiness of the study is evaluated.

3.1 Research approach

"Research is formalized curiosity. It is poking and prying with a purpose."

- Zora Neale Hurston

A research theorize and describe issues or problems (May 2002, 264). Merriam (2015, 3-4) defines research as "a systematic process by which we know more about something than we did before engaging in the process". There are two research strategies: basic and applied research. This study can be classified as a basic study, since basic research is focusing on a phenomenon and is aiming to gain more knowledge about it, whereas applied research focuses on a particular subject and aims to predict the impacts (Hirsjärvi et al. 2009, 132-133). This study proceed with an open research plan, since it emphasizes the interlinking of all stages (data collection, data analysis, interpretation and reporting) of the study (Eskola & Suoranta 1998, 16).

The research methods can be divided into two categories: quantitative and qualitative methods. These two methods may be used either separately or together as a mixed method by collecting and analyzing both quantitative and qualitative data. The choice of the method depends on the nature of the phenomena and the research questions. In a quantitative research, the phenomenon is analyzed and described statistically with numbers. Quantitative is philosophically viewed as positivism. On the contrary, qualitative research is subjectivism which views reality as being socially constructed (Eriksson & Kovalainen 2008, 15).

Qualitative material is referred to a data that is phrased text. The text may be created depending on the researcher or independently. For example, the researcher may collect the data with different interviews and observations, or the researcher may use personal diaries, personal biographies, letters and visual or audio material (Eskola & Suoranta 1998, 15). In quantitative research the aim is to collect data from a big mass, while in qualitative research the focus is usually on relatively small amount of cases and trying to analyze them as thoroughly as possible. The scientific criterion of the material is not the quantity but rather the quality. This research is conducted by using qualitative research

method as the attempt is to gain better understanding on dynamic capabilities of a firm that is doing business in disaster relief market.

Furthermore, in international business research, there are two basic models which are called deduction and induction. In deductive approach, the theory is the first source of knowledge. The research process starts with a theory from where the researcher is able to deduce one or more hypotheses. Through hypothesis, the researcher conduct the empirical analysis. This approach is linear with a logic of proceeding from theory to empirical research, and is usually used for quantitative research. Inductive approach, alternatively, is a process where theories are the outcomes of empirical research. The research process starts with empirical research to theoretical results. There are many researchers that are using both induction and deduction in different phases in their research process. A philosopher Charles Sanders Peirce (1839–1914), defined this approach as abduction logic, an exploratory data analysis (Eriksson & Kovalainen 2008, 21-23).

This thesis can be categorized as a deductive study as the theories used in this study form the basis of theoretical framework. However, the aim of this study is to use the empirical data to develop the framework further and not just merely test the validity of the framework. Therefore this study follows primarily an inductive approach. This thesis is guided by pre-existing theories and models from the fields of disaster management, cross-sector partnerships, and dynamic capabilities. These theories and concepts were selected as they are strongly linked to the research problem in question.

3.2 Data collection

Depending on the research context and the actual research questions, data is gathered in many different ways (Eriksson & Kovalainen 2008, 200). In this qualitative research, four main sources of information, both primary and secondary data sources, were used in order to gain more knowledge about the disaster management, cross-sector partnerships, and Finnish SMEs. These four main sources were interviews with Finnish SMEs, the corporate material, publications by third parties, and email exchanges, and phone and short face-to-face conversations with third and public sector organizations (including quasi-governmental organizations, humanitarian organizations, and consultants). Some of the information were also gained from different events organized by Finnish government to companies that aim to operate in developing and less developed countries or/and in crisis areas.

The results of Finnish SME barometer of Spring 2017 was researched carefully in order to gain a better understanding of the nature of Finnish SME and the current situation of their internationalization. The researcher also participated different events organized by Finnish government, such as Nordic Innovation Day (01/2017), TEKES event

(04/2017) Finnpartnership workshop (05/2017), and Team Finland Day (08/2017). In these events public sector representatives, such as Minister for Foreign Trade and Development, Kai Mykkänen and other quasi-governmental officers highlighted the need to combine private and public sector in order strengthen capacity to foster innovation. They also presented different options for co-operating with third sector, especially with the UN. In two of the events, there were representative from the UN as well. The UN representatives explained the challenges they are facing in disaster management, such as in the Syria crisis. The UNDP sub-regional coordinator Gustavo Gonzalez (Nordic Innovation Day 23.01.2017), said that private companies are already a key actor in disaster management as they provide a lot of logistic support to move supplies to right places at right time but there is still room for newcomers. Mr. Gonzalez empathizes that there is a great competitive edge for private companies and possibility to increase market share.

In this study, the main empirical data was collected through open discussions with Finnish SMEs. Semi-structure interviews were chosen as primary data collection method due to the nature of the study phenomenon. The interviewees were given the option to choose whether the interview should be conducted in English or in Finnish. One of the interviewees preferred to be interviewed in Finnish, one in English, and with one the interview was carried out in both languages. The language was chosen based on how the interviewees felt about their vocabulary on the subject. Two of the interviews were done in remote via Skype and normal phone call and the third interview was done face-to-face in the office.

3.2.1 Participation selection

For the purpose of this study, three managers from three different Finnish SMEs were interviewed. There are multiple criterion that define SMEs. SMEs are defined by the location, size (including the number of employees), age of the company, structure, sales volume, worth of assets, ownership through innovation and technology (Rahman 2001, 39; Nkongolo-Bakenda 2004, 31). The main criteria for choosing suitable companies for this study were that they are Finnish SMEs with less than 250 employees and their turnover is less than 50M€. The other criterion was that they all have experience in at least one cross-sector partnership but these companies actually have wide experience in cross-sector partnerships. They also have to have operated and still are operating in disaster market. The selected companies represent different business sectors as the focus of this study is not on any certain industry, rather the focus is on dynamic business environment, disaster management. Two of the interviewees are the founders of the companies and one is sales director. These companies are doing both domestic and international business and they are all located in Finland.

Criteria:

- SMEs located in Finland
- Companies that are doing both domestic and international business
- Has experience in cross-sector partnerships in disaster market
- All represent different fields of business sectors
- Profit-driven companies

As this study focus more on the post-disaster stage, the selected companies are mostly operating in post-disaster but two of them are also operating in pre-disaster stage with a minor role. The selected companies were chosen as they are actively present domestically in Finland but also in disaster markets.

Email exchanges, phone and short face-to-face conversations were made not only with private companies but also with quasi-governmental organizations, consultants, and third sector representatives. This procedure helped the researcher to gain better overview of the subject and find out the current situation from Finnish perspective.

In addition, the events organized by Finnish government in 2017, showed which industries are needed the most in disaster market and where Finnish companies expertise can be utilized. Minister Kai Mykkänen (Nordic Innovation Day 23.01.2017) said that Finnish companies are forerunners in the field of energy. Also companies working in ICT knowledge, water and waste management, safety and security services, logistics, and construction -fields are desperately needed in disaster market.

Interacting with different players in disaster market also helped to find possible candidates for the interviews. Before interviewing the candidates, there were short face-to-face meetings separately with each candidate to make sure that they are suitable and fulfil the criteria set. After that, there was email exchanges between the researcher and the possible interviewees. Subsequently the actual interviews were made. All interviewees agreed on tape recording the interviews, which allowed the researcher to make in-depth analysis through the interview transcripts.

Table 5 Interview summary

Interview method	Date	Interview duration	Industry	Participant's role in the organization
Face-to-face interview	7.9.2017	00:59:30	Education and training services	Chief Evangelist and Co-Founder
Skype interview	21.9.2017	00:42:04	Electrical supplies (mainly solar photovoltaic)	Sales Director
Telephone interview	5.10.2017	00:59:46	Safety and security research & consultancy services	CEO and Founder

3.2.2 Interview guide design

Semi-structure interview method were chosen for number of reasons. While a structured interview has an exact set of questions which does not allow anyone to distract, semi-structured interview allows two-way communication and enables the interviewees to express their views in their own terms freely. Semi-structure interview also provides the opportunity to gather rich empirical data efficiently (Eisenhardt & Graebner 2007, 28). Semi-structure interview design is based on themes. The questions can be, depending on the case, added or omitted as the interview proceeds. The interview process itself allows moderate room to explore responses and to adjust the protocol. It is both explanatory and exploratory method.

The interview guide consisted of both open and closed questions which is usual in semi-structured interviews. The questions were framed in English, but they were also translated into Finnish, enabling the possibility of having the interview session in two different language, if required. In order to answer the research questions, the researcher created five different themes on which basis the questions for the interview were created. The themes guided the interview, and they covered the aspects of disaster management, cross-sector partnerships as well as dynamic capabilities, providing the linkage between the all. The researcher developed these interview themes based on Ambrosini and Bowman's (2009, 35) four modes of dynamic capabilities, which are reconfiguration, leveraging, learning, and creative integration. The five themes of the interview for this study are as follows:

Dynamic business environment -theme's questions aimed to gain better understanding on the company's business strategy in disaster market and to develop the big picture of the company's role in disaster management. **Actors** -theme focused on finding out how Finnish SMEs are choosing their partners in disaster market and how they see the roles

of third and public sector players. In **working together** -theme, the emphasis was on a specific case or a project where the company was active with third or/and public sector organizations in disaster market. The aim was to gather rich information about how cross-sector partnerships actually work in real life situations. The last two themes, **learning** and **changes based on partners** -themes were about how the co-operation with different sectors helped companies to create and rebuild their dynamic capabilities. All in all, the questions of the interview together seek to find answers to the research questions.

Table 6 Operationalization table

Research objective	Research questions	Themes	Themes in literature (chapter number)
	Why operating through	Dynamic business environment	1.1; 2.1; 2.2; 2.3
To understand the	cross-sector partnership in disaster market?	Actors	2.2; 2.3
development of dynamic capabilities through	What are disaster management capabilities?	Working together	1.1; 2.1; 2.2; 2.3; 2.4
cross-sector	How do	Learning	2.3; 2.4
partnerships in disaster management from SMEs perspective	cross-sector collaboration in disaster market and the capabilities developed over time lead to dynamic capabilities?	Changes based on partners	2.4

3.3 Data analysis strategy

In qualitative research, case studies has been the most popular research strategy during the last decade (Welch et al. 2010, 1). According to Yin (2014, xix) case study has not always considered as proper scientific method. Some argue that case studies provide only little basis for scientific generalization. This standpoint has changes rapidly during the

last two decades and case study research has become a trend in qualitative research. Case study is used when the researcher wants to find answers to "how" and/or "why" -questions, and it does not require control of behavioral events. Case study focuses on contemporary events. To know "how" and "why" the cross-sector partnerships work (or does not work) in disaster management and help SMEs to develop their dynamic capabilities, the suitable research methods would be either a case study, field experiment or focus group research method. In this thesis, case study is the most fitting method. A field experiment compare outcomes of the candidates which is not the purpose of this study. The focus group research is generally used when studying a group of individuals to discuss and comment on the researched subject from personal experience (Eriksson & Kovalainen 2008, 173). This research method is not suitable for this study since the aim is not to have a focus group discussion about disaster market but rather focus on specific projects that Finnish SMEs are involved in.

