

**FRAMING GEOPOLITICAL CHANGE: THE
COGNITIVE FRAMES USED TO MAKE SENSE OF
BREXIT IN FINNISH SMES**

**Jyväskylä University
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**JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ**

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ABSTRACT

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Title Framing geopolitical change: The cognitive frames used to make sense of Brexit in Finnish SMEs	
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<p>Abstract</p> <p>The Cognitive Framing theory suggests that the way we frame different topics has a direct impact on the type of response we take to address the issue. This theory has been studied in economics and management decision making for decades. Studies on cognitive framing in management decision making have suffered from the fact that they deal with hypothetical scenarios instead of real-life situations. This study aims to identify what types of cognitive frames are used by managers in Finnish small and medium-sized enterprises to make sense of geopolitical change, in this case Brexit. Because as of the time of this thesis, existing literature on the cognitive framing of geopolitical change is limited, a grounded theory approach is taken to conduct this research.</p> <p>The data for this study was collected with semi-structured interviews with top managers in Finnish SMEs. The collected data was analysed with the constant comparative method simultaneously as the interviews were conducted.</p> <p>The findings of this study form a theory which shows that Brexit is framed through either a paradoxical or dilemma frame by managers in Finnish SMEs. The potential threats the managers saw Brexit would have to their company impacted whether the event was framed through a paradoxical or a dilemma frame.</p>	
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<p>Tiivistelmä</p> <p>Kognitiivisen kehysteorian mukaan tapa, jolla kehystämme ilmiöitä, vaikuttaa suoraan tapaan, jolla reagoimme kyseiseen ilmiöön. Tätä teoriaa on tutkittu taloustieteessä ja johtamisen päätöksentekoon liittyvissä tutkimuksissa jo vuosikymmeniä. Johdon päätöksenteon kognitiivista kehystystä koskevat tutkimukset ovat kärsineet siitä, että niissä käsitellään hypoteettisia skenaarioita todellisten, yrityksiä tosielämässä koskevien, tilanteiden sijaan. Tämän tutkimuksen tavoitteena on tunnistaa, minkälaisia kognitiivisia kehyksiä suomalaisten pienten ja keskisuurten yritysten johtajat käyttävät geopolitiittisen muutoksen, tässä tapauksessa Brexitin, ymmärtämiseen. Koska olemassa oleva kirjallisuus geopolitiittisen muutoksen kognitiivisesta kehyksestä on tämän opinnäytetyön tekohehkellä rajallinen, tämän tutkimuksen tekemiseen on noudatettu grounded theory -menetelmää. Tutkimuksen aineisto kerättiin suomalaisten pk-yritysten johtajien teemahaastatteluilla. Aineistoa analysoitiin grounded theory -menetelmän mukaisesti koko aineistonkeruun ajan.</p> <p>Tämän tutkimuksen tulokset muodostavat teorian, jonka mukaan suomalaisten pk-yritysten johtajat kehystävät Brexitin joko paradoksaalisen tai dilemma -kehyksen läpi. Brexitin kehystämiseen vaikuttavat ne mahdolliset uhat, joita yritysjohtajat näkevät Brexitin tuovan heidän yritykselleen.</p>	
Asiasanat Brexit, kehystäminen, päätöksenteko, grounded theory	
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1 INTRODUCTION

The United Kingdom has left the European Union causing a major change in the relationship between the United Kingdom and the remaining countries in the European Union. In 2017, the United Kingdom ranked as the 7th largest export market for Finland with exports adding up to EUR 2,687 billion (Tilastokeskus). This means, that the changes Brexit will eventually bring, affect many Finnish companies. If a Finnish company does business in the UK, whether it is exporting or having a local subsidiary in the UK, Brexit will certainly have an influence in their operations one way or another. These companies might eventually have to make changes and decisions about how to make their operations and strategy fit the post-Brexit era.

The way strategic decisions are made by individuals and teams is perhaps not as rational as one might think. The framing effect suggests that the decisions we make are influenced by how different topics or situations are framed, as was concluded in Tversky and Kahneman's paper: *The Framing of Decisions and the Psychology of Choice* (1981). We view different topics and situations through different frames without even necessarily realizing it.