Inductive analysis was chosen for analyzing the empirical data since it allows the researcher to analyze and observe the collected data in a detailed way but at the same time allowing to analyze the data in a versatile way (Hirsjärvi et al. 2009, 164). The objective of this study is not to test the validity of any existing theory. The theoretical context remains in the background but the aim is to gather new standpoints from the empirical data, to discover transferable knowledge. There are many ways to analyze the gathered data. In this thesis, the method used to organize a research data is through content analysis. Tuomi and Sarajärvi (2009, 91-92) have modified four step process for analyzing qualitative research, which was originally presented by Finnish researcher Timo Laine in 2001. This research follows their content analysis model:

- 1. Determining what is the interesting and relevant information in the research data.
- 2. Going through the gathered data (coding)
 - a. Identifying the interesting issues from the research data
 - b. Removing other, not relevant, issues from the study
 - c. Gathering identified issues and analyzing them separately
- 3. Classifying, schematizing, or typifying the research data
- 4. Making conclusions

The whole data analysis process began with transcribing the interviews word by word from audio record. However, in this study, the pauses or gasps where not written down, except when the expressions where part of the delivered message. Generally, when a structure of a research's semi-structure interview is based on themes, these same themes also form the ground for the structure of data analysis (Eskola & Suoranta 1998, 153; Tuomi & Sarajärvi 2009, 93). However, in this study, the researcher is not using the same themes as in the interview when analyzing the empirical data. The interview themes were divided differently in order to ensure that all relevant issues are addressed. The themes worked well for the interview but for the actual analysis, there was a need to change the

themes more suitable to the analysis. The empirical data analysis is divided into four different themes and two of them have subthemes. First theme is about the disaster market and the business environment and the second theme is about the actors in disaster management. In the third theme, cross-sector partnerships are viewed in more detail through the case companies' experiences and how these partnerships have helped these companies in creating dynamic capabilities. In addition, some unsuccessful cross-sector partnerships are discussed.

Coding is excellent way to analyze large amount of data, such as qualitative data. A code can be, for instance, a word or a color that is used to describe or summarize a sentence or paragraph (Myers 2013, 167). The code signs act as a tool for descriptive text (Tuomi & Sarajärvi 2009, 92). Coding has been used in this study to ease the analysis process as the coding itself is already analysis. The coding units are the three case companies used in this study. Each case company was colored differently, in order to be easily read from the coding table which is divided into categories. Funzi was colored with orange text, Naps was in blue, and Turvaten was in green. In addition, subtheme classifications were made under the actual themes, which also enabled more structured analysis process with the focus on the development of dynamic capabilities. Furthermore, general information that was not relevant to the study was excluded. The coding template used for empirical analysis can be find in appendices section (see appendix 2).

3.4 Evaluation of the study

The evaluation of qualitative research should not be done only at the end of the study, rather it should be done during the whole research process. It is essential to acknowledge both the limitations and the strengths of the research data, as that shows the academic trustworthiness (Eriksson & Kovalainen 2008, 290). While evaluating a study, it is important to do it with an acknowledgement of the philosophical and methodological background of the study (Eriksson & Kovalainen 2008, 295). Traditionally, when evaluating the quality of quantitative research, reliability, validity, and generalizability concepts are used. The use of these concepts in qualitative research are criticized since in quantitative research the belief is on the information's objective nature. These evaluation concepts do not fulfil the requirements of quantitative research and therefore are not used in this study (Tuomi & Sarajärvi 2009, 136). This qualitative research is based on subjectivist ideology (epistemology) as the aim is to answer questions "how" and "what", instead of "how many". This subjective epistemological view state that the external world can be accessed only by our own observations and interpretations (Eriksson & Kovalainen 2008, 14). Hence, considering the nature of this study, four criteria to assess a qualitative research that were developed by Lincoln and Guba (1985, 300) is used for evaluating this research.

Those four criteria are credibility, transferability, dependability, and confirmability. Each one of them emphasis on different aspects of the study.

Credibility is seen as most important criterion in establishing trustworthiness and it is parallel with internal validity in quantitative research (Sinkovics et al. 2008, 699). Credibility focuses on establishing a match between the research study's findings and the reality, in order to validate the truth of the study findings. Qualitative research aims to describe or understand the research phenomena in question from the research participants' point of view. Therefore, the actually legitimate judges for the credibility of the study results are the participants themselves. The interviews of this study were tape-recorded and transcribed word by word. The transcripts of interviews were then sent to the interviewees for a review. They were given the opportunity to comment and add more information if they felt that some part was misunderstood or needed to be clarified more. This study was built on established theories and concepts of disaster management, cross-sector partnerships, and dynamic capabilities that are accepted and referenced in international business literature. Other studies that are referenced in this research have used qualitative research approach. Hence, it is understandable to use qualitative approach in this study as well. During the interviews, the researcher elaborated the questions by explaining more about the subject in order to make sure that the interviewee understood the question in a way the researcher wished to be understood. From the critical perspective, this activity could have unintentionally guide the direction of the interviewees' answer.

A second relevant criterion for the evaluation is **transferability**, which is parallel with external validity or generalizability in quantitative research (Sinkovics et al. 2008, 699). Transferability refers how well the research can be transferred and applied in different contexts (Tuomi & Sarajärvi 2009, 138). The transferability is enhanced with describing thoroughly the research context. By doing so, a straightforward assessment of how sensible the transfer is to other different contexts, is made available. The focus of this thesis, was to study Finnish SMEs that are doing business in disaster market and how cross-sector partnerships help them to build dynamic capabilities. Therefore, the interview questions were not industry specific. Every company and industry is different in its own way and they may face different challenges in cross-sector partnerships in disaster market. However, this research should be accurate representation of the overview of Finnish SMEs doing business in crisis afflicted areas.

A third criterion to be evaluated is **dependability**, which is parallel with reliability in quantitative research, and is related to the stability of the results over time (Sinkovics et al. 2008, 699). Dependability is based on sample selection and data collection methods that are applied in the research without bias. There is no statistical data available on Finnish companies doing business in disaster afflicted areas which made the selection of potential interviewees challenging. The interviewees that matched the criteria set for participant selection (see chapter 3.2.1), were asked whether they are willing to participate the

research. In the end, three out of eight candidates were interviewed through semi-structure interview. There were three interviews with three different Finnish SMEs that have experience in cross-sector partnerships in disaster markets. The selected companies are known in Finland for their work in disaster afflicted areas, which proves that they are proper candidates for this research. The researcher's primary strategy for interview implementations was to interview all participants face-to-face. Due to scheduling challenges, two of the interviews were conducted remotely. However, there were no noticeable change in behavior or answering patterns between the face-to-face and distantly managed interview sessions. Although all the interviewees use English in their everyday operations, they were given an option to choose the language of the interview they prefer (Finnish or English). One interviewee felt most comfortable in speaking English, one wished that the whole interview would be conducted in Finnish and with one interviewee the interview, the interviewee felt that it would be better to continue rest of the interview in Finnish since, according to interviewee, it was more natural.

Lastly, **confirmability**, which is parallel with objectivity in quantitative research, refers to how the results of the particular research could be confirmed or supported by other studies or researchers (Sinkovics et al. 2008, 699). There should be a clear linkage between the findings and interpretations to the data, which will make the understanding of the research easy for others (Eriksson & Kovalainen 2008, 294). Semi-structure interviews are an excellent tool that is fairly flexible to generate a large amount of detail of certain subject, thus, giving deeper understanding of the response. It is also fairly reliable and the data is rather easy to analyze. Semi-structure interview is not just milk and honey. The disadvantages of semi-structure interviews is that the honesty of the participants cannot be guaranteed. Often interviews provoke an automatic reaction that the data are biased where the retrospective sense making and impression management are seen as the main culprits (Eisenhardt & Graebner 2007, 28). Another disadvantage of semi-structure interview is that the cause and the effect cannot be inferred. Also, having too much flexibility may lessen the reliability of the data. As all the interviews differ someway from each other, it is difficult to compare the answers between the interviewees. Additionally, openended questions are difficult to analyze and require more work for the researcher and good data analysis strategy.

Using the above criteria which were originally presented by Lincoln and Guba in 1985, it is justifiable to say that this research should be credible, transferable, dependable, and confirmable. Having said that, from the critical standpoint it is worth mentioning that the terminology of disaster management and cross-sector partnership used in existing literature is very broad and inconsistent. There are no universal definitions for disaster management or cross-sector partnerships, and very different terms are used when discussing about same issues. For instance, some researcher define disaster as crisis, and for some

those two terms have completely different meaning. Same goes with cross-sector partnerships. Some researchers include third sector in public-private partnerships, while for some it only includes public and private sector. This may have led, inadvertently, to a situation where the researcher has overlooked some literature about the subject as the used terms were not addressed to this research topic from the researcher point of view.

4 RESULTS OF THE STUDY

In this chapter, the focus is on the results of the study. The results are based on gathered empirical data from three interviews with three different companies. The interview guide was, to a certain extent, designed based on Ambrosini and Bowman's (2009, 35) four modes of dynamic capabilities, which are reconfiguration, leveraging, learning, and creative integration. Companies researched in this study are Funzi Ltd, Naps Solar Systems Ltd, and Turvaten Company.

Funzi is a mobile service company that delivers learning and training courses. Naps Solar Systems (from here on Naps) is providing photovoltaic systems. Turvaten, on the other hand, offers safety and security research and consultancy services. All these three companies are representing different business industry and therefore are providing wide insight into disaster management.