But what types of frames are there? Robert Entman (1991) mentions two different levels of framing; framing in communication and framing in thought (also known as cognitive framing). The first of which influences the communication between different actors, how the communicated information is framed in the communication process, for example by the news media. The latter consists of mental representation and interpretation, how an individual interprets and understands the ocean of information that he or she is receiving. This pattern of thought influences how an individual processes all succeeding information about this topic.

The same strategic issue might be framed differently by different individuals or organizations. The role of different variables in strategic issue framing has been studied quite extensively in the past. For example, the role of national culture (Schneider & De Meyer, 1991), the role of individual and organizational antecedents (Kuvaas & Kaufmann, 2004) and the role of organizational predisposition (Ashmos et. al., 1998) have been topics of previous research.

How certain strategic issues are framed has also been the topic in previous research. How framing influences the extent of organizations' environmental commitment (Polonsky & Zeffane, 1992), the use of patents (Neuhäusler, 2012) etc. have been studied. However, there seems to be a void in the literature on how global political events (such as Brexit) are framed by managers or management teams. Despite previous research on strategic issue framing, the focus of cognitive framing research tends to lie on how these cognitive frames are formed. There is still a need for more research on how specific strategic issues are framed (Powell & Colyvas, 2008, p. 269; Cornelis & Werner, 2014, p. 186).

It is clear that these cognitive frames have a strong influence on managers' and management teams' decision making. Studies about interpretation and framing in management decision making sometimes suffer from the fact that they deal with hypothetical cases. Thus, it is not known whether the interpretations of frames would be the same in real life (Kuvaas & Kaufmann., 2004; Ashmos et. al., 1998). Therefore, Brexit provides a good, real life context to study cognitive framing and the strategic sensemaking processes. Using the grounded theory method, this master's thesis aims to add to the cognitive framing literature, by studying how Brexit, or geopolitical issues in general are framed by managers and management teams.

1.1 The research question and data

By conducting semi-structured interviews to gather data, this thesis uses the grounded theory methodology to answer the research question: *What types of cognitive frames are used by managers in Finnish SMEs to make sense of geopolitical changes?*. Although grounded theory aims to create a new theory from data, and is by its definition very data driven, some theoretical background on related topics will be presented to help the reader better understand the topic being researched. This theoretical background also helps explain why certain topics such as scanning, interpretation and response were brought up in the semi-structured interviews this study conducted.

A total of eight semi-structured interviews with top managers in Finnish SMEs were conducted in the spring of 2019. These interviews serve as the data for this study. The interviews were transcribed and then coded. The codes produced by line-by-line coding were then assembled into categories by comparing and combining them. These categories serve as the basis for this study's theory.

1.2 Structure of the study

Chapter 2 is the theoretical background of this study. Although grounded theory methodology is data driven, and by its definition does not aim to test existing

theories, it is important to bring up an existing theoretical background to help the reader better understand the aim of this study.

Chapter 3 focuses on the methodology of this study. First, the grounded theory methodology and the research setting will be explained. This section also explains why certain methodological decisions were made to make the methodology fit this study in the best way possible. The data collection and analysis will also be explained in this chapter.

Chapter 4 focuses on the results of this study. The results of the data analysis will be explained in this chapter. The theory formed from the data will be presented in this chapter as well.

Chapter 5 is the literature integration chapter of this thesis. It explains how the findings of this study integrate into existing literature. Comparison to previous research on similar topics is made. The theory's situatedness in the literature field is also described.

Chapter 6 is the conclusion chapter. It summarizes the study and brings up its limitations.

2 THEORETICAL BACKGROUND

Although this study utilizes the grounded theory methodology, which by its nature is data driven, it is still important to bring up some relevant theoretical background to serve as a framework for this research. This framework helps not only the reader to better understand the research at hand, but also more importantly it helps guide the data collection of this research by highlighting, which topics would be relevant to bring up in the semi-structured interviews.

In addition to presenting a theoretical background on cognitive framing, also a theoretical background on the stages that are often associated with cognitive framing: interpretation, response (Karhu & Ritala, 2018; Tversky & Kahneman, 1981; Cornelissen & Werner, 2014) and scanning (Hahn et. al., 2014, 2) will be presented.

2.1 Cognitive framing

The framing effect suggests that the decisions we make are influenced by how different topics or situations are framed, as was concluded in Tversky and Kahneman's paper: *The Framing of Decisions and the Psychology of Choice* (1981). We view different topics and situations through different frames without even necessarily realizing it.

Robert Entman (1991) mentions two different levels of framing: Framing in communication and framing in thought (also known as cognitive framing). The first of which influences the communication between different actors, how the communicated information is framed in the communication process, for example by the news media. The latter consists of mental representation and interpretation, how an individual interprets and understands the ocean of information that he or she is receiving. This pattern of thought influences how an individual processes all succeeding information about this topic. The same strategic issue might be framed differently by different individuals or organizations.

Cognitive frames are built from our own personal experience, values, norms, habits, and personal characteristics. Cognitive frames have an influence on how an individual perceives and interprets an issue, and how they subsequently respond to that issue (Karhu & Ritala, 2018). Cornelissen and Werner (2014, p. 65) define cognitive frames as knowledge structures that direct and guide information processing. The cognitive framing effect has been studied in a variety of different fields. For example, studies on medical treatments (Huhn et. al., 2016), political studies (Jurin & Kruzic, 2020) and corporate sustainability (Ng & Walls, 2019) have shown that the way people frame an issue has an effect on the way they subsequently react to it. Business managers are no different. The way a change in the market or an innovation is framed has an influence on the way an organization organizes a response and allocate resources to address the

issue. For example, seeing a change as a threat tends to cause managers to over-react and commit too many resources too quickly to their response. And if a change is seen as an opportunity, companies are likely to commit insufficient resources to seizing the opportunity (Gilbert & Bower, 2002).

The role of different variables in strategic issue framing has been studied quite extensively in the past. For example, the role of national culture (Schneider & De Meyer, 1991), the role of individual and organizational antecedents (Kuvaas & Kaufmann, 2004) and the role of organizational predisposition (Ashmos et. al., 1998) have been topics of previous research.

The way certain specific strategic issues are framed has also been the topic of previous research. How framing influences the extent of organizations' environmental commitment (Polonsky & Zeffane, 1992), the use of patents (Neuhäusler, 2012) etc. have been studied. Cognitive framing of these types of strategic issues can be identified through the responses organizations take to address the issue. (Karhu & Ritala, 2018). Despite previous research in strategic issue framing, there seems to be a void in the literature on how geopolitical issues (such as Brexit) are framed by managers or management teams.

2.2 Environmental scanning

Environmental scanning refers to the activity a company's management engages in when scanning the external environment for information about event and relationships for the purpose of assisting the management in mapping the company's future course of action (Kourteli, 2000). Most authors agree that the main function of environmental scanning is to learn about the events and trends in the external environment, understand the relationships between them, making sense of the scanned data and to extract implication for future decision making about the company's future (Costa, 1995, p.5).

The main concepts that are involved with environmental scanning are related to the issues that are being scanned and the activities that are being done with this data (Costa, 1995). Indicators, trends, patterns, and segments as well as possible changes that are happening in them are related to the issue that is being scanned. Projections, forecasts, and predictions are typically made from the data that is gathered.

Different activities through which companies engage in environmental scanning can be categorized into three models: irregular, regular and continuous. Purpose of the environmental scanning influences heavily, which scanning model a company engages in. If the motivation for conducting environmental scanning is crisis motivated, a company typically conducts irregular environmental scanning. In decision and issue motivated situation, regular model is applied and in proactive situations the continuous model is applied (Fahey & King, 1977).

When engaging in these different type of environmental scanning models,

typically the companies have different aims for their environmental scanning activities and different sources and scope of data in their scanning process (Fahey & King, 1977). In irregular environmental scanning, a company's management focuses on ad hoc studies about specific events and hope to have an impact on current and near-term decisions. In regular scanning, the scope is a bit broader. A company might select periodically updated studies about selected events for impact on a near term decision. In continuous environmental scanning the scanning process is aimed at having an impact on a company's long term strategic decision making. The company engaging in this continuous scanning will have a very structured data collection process covering a broad range of environmental issues.