This chapter is divided into five different sections. The first section focuses on the environment of disaster management and aims to get understanding of the dynamism of disaster market. The second section focuses more specifically on the players in disaster management, and aims to find out who are involved in disaster management and with what kind of role. The first two sections are concentrating on disaster management as a whole and also on reconfiguration process. The third section focuses on certain cross-sector partnerships the case companies are engaged and examines how the partnerships have helped companies building their dynamic capabilities. Followed by that, few examples of unsuccessful cross-sector partnerships are reviewed. Third and fourth sections are concentrating on leveraging, learning, and creative integration processes. The chapter ends with the synthesis of empirical findings.

4.1 Dynamic business environment

Disaster management cycle consist of four phases. Two phases are before the disaster strikes, in the development stage: prevention and mitigation, and preparedness. Response and recovery phases are post-disaster, in the relief stage. Most of the private companies do business mainly in relief stage since the market is greater. All of the three companies that were interviewed for this study operate both domestically in Finland and also globally. The main effort in disaster business operations are mainly located in Africa (throughout the continent), MENA region, Southeast Asia, and Middle America.

Funzi reflect that they are in constant development process, hence their products and services are never ready. They enter the market because they want to develop and they understand their capabilities and acknowledge the potential of their products and services in post-disaster market. According to the research material, all three companies felt that

they have more to offer with their products and services during the aftermath of a disaster, when something is needed quickly to stabilize the society. Having said that, they all are operating sometimes in the pre-disaster stage as well.

"1) Broadly, we choose markets where we ourselves can be somewhat in control of the cycle of the development 2) in crisis and other markets, we look at what we can deliver and whether that what we delivered actually is a valuable to the end users, 3) there are markets where we just say let's just go in, that is just like ahh, let's just spread the knowledge." (Funzi)

For Naps the main criterion is that they enter those disaster markets where the United Nations is involved. In other words, they are there were their customers are. When a disaster strikes, they follow. For example, they went to Sierra Leone during the Ebola crisis, and they have continued their business operations there ever since. On contrary, Turvaten state that they would not go to areas that they are not familiar with. In case they do not know the environment they are entering, what type of disaster has occurred and what are the actual needs, they would rather not enter those markets.

All these three companies work mostly with third sector organizations but they also work closely with public sector. Furthermore, they all agree that it is not possible to achieve sustainable change by acting alone. There is need for collaboration with other players from different sectors.

"We started working in this space late 2015, so about 2 years ago, and we are now slowly starting to understand the complexities of this. So you must to be used to dealing with anyone and everyone but the major challenge, [...] the main challenge for us is that very large part, the great majority of all of this players guide their activities reactively, so the KPIs (Key Performance Indicators) or the measurements, the impact is measured in high sight, so they look into the past and do measurements." (Funzi)

In order for them to continue what they are doing, making this world a better place, their operations need to be self-sustainable. In addition, if they wish to grow as a company, the growth needs to happen by flourishing companies' own capital.

"The challenge in Finland is the concept of social entrepreneurship is legally non-existent, so you can't establish a B corp. The first B corp, that is nationalized B corp, is now the Helsinki Capital Partners (HCP). Yes, we are for-profit, but we are not profitable. We do not aim to become profitable. We are meaningful company." (Funzi)

Naps also pointed out that they have to be for-profit, since that is the only way they remain alive: "Public sector gets funding from someone outside and private companies get funded by selling their products and services.". Having profit also foster innovation and allows private companies to develop their products and create new innovative solutions that would be valuable in disaster market. The environment is constantly changing and every disaster differs from the previous one and there is no comparison. This means that companies must be constantly active and aware of changes and the current needs in the market. When asking the research participants how much the focus on the customer needs, they all stated that it is the key question. Turvaten pointed out how in the beginning of partnerships there is a strong discussion who has the leadership and how things should be done. This usually leads to a situation where the other party believes they know what needs to be done without truly listening to the customers need. Turvaten also state that they always aim to find out what is the actual need in that certain market after a disaster has occurred. If the actual need is not clear, then both private companies and other actors in disaster relief are wasting their time, and this extends the time of rebuilding the society. It is essential to know the real customers straight in the beginning of a partnership.

"We always aim to listen what is the actual need. Here the substantive aspect is not actually listen what is said but rather what is the message behind the story. What is the real need behind the message that is said to me, because it is worth noting that customer has needs but they also have desires. To find out the distinction between them, is possible only through effective dialogue." (Turvaten)

All three companies have noticed that the number of disaster have increased during the last few years and they will keep increasing: "One of the, that is a sad fact, but number of crisis is just going to go up." (Funzi). The need of private companies in disaster management is bigger than ever. Companies can quicken the recovery time with their excellent products and services.

"Some may consider commercialism as a bad thing, but we, on the other hand, see it as efficiency" (Naps)

As mentioned earlier on, it is essential to discover the actual need of the customers, instead of merely fulfilling their desires. To maintain the good reputation of ethicality of the commercial business in disaster relief, it is vital for companies to enter the market only if they will offer what customers really need in order to rebuild the society. After the situation has somehow normalized, then those other companies who wish to fulfill their customers' desires, may enter the market without being labeled as unethical.

"There has to be roles that everyone follows, for instance, we collaborate closely with UN, and they have very strictly regulated how we can operate. There is the code of conduct which gives direct guidelines. If we screw up, then we do not get the deal done. Acting unethically, you are out." (Naps)

4.2 Actors

Private companies usually have one thing that they focus on when operating in disaster market. They are there to offer their expertise and have a certain task to complete. Their role is more or less clear and straightforward. Then there are third sector and public sector organizations whose job description is very complex. Naps underline a very important aspect that is usually forgotten by many actors in disaster market. Third and public sector organizations are handling thousands of different things in a very tight schedule. Keeping this in mind, private companies need to have a straight forward strategy and stick with that. Disaster market is very complicated environment and there is no time to waste.

"Disaster management is very multi-sectoral, multi-actor and multi-complex. You cannot comprehend everything, so you have to be cross-sectoral in order to accomplish anything." (Turvaten)

"We enter a market where we are slave or subordinated to the existing structures and existing schedules, it is not productive or it is not easy for us to operate because we have our own timelines, that is why a key component in us choosing where we go, is if we can enter the market and have access to the actual end users without having to go through the red tape or the bureaucracy of existing systems." (Funzi)

When the researcher asked companies whether they prefer short-term or long-term activities in disaster market, the answers were diverse. Turvaten sees their company is at its best when they do not spend too much time in disaster management: just going straight to the point, getting their job done and giving the floor to someone else to do the long-term development activities.

"That is sort of my advantages, [...] I know that I can be in assistance better on this way but if it is long-term then there are other people and companies that are more suitable for that. [...] then I show that I have done my job and then it is for

someone else (to continue), but if I am really looking at the profits only, then I would like to milk and milk off the customer. I do not favor that." (Turvaten)

On the other hand, Funzi and Naps are aiming to reach long-term sustainability and development goals which are not possible to achieve alone. Therefore they are actively collaboration not only with Finnish actors but also with international actors in disaster relief.

"Long-term, focusing on development challenges and have better structures [...] We aim to build better things instead of making things better." (Funzi)

Third and public sector organizations in disaster market are the big players. For SMEs to get noticed, they are the ones that need to take the first step and be actively present. All three case companies have been active and present in different events in order to build a strong network and maintain it. Their hard work have payed of, and they have managed to get more partnerships through good network. The product or the service itself does not sell on its own, but having a good product that can be sold in different markets is a big asset company holds. For example, Naps's products are modular design, which enables them to reformulate the products based on the customers need very easily.

"We have invested so heavily into creating a network of partners, people: both organizations and people that we know. So having some experience, means that we also know that the personal reference are really good. Yes we know where ever we want to go, we usually tend to know someone who at least know that person or the organization directly." (Funzi)

"We have a good network but we also are actively doing "sales work", and by "sales work" I mean we are present in several different events and fairs. In these events we face potential partners. People has seen our operations somewhere and have contacted because they are interested into a collaboration." (Naps)

4.2.1 *Locals*

Locals play an important, if not the most critical role in disaster management. Locals are the ones who suffer the most from a disaster and they are also the ones who will remain in the area when "helpers" leave. Locals also hold valuable tacit knowledge that the outsider cannot get from anywhere else except from the locals themselves.

"Local are big part of our operations. They are the ones who do the installing of our products. In one project with UNDP (United Nations Development Programme) in West Africa, we send one instructor from Finland after the products were delivered. The instructor trained ten local installation manager, and these managers then build their own teams in order to install these systems. There is no point to send the installers from Finland because otherwise the locals do not have any interest or understanding how to maintenance the systems." (Naps)

Locals have also helped these companies to rebuild their dynamic capabilities. They have, for instance, helped private companies to refigure their products and services so they would match the needs of the actual customers. This would have not be possible if private companies do not actively involve locals into their operations and collaborate with them.

"Involving the locals in our operations have enables us to create great dynamic capabilities. For example, we have managed to create a great platform for training installers with rather low educational level. We say that we have to lower everyone to our own level, so they would understand. [...] These types of activities have enabled us to do business beyond these partnerships, so called normal business activity. This is usually not possible during the crisis but after the situation has normalized, we can expand our operations in that country and we already have partners with whom to continue collaboration." (Naps)

It is also important to distinguish that the locals are actually the partners or the beneficiaries. Turvaten had a case where they first saw their partner as full partner and it took some time before they realized that they are more help recipient than actual partner in the commercial partnership.

"And then the approach is little bit different, like I have one experience in Haiti. We were working with some organization and then we kind of noticed that we should see them more as beneficiaries because they have been affected, their whole organization have been affected so much with the earthquake and they are not so able partners. Of course they are partners but you have to see also the role of that they are beneficiary, they are more like an even partners." (Turvaten)

4.2.2 Third sector

According to the empirical data, third sector actors have a tendency of misunderstanding the role of private sector in disaster management: "They think that the private sector companies are there for-profit, and as such we present, if not evil, then something close to evil." (Funzi). Funzi highlights that the innovation nowadays happens to large extents in start-up companies that are enthusiastic about research and therefore third sector organizations should be more open in collaborating with for-profit companies and learning from them. Funzi believe that one of the reasons for this behavior is that third sector organizations plan to create something in well in advance. They plan their operations for the next few years and apply for funding. When they receive the funding, they lock the project and will not do any changes to the implementation plan. These type of practice is a big challenge for the future, since the world and the environment where they operate changes all the time.