Culture and the nature of the issue being scanned have an influence on the environmental scanning activities conducted by a company. Typically, in cultures with higher uncertainty avoidance and high future orientation, companies tend to do more environmental scanning (Stewart et. al. 2008). Also, if the environmental scanning process is issue or crisis motivated, companies tend to do more environmental scanning. Uncertainty avoidance and future orientation refer to dimensions in Geert Hofstede's famous cultural dimensions theory. In short, they mean the tendency to feel threatened by ambiguity and trying to avoid it as well as the tendency to which a culture is focused on long-term or short-term results respectively. According to Hofstede's research, Finland ranks high on uncertainty avoidance and low on long term orientation (Hofstede, n.d.).

Based on Finnish culture's rankings on these cultural dimensions, especially it's high score on uncertainty avoidance, it could be assumed that Finnish companies engage in some sort of environmental scanning when it comes to Brexit. Therefore, adding environmental scanning as a topic of discussion in this research's semi-structured interviews might offer insight on what types of cognitive frames are used to make sense of Brexit.

2.3 Strategic issue interpretation

Strategic issue diagnosis refers to the process in which managers give sense to a continuous flow of ambiguous and complex information. It has been identified that the way a strategic issue is diagnosed, or interpreted, greatly influences the actions a company will take to respond to the issue (Dutton & Dukerich, 1991). Management literature has identified interpretations of "crisis", "threat" and "opportunity". Crisis interpretations derive from the perceived value of the possible loss, the probability of the loss and the time pressure. Threat and opportunity interpretations derive from the possibility of loss and gain and whether the issue is controllable or uncontrollable (Schneider & De Meyer, 1991, p.308). Also, how well the issue is understood, has an influence on how it is interpreted. For example, when facing an issue perceived as a "potential loss", individuals tend to engage in risk taking behavior (Tversky & Kahneman, 1974). Interpreting an issue as something an organization needs to "defend" itself from, it tends to

emphasize efficiency, develop its organizational competencies, and establish a “niche” (Schneider & De Meyer, 1991).

Some strategic issue interpretation studies suffer from the fact that they submit questionnaires with hypothetical cases, to which participants must respond to. This limits the reliability of the study, as it is not known if the participants of the studies would interpret a real-life situation with real people and assets on the line in the same way (Kuvaas & Kaufmann, 2004; Ashmos et. al., 1998). Brexit, being a real-life phenomenon, makes the context of this study a more reliable setting to study the responses companies are taking to address Brexit and thus what cognitive frames they use to make sense of it.

2.4 Response

There are a variety of studies on the responses companies take to address geopolitical risk. Previous studies have ranged from studying whether companies invest more in corporate social responsibility in the face of geopolitical risk (Oanh & Hoang., 2020) to how shipping companies increase their cash reserves in light of potential geopolitical risk (Kotcharin & Maneenop., 2020)

Perhaps something more relevant to this study is a study by Roscoe et. al (2020), who when studying the strategies companies took to address uncertainty in supply chain disruption caused by geopolitical risk, identified four different types of responses; reactive, passive, proactive and wait-and-see responses. As was mentioned in the context of this study, one factor of uncertainty in Brexit was whether the United Kingdom will in some way remain a part of the European Union’s customs union or not.

2.5 Theoretical background summary

The current literature on cognitive framing has not yet focused on the types of cognitive frames managers use to make sense of geopolitical change. As the cognitive framing theory suggests, the way an issue is framed has a direct impact on the type of response a company takes to address it. Gaining a better understanding of how geopolitical change is framed, not only contributes to existing literature, but also might help managers better understand this aspect of decision making.

Scanning, interpretation, and response are all associated with cognitive framing. While there may be research gaps in these fields of literature, that a study of this type could help address, it is not the purpose of this study. The literature presented on environmental scanning, strategic issue interpretation and responses hopefully helped the reader better understand why these issues were brought up in the data collection interviews.

3 DATA AND METHODOLOGY

3.1 Methodological approach

This study aims to answer the question: *What types of cognitive frames are used by managers in Finnish SMEs to make sense of geopolitical change?* A qualitative, grounded theory approach is well suited for studies aiming to gain in depth knowledge about the research topic. Instead of generating statistical generalizability, the qualitative approach aims to understand a phenomenon and generate new empirical evidence through data analysis (Corbin & Strauss, 2008). Qualitative research is characterized by having small data sets, which typically are in written form, flexibility in the planning and progressing process of the study as well as being aware of one's subjectivity in interpreting the data (Eskola & Suoranta, 1998, p. 15–18).