Third sector organizations do not focus on RDI (Research, Development, and Innovation): "No, they do not focus on innovation, they do not focus on dynamics, they do not focus on future, they are not forward looking. And this is quite contrary to the things that they should be doing." (Funzi). One of the reasons could be that they simply do not have enough resources to focus on RDI. The best solution for this challenge is to collaborate more with private companies and benefit from their expertise.

"And then getting funding and support for such services and operations that we would like to do, is difficult because all of the people that have the money and the decision-making power, they want to measure what happened in the past. And that is where on a global scale, the biggest challenge for us to use the new technologies, to actually help people in crisis and society, communities in crisis, one of the biggest challenges is, how to change that reactive decision-making system to become proactive." (Funzi)

Naps, on the other hand, view the role of third sector in disaster management slightly differently. The interviewee says that they see two different generations in third sector. The interviewee also say that the older generation are that type of people who are strong realists, indicating that their ideology has changed in a way that if a private company will enter the disaster market and gets things done, then it is fine to have private companies on board. In other words, there are people who have been working in the field for very long time and have a wide experience. These people are only focused on the thing that needs to be done instead of who will do it and how. Then there are those people in decision-making and administrative positions who wants to do things only by the book. This way of working delay the whole disaster management.

Turvaten has been working in disaster market for many decades and according to the interviewee, there is a clear change on the behavior of third sector towards private companies, positive change. The interviewee state that nowadays both public and third sector understand the importance of private companies in disaster management.

4.2.3 Public sector

In target market, the interviewees are mostly working with third sector organizations and thus they do not have so much experience purely with the target country's public sector actors. However, these interviewed SMEs are closely working with Finnish public sector that is investing in assisting private companies to enter disaster market and hence increase the share of Finnish companies in the market. Since 2015, Finnish Foreign Ministry have had a very forward looking policy to support Finnish companies that are planning to do business in disaster management. The whole decision to support Finnish companies was driven by the fact that a lot of money flow through UN logistics center in Copenhagen but Finland gets only a fraction of it. This evidences that the share of Finnish private sector within the UN system's budget is very small. Therefore, under the Minister of Foreign Trade and Development of that time, minister Lenita Toivakka, a program to encourage Finnish private sector companies to be more active with the UN actors, was created. Ever since as a result of the program, several different events has been organized by Team Finland organizations, not only in Finland but internationally as well.

4.2.4 Combining forces with other private companies

Human security Finland is a network that bring business, research, training, and education together where the lead focus is on business (development and disaster business). The network believes that Finnish companies should first establish partnerships within private sector and then enter disaster market stronger together. Funzi, Naps and Turvaten were asked have they considered establishing this type of partnerships with other Finnish SMEs.

Funzi is actively doing this. For example, Funzi is part of a delegation of companies that are representing different industries from mobile services to satellite company to construction firm. They are part of an active group that collaborate together. They are all part of the different phases in disaster relief stage. The main focus with this delegation group is all about quality and not so much on the profit making. They are all following Finnish values with the aim of helping people in crisis.

"We all are dealing with difficult things and want to help and assist and get things done instead of focusing on administration or bureaucracy things, there are many other countries or other organizations that want to focus on, such as OICD, European Union, with UN system there is a lot of bureaucracy, so you can sit in endless meetings, endless seminars, endless conferences, we do not want to do that. We want to get things done." (Funzi)

Naps have tried these, so called "export team", but they noticed that it does not work for them since the companies' products and objectives did not synchronize. Naps is aware of these groups where everyone has their own role in the rebuilding the society but they have noted that the collaboration does not work as desired because the leadership is missing. In order for a team like that to work properly, there needs to be different hierarchy levels, because if everyone have an equal position in the team, in the end it will not work.

Turvaten does not have any experience on this type of collaboration with other Finnish private companies but they favor this type of approach in disaster market. On the other hand, Turvaten sees that there would be even greater potential to gain bigger market share if building partnerships with other European countries, such as with Netherlands and Germany. Turvaten feels that these companies share similar values and therefore the collaboration would be easy and most likely successful.

4.3 Cross-sector partnership

It is vital for the private companies to closely collaborate with third and private sector actors. The need to have mutual understanding of their goals they wish to achieve. Sustainable development approach and mentality are very important for the continuation and also in terms of functionality. Everyone needs to be, more or less, on the same side of the table, otherwise it does not work. These aspects arose in all interviews. It is essential to acknowledge the nature of the collaboration. It is not a supplier – customer relationships, but rather team work in order to achieve the common goal, which is quickly rebuilding the society in the best way possible.

Naps elaborates that private company should not just merely aim for a quick profit or quick solution and leave immediately. As in these situation, it is more likely not to have proper collaboration with those partners in question. Funzi holds the same ideology: "I think all partnerships should measure by only the outcomes of the partnerships. If we build structures where the partnerships are more important than the outcomes then such partnerships should not exist.".

In the three following sub-sections, cross-sector partnership of each case company is presented and how these partnerships have developed their dynamic capabilities.

4.3.1 Funzi participating in rebuilding Syria

Funzi offers mobile service that delivers learning and training to everyone around the world. The company was founded in 2014 and has won several awards. The company was founded to achieve three goals: 1) Every person on the planet have a meaningful employment, 2) Everyone on the planet have access and can lead healthy lives, and 3) There are no more conflicts on the planet. These three goals guides Funzi's operations. Great capability is that Funzi's goals go beyond religious and political systems, which makes doing business in disaster market easier with less obstacles.

Syria civil war, also known as Syria crisis, started in early 2011 and it has been reported as the bloodiest and most complicated conflict in human history. When interviewing Funzi, the partnership they described was an ongoing case that was not on production at that time. It was in the final steps of procurement but they wanted to discuss about the case since, according to them, it is a great example of how the proactive action from their side has led to positive outcomes. Few weeks after the interview, the company informed the researcher that they have officially signed the partnership contract with UNDP Syria and few other NGOs. The whole collaboration began in late 2015, when Funzi participated an innovation and crisis event organized by UN as part of 3RP (Regional Refugee and Resilience Plan) that was the reaction to the Syrian crisis.

Funzi was participating the event at the Dead Sea, where Finland had a pavilion with official start-ups delegation. Finland was the first country having a start-ups delegation in this type of events. During the event Funzi build up their network by starting to explain people their operations and what they do as a company and how they can assist in disaster management. According to Funzi, it did not took long time before UNDP Syria approached them and they began to discuss about possible collaboration. The situation in Syria is dynamic in a negative term and the company was aware of this. After leaving the event, few Skype calls were made. During those calls, both parties discussed how the mobile can be used in rebuilding the society and how it will help UNDP's overall efforts in rebuilding the society. Funzi emphasis that they are small company and as they do not get funding from any other organization in order for them to be able to try new things. Therefore, they simply cannot afford to start planning a project without knowing they will somehow get compensated. It did not take long time before they started to push things forward in order to have actual concreate project and discuss about the terms of references. The partnership is in its early stages but they all have clear roles and objectives in the collaboration. The partnership is based on mutual contribution and the role division, including the leader of the partnership is also clear. The partner sent a document, a concept note, where they defined how they view Funzi's capabilities and how they could be applied into their local setting and local challenges.

"As a following step, we looked at the document they send and said, we cannot answer these questions directly because they represented a view, sort of like a lateral view on our horizontal context, and thus we created from our generic functionalities, a locally relevant set of things that answered to the questions or the challenges they presented to us." (Funzi)

As Funzi noticed how their partner viewed their capabilities, they needed to refigure how they can present solutions for their potential partner's challenges. While doing so, they went through a creation process, in which they learned to transform company's generic capabilities into something much more, add value to them and making them locally relevant, and hence making their capabilities dynamic. They learned to understand what the steps are and how they need to proceed in order to get there. Since then, they have used the same process in other projects in disaster management. This cross-sector partnership has enabled Funzi to create dynamic capabilities, a functional process that can be used in the future as well.

Trust is key component for Funzi. They believe that no innovation trade or actually nothing can happen without trust. The trust should exists not only with the actual business partners but also with end users. There needs to be mutual trust between all actors involved in the value chain. Funzi emphasizes that in disaster management, they usually end up in difficult situations and therefore trust is core component in cross-sector partnerships.

"We are coming from Finland that is very, very trusted society. We do trust people until they prove us wrong. Without trust there is nothing, none of this would happen. People would not use mobile service, we would not have the content partners, people would not learn, people would not be able to do trade based on learning that they do, communities would not be created, empathy would not be generated, compassion would not exist, peace would not exist. Trust is at the very heart of everything." (Funzi)

Open communication and knowledge sharing is also vital for Funzi. The company acknowledge the cultural setting and that they need to act differently in different environments: "We have learned how to deal with the United Nations and how different the organizations, they cannot react, they cannot use vocabulary, and so we, we approach this through a systems thinkers method, we know that we have to integrate and adapt in order to survive. As we are the smallest, we are the new who entered into the system, we have to integrate and adapt, we cannot dictate. That is our approach.".

Funzi also gathers information from their end-users and partners regularly in order to develop as a company constantly. They have developed functional feedback mechanism that they are using to collect data, both qualitative and quantitative data. This has also helped them to respond to changes in environment quickly.

Even though this collaboration with UNDP Syria is in its early stages, it has taught Funzi a lot: "You cannot force people to change their attitude. People do not believe in facts, people are stuck with their assumptions and existing projects. And definitions and KPIs (key performance indicators) over rule everything." (Funzi). One of the biggest challenges Funzi has faced is the fact that nobody has done what they are doing, they are one of the kind. Therefore they are in a constant process of understanding what is happening and at the same time creating new science. To get where they want to be, they need to interact with other players, collaborate. They are entering the Blue Ocean. They are entering into new spaces that have never existed before. Feedback mechanism from customers themselves as well as working with partners has taught Funzi to simplify things to make sure that they are not misunderstood.

This cross-sector partnership have been the seed for a new innovation. Funzi and their partners have co-created a new innovation that they most likely would not have figured merely on their own. They created a concept of blended learning where instead of only teaching virtually, they teach each other in physical spaces. Cross-sector partnership has also taught Funzi to rethink what they should do in order to grow the company and possess more dynamic capabilities, and how they can do it most efficiently.

"We are dynamic inception.... We (= the CEO and the interviewee) need to hire people who are younger than us, that is really easy because we are so old, they need to be more intelligence than we are, that is really simple too, and we just let them do what they are best and force them to become better and give them the tools they need to do their tricks." (Funzi)

The interviewee did not thought about it before until during the interview when the researcher asked to ponder how this partnership has helped them to develop their organizational dynamic capabilities. Funzi note that the partnership has validated their organizational model. Funzi also mark that it is not possible to establish a company with predefined roles: "You have to measure, you have to have the capability of building and measuring and delivering and running your organizational capabilities, doing your job, working your work, based on understanding what is the input and what is the outcome, and just get things done in between.".

"All of the programs and all of the partnership discussions have validated the importance of our organization structure that is structurally dynamic." (Funzi)

There needs to be constant change happening by sensing and shaping the opportunities and threats from the surroundings. It require invest in research and that is what Funzi is doing. They investigate and search the opportunities in disaster market and with whom they can collaborate in order to create strong dynamic capabilities. Then when they find great opportunities, they start transforming and figuring what would be the easiest adaptable way to operate to something they have not done before and through that process their roles shape.

"And that is why the collaboration that these different type of organizations would have, they must develop mechanisms, measurement mechanisms, funding mechanisms, and all these kind of mechanisms that would enable them to work smoothly together and faster." (Funzi)

Funzi gives another example of their cross-sector partnership in Turkey. The collaboration began in November 2015 and almost two years later, they reach an agreement. The actual lead time of the decision making process and project planning extremely long without any sensible reason. "One of the things that these people don't understand is that them not making a decision, is a decision itself and reason for a lots of these, or these extensional of the crisis. That must change". Funzi believes that when there are academic prove for these organizations why their certain frameworks do not work in disaster relief that the behavior may change more easily, because if private companies themselves express what needs to be improved, the response and reaction would not be the same.

4.3.2 Naps Solar Systems provides disaster relief in Sierra Leone

Naps Solar Systems is the leading solar photovoltaic solution provider in Finland and the Nordic countries. Originally, Naps is an abbreviation of words Neste Advanced Power Systems. The company was established in 1982 and have been operating in disaster relief ever since.

West Africa's Ebola virus epidemic caused major loss of life and many private companies felt that with their products and services they could help to outfight the epidemic. Naps was one of them. The first Ebola case was reported in the end of 2013 in Guinea and soon after that the disease spread to Liberia and Sierra Leone. The whole epidemic lasted for three years and caused socioeconomic disruption in West Africa. Naps worked closely with the UN, particularly with UNICEF, during the Ebola crisis in Sierra Leone in 2015. Naps provides electrical supplies and they mainly focus on products that work with solar energy. The company have a long history of collaboration with UN but they usually involve different people from different organizations under the UN. The United

Nations UN maintain their own project portfolio. When UN notice they need something that they cannot provide themselves, they go through their project bank and see who has done something similar what they want this time and the references of that particular partner. Through this portfolio, Naps has been in several different project with different UN's sub organizations.

During the Ebola crisis, everything had to be done in a fast speed. As the epidemic spread virally, new UN offices, inter alia for the vaccinations, needed to be placed quickly. Naps was there to help to plan and install suitable systems for these offices and taking care of the electrification. Naps and their partner both had very clear roles and objectives towards the collaboration. Company stated that in these type of partnerships the collaboration is usually very well-designed and therefore the project implementation succeeded without any delays. However, Naps have had cases where it is unclear who can define the actual need. Naps also say that there are risks that one company will do all the planning and in the end that company has done the plan ready for free for their competitor. Therefore, it is very essential to have a strong trust relationship already established. Third important thing according to Naps, is payment policy: who will pay, based on what calculations, when the company may expect the payment to be delivered and how it will be delivered. Naps says that they need to have the payment procedure clear before they commit to this type of projects. Usually these type of partnerships involve external funding where the bureaucracy is very slow. Naps state that they go through this unpleasant phase in every project they do in disaster market.

"When the trust is already there, then it saves a lot of time. Then there is no need to start everything from scratch and think how this partnership will work out in the end" (Naps)

Having trust allows partners to focus on the actual matter and there is no need to constantly protect oneself. In this Sierra Leone project, the trust between Naps and the partner was there already, even though they did not knew each other before the project, but having good reference had a positive influence. This also affected how the collaboration proceeded, since Naps did not had to worry whether their hard work will promote the competitors. Naps and their partners were doing everything together with the same aim. It took many years for Naps to create strong trust relationships with UN.

"The collaboration does not work if there is not two-way communication, because if our partner will openly share their needs, then we should also openly tell what we can do to help them." (Naps)

Private companies may sometime have to change their corporate strategy because of gained knowledge or advice from partners and thus creating new dynamic capabilities. Naps has a long working history with UN and their policies have guided Naps operations. UN has formal requirements that needs to be fulfilled by their suppliers. This has forced Naps to form some routines that guides their operations, for example, UN requires that their partners have ISO 9001 quality management system and that affects Naps overall corporate strategy. In addition, as the frequency of natural disasters and other disaster has increased, some private companies that are operating in disaster afflicted areas have also had to change their products. For example in Naps' case, they have had to refigure their products to more sustainable solutions instead of short-term solutions.

"For instance, refugee camps are much more like a permanent buildings nowadays. When before there was a tent camp, now it is practically a fully functioning city." (Naps)

Naps' partners and end-users are frequently giving feedback how they feel about the products and if there is need for improvements. They do not receive feedback on the technology itself but more on the practicality since the products are used under extreme conditions. Therefore their partners' and end-users' needs are different than Naps' other regular customers and thus requiring special modifications. Naps has not directly co-created any innovations with their partners but they have had big influence on creating new innovations.

Naps mention that Finnish public and quasi-governmental organizations should organize more events and actively bringing different parties together because otherwise other Finnish SMEs will find it extremely difficult to enter disaster market, let alone knowing about the opportunities. Team Finland is aiming to offer more support for different players in disaster market. Furthermore, Naps emphasize that there should be easier access to a wider network that includes users, suppliers, and financiers.

This cross-sector partnership has enabled Naps to use their created processes to other projects in disaster management. This partnership has also help Naps to develop their dynamic capabilities since it has enabled them to sense and shape opportunities and threats in disaster market, as well as seize the opportunities, and also transforming them. In addition, Naps has an ISO certified quality management system where they record all their project's objectives and risk analysis. After a project ends, the company will go through the feedback and see how the project was carried out as a whole. All in all, the cross-sector partnership was successful. Naps reminds that the situation in disaster market changes constantly. Despite the fact that usually the delivery time of their products is very short, the situation may have changed during the product delivery which requires modifications from Naps' side.

4.3.3 Turvaten goes helping Haiti

Turvaten is a Finnish company that was founded in 2009. The company provides safety and security research and consultancy services. In the beginning of 2010 Haiti suffered from a high magnitude earthquake and Turvaten went there to help rebuilding the society. In Haiti, majority of schools are private. The earthquake was destructive and many of the schools were badly destroyed. Due to this, children and other students had to be displaced quickly so that they could continue with their education. Turvaten was there to help to reopen a school for children of Haiti. Episcopal Church runs the school and they get funding from United States of America. It needed to be quickly fixed since the sooner Haitians can continue with their normal lives, the easier it is to rebuild the society.

In the beginning Turvaten saw the school as their partner and it took relatively long time before they realized that they are not actual partners but rather beneficiary. In the beginning they all focused on what was the need of the school as an education provider but later they realized that the school is not the right one to provide the answers what is actually needed. It was the community, that community who send their children to these schools. They were the right people to say what was needed. Turvaten reveals that without the school, the company would not have been able to reach the community and find out how they can actually help them in the right way.

"There is no way we could have found the communities on our own, without the help of the school. We probably would not have found anyone." (Turvaten)

Here the role of locals weights again. Turvaten says that the local school helped them to contact the local communities and through that the company was able to get valuable insight information which helped them to rebuild the school. In more details, Turvaten gives an example of how they divided the work among actors from all three different sectors. Before any rebuilding can start after an earthquake, the ruins must be demolished. Hence the first thing is to find who can demolish the ruins. There was Canadian army with heavy equipment that took care of the cleaning all the heavy ruins. After that, the smaller waste was remaining and this was the part where the local community had to act on their own. Turvaten was able to donate wheelbarrows, shovels, gloves and respiratory protections. Only providing the equipment did not assure that the locals will actually get involved and help cleaning the area. It is worth noting that these locals are the ones who has suffered the most from the earthquake and they lost everything, including their homes. Therefore it is more likely that they will not assist in cleaning the area if they do not gain any personal benefit from it. At this point, UNDP or WFP (World Food Programme) steps in. UNDP has a Cash-For-Work (CFW) programme and WFP has Food Assistance for Assets (FFA) initiative where the aim is the same. They both aim to provide temporary

employment in public projects in disaster afflicted areas, such as to rebuild the infrastructure.

When the locals have done their part, the following step is to get the buildings (class-rooms, washrooms, and kitchens) ready for use. The next partner was responsible of taking care of the sanitary side. They manage to find a good private company that fixed all the washrooms. After that, the next priority was to plan how to provide food and drinkable water for children. It was then, when Turvaten contacted World Food Programme and asked if they could add the schools to their distribution circle. The last and the most important task was to offer psycho-social support for the people of the school, since there were a lot of traumatized people. The teachers were traumatized and they were facing traumatized children, so it was very essential for Turvaten to find expert in that field. Meanwhile when the schools were out of order, Turvaten with their partners needed to find another private company that could deliver tents fast, so they could set up classes. In addition to all of this, UNICEF provide school-in-a-box aluminum boxes that are full of school supplies which enable classroom settings anywhere.

This chain of operations illustrates how all public, private, and third sectors work together aiming for the same goal. This type of operating is one of the ways to collaborate in disaster market which is shown in Figure 3 (in chapter 2.2). In this approach both NGOs and local communities benefit from company's products in the interest of the community and the individual. This is the environment Turvaten operates in disaster market. It is not merely about the reopening of the schools, there a lot of other aspects that needs to be taken into consideration and private companies should acknowledge that.

As previously mentioned, Turvaten and their partners did not have clear roles and objectives in the beginning of the project and it took rather long time before they figured out the right way to proceed. When they managed to find mutual understanding, rest of the project proceeded smoothly. At some point they had some difficulties to continue with their work since they faced some obstacles. For instance, they had some logistics challenges regarding the tents, as where they should be delivered and how they can quickly to find storage space for the tents.