In this research, the data was collected by conducting semi-structured interviews with top managers in Finnish SMEs with significant trade with the United Kingdom. Most of the interviews were conducted face-to-face, but as recent studies have shown that telephone interviews can be just as effective as face-to-face interviews (Sturges & Hanrahan, 2004, p. 107), a few of the interviews were conducted via Skype. The interviews were transcribed, and the written text serves as the data for this research. Semi-structured and unstructured interviews are the most common forms of interviews in grounded theory research and they are seen as fitting to the data driven nature of grounded theory (Duffy et. al. 2004, p. 68).

The data has been analyzed with the grounded theory methodology, using inductive reasoning, or the process of proposing theories based on observations. The grounded theory methodology was chosen, as it is the recommended approach when studying situations to which people or organizations must somehow adapt to (Corbin & Strauss, 2008; Benoliel, 1996), such as Brexit. It is in the nature of grounded theory research, that the data collection, theoretical sampling and data analysis are done simultaneously until no new data emerges from the data collection process, or in other words: data saturation occurs.

In the next chapter, the context of the study, its data collection, theoretical sampling and data analysis will be gone through more in depth.

3.2 Context of the study

At the time of this thesis, a significant geopolitical disruption (Roscoe et. al., 2020) was taking place as the United Kingdom was in the process of leaving the European Union (Brexit). This provided a good real life context for gathering data to answer the research question.

To better understand why Brexit provided a good real life context for answering the research question, the next chapters will provide some context on what Brexit really means and what the trade relations between Finland and the United Kingdom have historically been.

3.2.1 Brexit

Since the second world war, Europe has been in a period marked by increasing economic, cultural and political integration driven mainly by the European Union. The decision for Great Britain to leave the European Union (a process known as Brexit), marks an end to this trend of increased cohesion (Sampson, 2017). Among other things, Brexit will possibly erect new barriers to trade between Great Britain and countries in the EU.

During the writing of this thesis, and especially during the data collection period in early 2019, there was uncertainty about what the relationship with Great Britain and the European Union would be post-Brexit and what it would mean for trade between the two entities (Lawless & Morgenroth, 2019). The possible speculated scenarios ranged from what is known as a “hard Brexit”: where the United Kingdom would leave the European Union’s single market customs union (in short, meaning countries not charging import duties on goods and services from other member countries and WTO tariffs would apply) to a “soft Brexit”, which means the United Kingdom would leave the European Union, but stay in the the single market customs union in one way or another (Dhingra et. al., 2017) .

It was uncertain what implications Brexit would have on trade between the United Kingdom and the European Union. The impact of potential tariff and non-tariff barriers remains unclear during the writing of this thesis. Brexit provides a good real life context for studying the cognitive framing of geopolitical change.

The United Kingdom has been an important trade partner for Finland for a long time. In the 19th century, England was one of the largest exports and import destinations for Finland together with Russia and Germany. Driven by rapid industrialization after the second world war, Finnish exports to Britain started to increase rapidly. When Finland joined the European Union in 1995, its economy started to integrate more to the European Union’s, which the United Kingdom had been a part of since it was founded in 1992 (the United Kingdom had been a member of predecessor to the EU, the European Economic Community (EEC) since 1973). The common customs policies and the free movement of goods and people within EU countries made both exporting and importing between Finland and other EU countries easier than before.

The UK’s relationship with the EU and its predecessor, the EEC had always been controversial. The first in-or-out referendum was held in 1975, just two years after the UK had joined the EEC. Then, a two thirds majority voted to remain in the economic community. In 2015, due to internal struggles within the Conservative Party prime minster David Cameron promised another in-or-out referendum on UK’s EU membership. The referendum was held on June 23rd,

2016, with a slight majority, 51,9 %, voting to leave the European Union. This began the process of leaving the EU in the United Kingdom. (Goodwin & Heath, 2016)

The Brexit process has had its effects on the United Kingdom and the European Union, as well as companies operating in them. When the data for this research was collected, in February and March 2019, the true effects of Brexit were uncertain, as the nature of the relationship between EU and UK after Brexit remained uncertain. Issues that would play a role in shaping the future trade relationship between the two parties and influence companies' operations include tariff and non-tariff (such as border control and different regulations) barriers to trade and the possible economic recession caused by UK leaving the union (Dhingra et. al., 2016). In early 2019, these issues were still under negotiation both in the UK's house of commons and between the EU and the UK.