When it comes to trust, Turvaten emphasizes that is important to understand the level of trust in a partnership. Where to draw the line, how much one can collaborate with untrusted partner? Turvaten points out that if the company is trying to find only someone who have exactly same values as they have, then they will most likely act alone in the disaster market. It is important to understand the different values different sectors hold and be willing to find the mutual understanding and set certain ground rules that both agree and follow. For instance, in Haiti project, Turvaten was in a very unpleasant situation because in Haiti, the police are corrupted and they were the ones guarding the products. Turvaten could not send them away because then there would be no one guarding the items. In those situations, it is crucial not to let the corruption affect the business. All

in all, in this particular project, building trust took its own time since they all were new partners Turvaten was doing business with. Turvaten also mark that whenever they meet some Finnish or Nordic people, the trust is in some level already. Here the cultural and person aspects come into the picture.

When it comes to communication, especially in business context, companies tend to reveal as little as possible to make sure that nobody is going to take advantage without the company benefiting from it also. In this Haiti project, the communication was open but the biggest challenge was that there was too much information available. That created chaotic information flow which made it harder to keep track on what is necessary information and what is the current situation.

During the years Turvaten has done business in disaster market, they have noticed that in the early steps of the collaboration, it is important to find out the whole value chain. Knowing who the company's customer' customer is and how business in certain point affects rest of the operations, plays an important role in the project planning and implementation. All in all, it was a fruitful cross-sector partnership in disaster management. This Haiti project has helped Turvaten to realize where they are best at and through that they have refigured their dynamic capabilities.

"It is important to distinguish the difference between the customer's actual need and desires, before going very hard to do business in disaster market" (Turvaten)

4.4 Unsuccessful cross-sector partnerships

All three companies were asked to describe if they have had any fruitless cross-sector partnership in disaster market. In this section, some of the unsuccessful partnerships of the research companies are described. Despite Funzi's young age, they have been very active in disaster market and along the way there has been some unsuccessful cross-sector partnerships as well. Unsuccessful collaborations are experiences that will help companies to learn more about themselves as company and also get a wider view of the whole disaster sector. Naps have had experience with unsuccessful cross-sector partnerships which has been caused by distrust or false information in the beginning.

The cultural differences, the level of trust, and the delivery itself has been the main reasons why some partnerships has not worked for Funzi. For example, an USA based company asked Funzi to sign NDA (non-disclosure agreement). Majority of companies, especially in Europe do not tend to ask their partners to sign NDAs anymore. This is a sign of distrust and does not have a promising start of a successful partnership. Impotence has also been one reason why the cross-sector collaboration with some partners has not

worked out. There has been cases where the desire existed but there were no capability to execute the project together.

Another example Funzi has experienced in disaster management is collaboration with World Bank. They have been very interested in the mobile service Funzi offers. World Bank have noticed what kind of positive impact it would have when rebuilding a society after a crisis. Everything was ready for collaboration on Funzi side but the bureaucracy of World Bank placed the project on ice: "I went and found these people and these institutions, these laboratories, and then they said: "We have these Calls".".

When disaster strikes, everything changes rapidly. The reaction should happen straight away and not based on prescheduled dates. An earthquake does not ask anyone when it would be suitable time they can strike.

"The reaction of mobile, the reaction time from when crisis hits until people start looking at their mobiles is ZERO. The first thing they do, when they have shelter, is mobile." (Funzi)

Funzi also points out the fact that third and public sector organizations are following manuals that are not up to date: "[...] the setting, the buildings are the same, people are the same, and we live and die the same way but the surrounding." Something that worked well twenty years ago, may not work today. This is a big obstacle private companies are facing, because private sector is constantly responding to changes in environment and they are reshaping their capabilities in order to maintain competitive advantage and stay on the top. This mentality is lacking in most of the third sector organizations.

Cambodia suffered from heavy rains and overflow of Mekong River in 2011 which caused a lot of damage to a massive group of people. Turvaten was there to help an international NGO handling the flood situation. The whole partnership failed since the partner never actually told what was needed. According to Turvaten the partner was busy with their own activities. In other words, it was a chaotic environment without any structure. There were also local actors involved and the collaboration with them worked well but the international NGO mixed the pack. It has been reported that the aftermath of 2004 Indian Ocean earthquake and tsunami showed that there is significant lack of coordination and managing a disaster. Especially the role of private companies were emphasized since third sector organizations were not able to provide all the need in timely manner. Turvaten' example of an international NGO shows that there is still room for improvement. The company believe that the reason for this failure is the fact that these type of organizations, development-oriented organizations that have not used to shift into a disaster mode, unlike some companies that have more experience in this field.

"It can be compared for example into a situation when something unusual happens in the society, normal player does not know how to act because it is something new, never experienced before. These NGOs are good in building sustainable competences and they know the environment they are operating, but when the flood comes and take it all away, then they do not know how to act." (Turvaten)

Another unpleasant experience Turvaten has had with cross-sector partnerships was with UN in Mozambique: "When we asked what is the current situation, they (their UN partners) replied that we just report the current situation a week ago.". This example expresses that for some third sector organizations it is hard to shift into the disaster mode which requires constant changes in the procedures. The current situation during disaster management can change radically within short period of time. There the importance of effective communication and knowledge sharing arise, especially in disaster management environment where the situation changes several time even during one day.

4.5 Synthesis of empirical data

The empirical results of the study reveals important information about how cross-sector partnerships in disaster management help private companies to create dynamic capabilities and thus gain competitive advantage in the market. The case companies were Finnish SMEs that are actively operating in disaster afflicted areas in rebuilding the society. There are several issues that arouse from the empirical study. The most important aspect is that disaster market is very complex and dynamic environment. Private companies cannot operate there alone nor can third or public sector organizations. This study shows the importance of cross-sector partnerships. For those private companies that are operating in disaster market need to first go through reconfiguration process: identify potential partners and form cross-sector partnerships. When companies have formed cross-sector partnerships, they will go through remaining three processes of the modes of developing dynamic capabilities. This study revealed through the cross-sector partnership examples that companies will experience leveraging, learning, and creative configuration processes. These remaining three processes are not in any specific order since they are all ongoing processes throughout the whole cross-sector partnership. When companies are working with their partners they are in constant learning and development course. These processes help companies to create new products and services. During the partnerships companies are changing based on partners. On one hand, the change happens due to the fact that in order to survive, they need to adapt to new environment. On the other hand, the change happens because the company has learned some new better improved method that they

start using. Companies are forming new resource configurations as a result of cross-sector partnerships.

To include locals into companies operations is one of the important disaster management capabilities, since locals are in the key position. The private companies cannot be the ones who state how things are and how they should be handled. They are there more in role of assisting. Locals are the ones who knows the situation the best. When the locals are more involved, they will actually help private companies to realize how they can use their capabilities in best possible way. More frequently occurring disasters are affecting the way private companies work in disaster management. Companies are also constantly changing based on the need of customers and also because of the change of the environment they operate.

The empirical study revealed, that two of the three companies are aiming to achieve long-term objectives that focus on sustainable development and their operations in disaster market usually lasts few years, whereas one company feels they work best with short-term objectives. The objectives of the company determine what kind of disaster market is most suitable for them. Finding out the customers' actual needs instead of desires is also essential in disaster market. If a private company enters disaster market only to fulfill customers desires, it will not work out in the long-run and does not help the company to create any dynamic capabilities. The focus should be on the necessities of the customers which will benefit companies when sensing new opportunities in disaster market. However, it still remains unclear who is the right operator to define the actual need.

According to the empirical data, if SMEs wish to gain a share in disaster market, they need to be active and present in different events, and build their own strong network which they will maintain constantly. When a disaster strikes, the reaction is immediate. Third and public sector organizations are working with a very tight schedule. They do not have time to start searching for companies and going through different alternatives. Having already established relationships with third or public sector or at least the organizations are aware of the company and their products and services, will foster the future collaboration opportunities.

The role of trust was also one theme that arouse several occasion with interview participants. All of the interviewees stress how important trust is in a partnership. However, one of the interviewees said that there is still possibility to some kind of partnership to some extend even without trust. Turvaten points out that if a company is looking for partner who has exactly same values as the company holds, then it is more likely that the company will be there alone. It is essential to acknowledge the differences between the organizational structures, interests and the way of working. A successful partnership is still possible despite the differences. In some case the differences could actually be the real asset.

The role of Finnish public and quasi-governmental organizations also arouse. They are helping Finnish SMEs to create their dynamic capabilities before entering the disaster market by supporting in sensing and shaping opportunities and threats of disaster market. In addition the co-operation with other Finnish SMEs is viewed important. This type of collaboration may not work for every company but it is worth considering because for those that it does work, they add precious value to the company.

In disaster management, there are very enthusiastic organizations that have a clear view of what they want to accomplish and have clear roles, and acknowledge why they are there. Then there are those who slow the rebuilding of the society due to time-consuming processes and bureaucracy. Due to the diversity of people and organization in disaster management, interviewees feel that it is very important to do research and measure the impact of cross-sector partnerships in disaster management since it will help not only private companies but also other actors in disaster management to acknowledge the role of every operator and thus helping them to develop their capabilities in more efficient way.

"Understanding and knowing what we do not know is more important than knowing what we know."

-Aape Pohjavirta (Funzi)

5 CONCLUSION

In this chapter, the conclusions of this research are discussed. The first section is focusing on the theoretical discussion that include the literature review and the empirical findings. The second section present the managerial implications, giving some guidelines for companies to follow when aiming for improved value creation. After that, the chapter ends with the suggestions for potential future research based on the results of this study.

5.1 Theoretical discussion

The aim of this research was to gain a holistic view of the creation of dynamic capabilities in disaster management through cross-sector partnerships. This study was conducted systematically based on both theoretical background and empirical assessment. The theories and concepts used in this study are disaster management, dynamic capabilities and cross-sector partnerships. During one of the interviews, the terminology of disaster management arouse in the discussion. In Finnish language, doing business in disaster market is called "kriisiliiketoiminta", which describes the activity more correctly than for example crisis business in English. Funzi describes that "kriisiliiketoiminta" is an activity that has economic component whereas the word "crisis business" indicates that companies are taking advantage of someone else's sorrow and lost. The researcher also deliberated different options and disaster management and disaster market are most correct terms to use in this context as these terms have also used in other related academic studies.