3.2.2 Trade between Finland and The United Kingdom

In recent years, the amount of Finnish exports to the United Kingdom have experienced a declining trend. In 2017, exports to the UK added up to 3,8 € billion, 5,8% of total exports (Tilastokeskus). In 2016, exports to the UK had declined to 2,49 € billion, or 4,8 % of total exports. However, the exports to the UK experienced a slight re- bound, with total exports increasing to 2,68 € billion, while the portion of total Finnish exports to the UK decreased to 4,5 % remaining. The United Kingdom ranked as the 7th largest export market for Finland. The largest goods categories exported in 2017 were paper and cardboard, oil products and metal products with each category having a 23,1 %, 18,2 % & 11,5 % share of the total exports to the UK respectively.

Similarly, to exports from Finland to the United Kingdom, imports from the UK have decreased during the past decade. In 2017, 2,9 € billion worth of goods were imported from the UK (Tilastokeskus). This was equal to 4,9% of total good imported to Finland. 1,86 € billion worth of goods were imported to Finland in 2017. The share of imports from the UK also dropped to 2,9 %. Chemical products, vehicles and motors & other industrial products were the largest imported goods categories with each category having a 22,5 %, 20,1 % and 13,7 % share of the total imports respectively.

3.3 Research design

To answer the research question, this study used the qualitative grounded theory research design. The first application of grounded theory was in the 1965 published book *Awareness of Dying* by Barney Glaser and Anselm Strauss. Glaser and Strauss conducted field studies in hospitals and came up with a theory on the influence of awareness on the interaction with dying people. Two years later, the methodology they used to come up with the theory was presented as grounded theory in *The Discovery of Grounded Theory* (Glaser & Strauss,

1968). The purpose of presenting the methodology was to create an inductive methodology as an alternative to the tradition of generating theory through testing already existing theories (Glaser & Strauss, 1976, p. 2). Grounded theory is a rationale for theory that is grounded in the data collected for research projects.

Since its initial discovery, Glaser and Strauss have disagreed about the nature of the grounded theory methodology, which eventually led to them discontinuing their academic collaboration. Since then, there have been numerous different interpretations and versions of grounded theory (Holton 2008). Perhaps the two most notable versions of grounded theory are made separately by its original discoverers, Glaser and Strauss (in collaboration with Juliet Corbin). A researcher can choose between the (Cooney, 2013):

1. Glaserian methodology (Glaser, 1992)
2. Straussian methodology (Strauss & Corbin, 1990)
3. A combination of the two
4. The classical approach by Glaser and Strauss (Glaser & Strauss, 1967)

In this research, the Glaserian methodology was used, as it has a greater emphasis on the data, inductive reasoning and the emergence of theory from the data. In its approach to data analysis, the method is seen as more similar to the original grounded theory presented in 1968 (Walker and Myrick, 2006; Heath and Cowley, 2004). The *classical approach* presented in 1968 is seen by some as an argument for the creation of grounded theory, not a methodology textbook (Cooney, 2013). The *Straussian* method is seen as having a more systematic approach to the data analysis and focusing induction and deduction reasoning as well as verification of the theory (Stauss & Corbin, 2008). The Straussian methodology is seen by some as a less flexible methodology, which might make theory formation more difficult for researchers (Cooney, 2013). Heath and Cowley (2004) argue that mixing the two methodologies “violates (the) philosophical underpinnings of both” and might be difficult for novice researchers such as myself. As my thesis aims to gain an understanding and form a theory on the cognitive frames that are used to make sense of Brexit from the acquired data, the Glaserian methodology is the most logical choice.

As the theory is inductive, or derived from data, the data itself and its analysis process are heavily emphasized in all versions of the methodology. When constructing data driven theory, it is important to not just conceptually define and describe the phenomenon which is being studied, but to conceptually transcend the data to form an integrated, data-based theory (Holton 2008, p. 49). According to Holton (2008, p. 51), the aim of grounded theory research is not to report facts, but to come up with a data-based theory, which describes the relationships between concepts that are related to the phenomenon.