The existing literature has been able to collect information on the creation of dynamic capabilities in cross-sector partnerships to some extent. Therefore, there was a need to study further how cross-sector partnerships helps building private companies' dynamic capabilities. The focus of this study was on Finnish SMEs, since they have not been actively participating in disaster management. The Finnish government recognized the need for improvement in 2015 and there has been noteworthy change since then. According to the empirical data, the support of Finnish government is helping SMEs to recognize the market niche and utilize their expertise. However, the case companies of this study believe that there is still a need to invest more on supporting companies and sharing knowledge as the number of Finnish SMEs in disaster market is still rather low. SMEs have a greater ability to react to the changes on the market rapidly and flexibly unlike larger companies, since their company's structure is more easily modifiable. But on the other hand, SMEs may not have enough resources, financially or human resource wise, to make drastic changes in order to survive in a complex business environment. Small and medium-sized enterprises are important for country's GDP and for creating new vacancies. They are also the ones who innovate the most (Kubickova & Procházková 2014,

131). SMEs need to have dynamic capabilities in order to have persistent competitive advantage. They need constantly develop their resource base with the aim of creating new strategic growth alternatives (Ambrosini and Bowman 2009, 46). SMEs also have a stronger entrepreneurial spirit which is an excellent asset in disaster market.

Figure 3 in subchapter 2.2 illustrates value chain of private companies in disaster market with four different approaches. Most of the business operations of the case companies of this study involve either NGOs, locals or both of them. None of the case companies mentioned that they are marketing their products directly to the community or the individuals. They always have other partners with whom they market their product or services. Especially the involvement of locals were mentioned in the literature and they were also mentioned several times during the interviews. The empirical data also revealed that the relationship between company's own and locals' interests and benefits needs to be clear from the start.

Human security was also mentioned in the literature as a threat for the players in disaster management, and some private companies may not enter the market because they cannot guarantee the safety of their employees. This did not raise in the empirical study, however, the corruption did. More often disasters occur in poorer nations because of the geographical locations, the poor infrastructure, lack of preparedness, and the population concentration patterns. In these developing and the least developed countries the probability of corruption is higher. The case companies are acknowledging that they are not the ones who can decide the ground roles, and they have to have the ability to adapt to the changing environment without allowing partners or other players in the market change their core objectives and ethics.

Some academic scholars (i.e., Balcik et al. 2010, 23; Binder & Witte 2007, 25) have listed the challenges actors face in disaster management, and language barrier was one of them. In this study, none of the interviewees brought up any challenges regarding the language barriers. This could indicate that there are no significant challenges when it comes to language. They all manage to do their business without concerning what is the official language of the country in question.

Naps pointed out in the interview that third sector administrative workers involved in the disaster management network is relatively small number. According to the company, workers move from one organization to another rather freely, indicating that some people may have worked previously in one of the UN organizations and now are working with another NGO. This information did not came across from literature review. On one hand, this can imply that it is not hard to build or maintain good network as it gets more on to the personal level easily, which allows to expand the operations to disaster markets. On the other hand, if a company has done something wrong and the trust is lost, it does not take long before their reputation is gone as the cycle is small.

Figure 4 in subchapter 2.2 shows how many different stakeholders are actually involved and needed when managing a disaster. The figure also shows actors of needs and capacities. Empirical data of this study confirms that there are many different actors involved when managing a disaster, for instance, Turvaten's Haiti cross-sector partnership is an excellent example. This link the literature and empirical data. As mentioned earlier on, empirical study also revealed that there are situations where private companies may not choose all the actors involved during their time of operations. Clearly companies can choose with whom they establish the actual partnership but there are also cases where some stakeholders, such as corrupted police, that are more or less part of the operating cycle. The interviews also brought up the fact that every actor in the disaster management affects the development of companies' dynamic capabilities, some through positive experience and some with negative cases.

Earlier academic studies have listed that lack of skillful employees is one of the weakness (Henderson 2004, 111), but this issue did not came across in empirical study. Instead, according to the empirical findings, the financial side is seen as a weakness. Cash flow is also one threat for SMEs in disaster market. Who will pay and when, are big questions that determines whether SMEs will operate in disaster markets. Usually the partner will get funding from someone outsider which means longer payment periods and what raises some concern among the SMEs.

Ambrosini and Bowman (2009, 35) developed four modes of dynamic capabilities that would be beneficial for disaster management. Private companies can create dynamic capabilities with reconfiguration, which refers to transforming and recombining assets and resources. This could be done through cross-sector partnerships. Leveraging relates to the ability of extending resources into new domain, for instance the extending a brand into new set of products. Case companies of this study have leveraging their resources based on the demands of disaster market. This has not only helped them to succeed in disaster market but also enabled them to expand their business to other markets as well. However, this study showed that not all companies are aiming to leverage because they want to focus more on what they already have and become better on that. Dynamic capabilities are usually result of *learning*. Companies learn through failures and success as they gain more experiences. Case companies of this study have had both very successful partnerships but also unsuccessful ones. Reflecting on them all, they have learned valuable things which has enabled them to form dynamic capabilities and improve their performances more effectively and efficiently. The last but not least mode of dynamic capabilities that is suitable for disaster management is *creative integration*. This approach refers to the ability of integrating company's assets and resources into a new resource configuration. Cross-sector partnership in disaster management has enabled companies to co-create innovations that they most likely would not have been able to do on their own. Innovation is more than just a new idea, it is a new practice. For example, Funzi co-created with their partners a blended learning concept which enrich the service portfolio Funzi is offering. The findings from the empirical research also revealed regular dialog and open communication is vital when building trust between private companies and third sector. Not having strong effective and open communication in the beginning will delay the operations. For example, with Turvaten and their Haiti collaboration, the cooperation proceeded slowly. A surprising observation was that the interviewees have not thought of the wholeness and the true value of cross-sector partnerships until they were asked about how cross-sector partnerships have helped them in developing dynamic capabilities.

In addition to all the above mention discussion, the case companies and the literature have highlighted that knowing customer's actual needs instead of desires is essential in disaster management especially in the long-run, since otherwise operating in disaster market to fulfill customers' desires will not help to develop dynamic capabilities. The big challenge with this is that it still remains unclear who is the right operator to define the actual need. To define who is the right party to determine what the actual need is, remains as a puzzling question.

5.2 Managerial implications

In this research, the case study method was used with the aim of providing deep understanding on developing dynamic capabilities in disaster management through cross-sector partnerships. Four managerial recommendations can be drawn from the empirical findings of this study:

- 1) The best way to achieve competitive advantage in disaster market is collaborating with other economic sectors (third, public, and private sector).
- 2) Involving locals can be the key to success in disaster management.
- 3) Private companies need to acknowledge that they may need to make changes into their processes.
- 4) SMEs can improve their overall performance by entering disaster markets.

Companies can offer high-quality services and products at competitive prices, so that disasters are managed more efficiently and more effectively. In addition, private companies gain bigger market share and in the long run can expand their business to other non-disaster areas nearby with the help of their existing network they build during the disaster relief. Participating in cross-sector partnerships in disaster market can improve companies' capabilities to become more dynamic. All this can enhance company's reputation, provide easier access to local knowledge, and increase company's corporate social responsibility performance. Furthermore, third and public sector will benefit from cross-

sector partnerships as they can receive better access to intangible assets, such as technical know-how and also organizational resources.

Regular dialog and open communication is vital when building trust between private companies and humanitarian organizations. Private companies should acknowledge that there may be a need for adapting companies' processes according to the environment or the partners. The empirical assessment showed that adaptation actually has a positive impact on companies' routines and processes since it improves the quality of the products and services. In addition, companies get wider experience from the disaster field and develop the overall performance, especially in the long run. It is also worth noting that private companies tend to forget that third sector and public sector organizations that are very active during the disaster and are handing thousands of other things at the same time and they are in a really tight schedule. Therefore, private companies themselves needs to be proactive and also have the capacity of adapting to new environment rapidly. Disaster market is a great opportunity for SMEs to enter if they aim to enhance their overall performance. Disaster business should be included as part of the corporate strategy. This research showed that private companies have been able to develop dynamic capabilities which have helped them to improve their overall performance.

On the one hand, Finland is a small country and there are small circles which in a way makes the collaboration easy with less competition. Finland has a good reputation abroad as an innovative country and reliable partner, which will also be on favor when competing. On the other hand, when talking about collaborations of Finnish private companies and entering the market together, having only a small amount of companies to collaborate with brings its limitations. It may be harder to actually find the most suitable partners because there is so few companies to choose from.

It is a fact that in business environment and especially in disaster market, one universal business model do not exist. Every case is unique in its own way and the efficiency and effectiveness of the partnerships are influenced by the environment. The environment includes the nature of the disaster (the cause and the scale of the disaster), the country in question and the business culture, and the partners themselves (e.g., the compatibility). Lack of mutual understanding, roles and responsibilities, management of partnership relationships, commitment at all levels, lack of transparency and accountability have been one of the main reasons why companies are not succeeding in disaster market. Private companies need to have realistic goals and keep themselves updated all the time. It is also essential to forget me -mentality as the key to success in disaster management is through networking and team work. This study focused on Finnish SMEs, without focusing on any particular industry, therefore the recommendations can be applied to other Finnish SMEs.

5.3 Future research opportunities

It is common that the researcher discover interesting issues afterwards, from the qualitative research material that did not cross researcher's mind before (Tuomi & Sarajärvi 2009, 92). In such cases, the researcher begins to rethink the frame of the research and starts planning to research more and report all findings in one study. Herein, it is vital to continue with the original research objectives and separately note down recommendations for future studies. In this section, recommendations for future research is presented.

During the research, the researcher discover an interesting topic that would be interesting and valuable to study further. The payment policy and the money flow is something that is very complex and different, not only in different countries but also every organization have their own payment policies which mix and complicate the whole cash flow in disaster market. The actual customers may not be the ones who pays the bill. It would be interesting to study how the different payment policies affect the overall business in disaster management and how strongly the existing policies affect private companies' objectives and progress in disaster market.

Another fascinating topic to study would be the role of media in disaster management and how that affects the business. Some disasters get less publicity than others. Companies tend to rather choose the disaster that gets more publicity than those who do not. It would be interesting to study how the role of media affects disaster management and the business. The research questions for this study could be, for example, how does publicity affects the effectiveness of disaster management and what is the role of media in market entry decision making?.

The power of mobile also arouse during the interviews. Funzi underline the power of mobile and the power of digital in general. This topic is truly worth studying more. How much digitalization affects the disaster management and what does this mean from the business perspective. This topic could also be linked with the role of media, since nowadays the information spread extremely fast. There are some channels that can be controlled and are usually trusted source of information, but then there are those that cannot be controlled, for example Facebook and WhatsApp. How does this affect the business in disaster market? How does it affect the overall disaster management? Also, it would be interesting to study, could the use of mobile open new business opportunities that did not exist before.

Nobody talks about the power of mobile. [...] The power of mobile, the power of digital is not and has not been appreciate and is not being measured by existing powers and existing structures." (Funzi)

The collaboration within the private sector. It would be interesting to research the partnerships with private companies. How these partners decide their objectives, how they manage to find mutual understanding? Is the competition helping them to work together or is it causing them more harm? How the leadership is carried out? How the trust is build? How the information flow is carried out? How hesitating companies are to share information in the early stages of the collaboration?

In the interviews, it was also discovered that third sector, especially humanitarian aid organizations, follows manuals that are not up to date. As a result, their way of working do not match with the today's demands and it also makes the cross-sector collaboration extremely difficult and therefore affects the overall disaster management. As Funzi described in the interview: "[...] the setting, the buildings are the same, people are the same, we live and die the same way but the surrounding.". It would be worth researching how third sector works nowadays and how their performance good be further develop in order to make the collaboration with private companies more efficient.

Few other topics that are worth for further research that caught the researcher's interest from the literature are: Ad hoc decision making and how that works in disaster management compared to dynamic capabilities. As the name itself indicated, ad hoc decision making is done without any further planning. It is about the situation at that moment, and acting the best way to handle the situation in that specific moment without thinking about how the decision's consequences influence in the long-run. In some cases ad hoc decisions may lead to a larger problem that what it was in the beginning. Short-term thinking mode versus long-term thinking mode. Creating dynamic capabilities require time but they are more useful in constantly changing environment than ad hoc decision making. Consolidating and mining big data in disaster management and how it provides innovation partnerships and solutions. It could be researched that how improved programming could help to increase the efficiency of disaster management and how does it influence the way the actors in disaster market operate. It would be also interesting to study do listed companies have different challenges and motives in disaster market. What motivates listed companies to enter disaster market? Is doing disaster management more part of their corporate social responsibility (CSR) and do they aim to get more publicity and improve their corporate image through disaster management?

Disaster management is studied a lot, but mainly from third sector point of view. There are still a lot of different relevant research topics that are not yet researched, especially from the private sector's point of view. The disaster environment is constantly changing and new challenges arise. Private companies have found the market niche but the competition is gradually getting tougher.

6 SUMMARY

The purpose of this study was to understand the development of dynamic capabilities through cross-sector partnerships in disaster management from SMEs perspective. The motive behind the chosen topic was the fact that disasters caused by nature or created by man has increased and are still increasing, hence the humanitarian need is likely to grow (Lu et al. 2013, 149; Goldschmidt & Kumar 2016, 1). Non-profit organizations have dominated disaster relief for decades, but private sector companies' involvement in disaster relief is not a new phenomenon (Binder & Witte 2007, 19). However, their participation in disaster market has been very low. It was after the Indian Ocean earthquake and tsunami 2004 and hurricane Katrina, when the involvement of private sector companies in disaster relief increased greatly (Thomas & Fritz 2006, 122). The aftermath of tsunami 2004 showed that the lack of coordination created various problems. Humanitarian aid organizations were not able to provide the help for those in need and stabilize the situation fast and effectively without the help and involvement of private sector by establishing cross-sector partnerships. Disaster management is not a new research topic in academic world, however there has been fairly little studies related to cross-sector partnerships and their effect on developing dynamic capabilities in disaster markets. "Dynamic" term was applied by Teece et al. (1997, 515) for rapidly changing situations and "capabilities" term aims to highlight the importance. There were some limitation of resource-based view (RBV), and by presenting dynamic capabilities approach, the limitations could be overcome. Previous literature has been researching cross-sector partnerships and their connection to dynamic capabilities from different standpoints but not to a large extent of SMEs and especially not Finnish SMEs. An important contribution of this study is providing a current view on disaster management from a Finnish perspective. Therefore, the following research questions were proposed:

- 1. Why operating through cross-sector partnership in disaster market?
- 2. What are disaster management capabilities?
- 3. How do cross-sector collaboration in disaster market and the capabilities developed over time lead to dynamic capabilities?

Answers to the proposed research questions were gained by using both already existing literature and interviewing companies that are operating in disaster market. The theories and concepts used in this study are disaster management, cross-sector partnerships, and dynamic capabilities. The phenomena was researched through case companies' cross-sector partnerships. Focusing on certain partnerships in more detail enabled to get better insight of how cross-sector partnerships help to develop private companies' dynamic capabilities in disaster management. People in crisis areas are usually left out of education

opportunities, the possibility of social assistance, or health care services. The case companies of this study are from education, electrical, and safety industries.

This thesis was conducted by using qualitative method in data collection from both primary and secondary sources. The empirical part of the study was made through three semi-structure interviews face-to-face, on Skype and via telephone. All three interviewees represent different business industry which enabled wide view of disaster management. Case companies were Finnish SMEs that have experience in working in disaster market and have commercial cross-sector partnerships. The research was conducted holistically by reflecting on multiple aspects. Even though the sample size was small, three case companies, the results of the study provides great insight of Finnish SMEs operations in disaster afflicted areas and the creation of dynamic capabilities through cross-sector partnerships. The findings of this study did not only show strong support to the theories and concepts presented but also revealed unexpected aspect. As predicted, the findings confirm that the cross-sector partnerships, both successful and unsuccessful ones, help private companies to develop their dynamic capabilities. Unpredictably, the study revealed that not even private companies themselves realize how much cross-sector partnerships shape their way of working.

Disaster market is very complex and constantly changing environment. Something that worked ten years ago, may not work today. Organizations need to update themselves frequently according to the current environment they are operating in.

"The only man who behaves sensibly is my tailor; he takes my measurements anew every time he sees me, while all the rest go on with their old measurements and expect me to fit them"

- George Bernard Shaw

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APPENDICES

Appendix 1: Interview guideline

I Dynamic business environment

- 1. Which part of the world (which countries) have you operated / are operating mostly?
- 2. How do you choose your target market abroad? What are the criteria?
- 3. Do you have experience in cross-sector partnerships?
 - a. Mostly with third sector, or public sector, or both equally?
- 4. What type of partnerships? Commercial partnerships or/and non-commercial partnerships?
- 5. Is your company more involved in pre-disaster management or more active after a disaster has occurred?
 - a. What are the reasons behind your decision?
- 6. How are you focusing on the customer need?
- 7. How would you describe the role of cross-sector partnerships in dynamic business environment such as disaster relief market?
 - a. Does cross-sector collaboration help to gain sustainable competitive advantage?
- 8. Should the focus of the partnership be primarily on efficiency or effectiveness?
 - a. Can you elaborate more?
- 9. Are your company's objectives for disaster market short-term (profit-driven) or long-term (focusing on development challenges)?
 - a. Can you explain why?

II Actors

- 10. How do you seek and identify potential partners?
- 11. How do you see the role of locals in disaster relief stage?
 - a. How strongly are local actors involved in your operations in the disaster market?
 - b. How they have helped you to develop your organizational dynamic capabilities?
- 12. How does third sector view private companies that are operating in disaster afflicted area?
- 13. Do you wish more support from the Finnish or target market's government?
 - a. What kind of support?
- 14. Have you considered to co-operate with other Finnish companies within private sector and collaborate in disaster relief market?

III Working together

15. Can you tell more about one specific case or project that your company has been active with a particular partner in disaster market?

- 16. Did everyone had clear roles and objectives in the cross-sector partnerships that you have been involved?
- 17. What does trust between the partners mean to you? How the trust has shown in your partnership
- 18. How was the communication carried out in disaster management from your company's perspective?
- 19. How was the nature of the partnership?

IV Learning

- 20. What have you learned from that partnerships from the acting partners?
 - a. Have you managed to find different approaches to the same challenges because of cross-sector partnerships?
 - b. Have you benefited from exchanging experience and combining knowledge and competences? Can you give an example?
- 21. How much of the learning is learning about yourself as organization?

V Changes based on partners

- 22. Have you changed your corporate strategy because of gained knowledge or advice from partners?
 - a. Has there been any cases that your company has redeployed your resources or capabilities due to pressure?
- 23. Have you adapted procedures and routines from your partners and incorporated them to your company's processes?
- 24. How strongly does partners effect on product development?
- 25. Have you co-created innovations with your partners during the cross-sector relationship?
 - a. Can you give an example?
- 26. How this partnership helped to develop your organizational dynamic capabilities
- 27. Has there been any catastrophic relationships in the past?
 - a. If yes, what have been the cause?
- 28. Is there anything you wish to add?

Appendix 2: Coding of empirical data

Coding units are the three case companies used in this study. Each case company was colored differently, in order to be easily read from the table. Funzi was colored with orange text, Naps Solar Systems was in blue, and Turvaten was green.

Table 7 Coding categories used in empirical analysis

Main themes	Sub-themes	
Dynamic business environment	Background experience in disaster management	
	Business strategy	In general
		In disaster market
		Future plans
	Target market	
	Customers in disaster market	
	The role of cross-sector partnerships in disaster market	
Actors	Strategy for identifying potential partners	
	Locals	Their role in disaster
		management
		Locals' impact on dynamic capabil-
		ities
	Third sector	Their view on private
		companies
		Their way of working
		Third sector' impact on
		dynamic capabilities
	Public sector	Target market's public
		sector
		Finnish Public sector
	Private sector	Collaboration within private sector
		Public sector' impact on
		dynamic capabilities

Main themes		Sub-themes
Cross-sector partnership	Funzi	Background of the collaboration (the duration, cultural setting, the main task, the roles and objectives) The partner The link between the collaboration and companies' strategies Leadership Trust Knowledge sharing and communication Learning
	Naps	Changes (processes and routines) Background of the collaboration (the duration, cultural setting, the main task, the roles and objectives) The partner The link between the collaboration and companies' strategies Leadership Trust Knowledge sharing and communication Learning Changes (processes and routines)
	Turvaten	Changes (processes and routines) Background of the collaboration (the duration, cultural setting, the main task, the roles and objectives) The partner The link between the collaboration and companies' strategies Leadership Trust Knowledge sharing and communication Learning Changes (processes and routines)

Main themes	Sub-themes
Unsuccessful cross-sector partnerships	The background Reasons why partnership failed Lessons learned