The Glaserian methodology emphasizes the following steps in generating grounded theory: data collection theoretical sampling, coding and analyzing the data throughout the data collection process (known as the Constant Comparative

Method) and memoing (Glaser, 1978). The researcher has to conduct these processes simultaneously from the start of the data collection until the final theory is formed (Holton 2008, p. 53-56). The Glaserian grounded theory research model is visualized in figure 1.

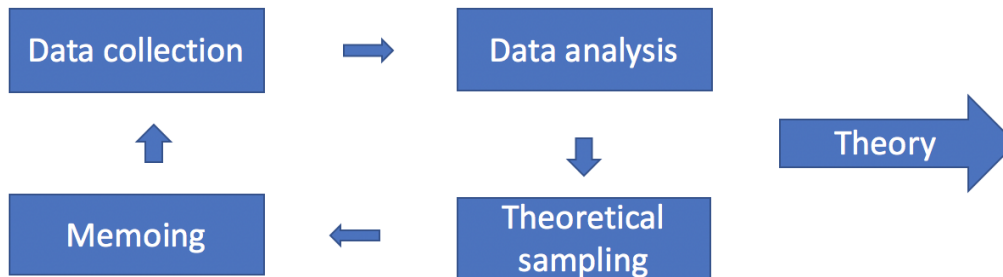


Figure 1: The Glaserian grounded theory research model

Theoretical sensitivity is relevant in all phases of grounded theory research. Theoretical sensitivity refers to the ability of the researcher to conduct all phases of the study without being influenced by pre-existing theories (Glaser, 1978). While some knowledge of relevant previous research might be helpful and in some cases necessary, it is important to not let this influence the research process.

In the next chapters each step of the grounded theory process will be gone through more in depth. Each chapter contains a theoretical background which explains why certain decisions were made in this research process. They also include information on how these different steps were conducted in this research. Finally, the concept of theoretical sensitivity is explained more, and how it was taken to account in each step of the research process.

3.4 Data collection

The classical grounded theory methodology introduced by Glaser and Strauss in 1968 did not specifically define which sources of data were applicable with the methodology (Glaser & Strauss, 1968). However, after the collaboration between Strauss and Glaser ended due to differences in their perception of the nature of grounded theory, there has been some clarification on this matter. The Glaserian version of grounded theory, the one used in this research, coined the term “all is data” (Glaser 2001, p. 145). This means, that everything that is going on around the research setting can be used as data. Not just what is being talked, but the conditions, gestures etc. (Glaser 2001, p. 145)

Data in qualitative research can be gathered in multiple ways. Typically, the aim of qualitative research is to gather research participants’ thoughts,

perceptions and ideas. This can be done for example by interviewing, observing or reviewing text. Interviews, especially unstructured and semi-structured interviews, have the advantage over the other methods mentioned before, that they allow the participants to give their own viewpoint in private, without the researcher forcing a predetermined framework to guide the answers (Bolderston, 2012, p. 68). Unstructured interviews might prove to be difficult for the interviewer and the interviewee because of the complexity of the topic. Fully structured interviews might also provide less relevant data, as the participants would be restricted in their answers. The quality of the data might have been negatively affected by conducting a fully structured or unstructured interview.

In this research the data was collected through eight semi-structured interviews. Semi-structured and unstructured interviews are the most common forms of interviews in grounded theory research and they are seen as fitting to the data driven nature of grounded theory (Duffy et. al., 2004, p. 68). Most of the interviews were done face-to-face, but as research has shown that telephone interviews can be just as effective as face-to-face interviews (Sturges & Hanrahan, 2004), a few of the interviews were conducted via Skype because of the geographic distance between the interviewee and the researcher. The interviews were transcribed, and the written text serves as the data for this research. All of the interviews added up to 70 pages of transcribed text.

As was mentioned, the interviews were semi-structure, meaning the interviews were aimed at gaining more focused information than in unstructured interviews. In practice, this was done by opening the discussion by asking about issues related to the research and then listening and following up on the discussion. The semi-structure of the interviews were based on the stages that are often associated with cognitive framing: interpretation, response (Karhu & Ritala, 2018; Tversky & Kahneman, 1981; Cornelissen & Werner, 2014) and scanning (Hahn et. al., 2014, 2). This was done in order to guide the discussion to the direction that it would provide relevant information when it comes to cognitive frames. See appendix 1 for the semi-structure of the interviews.

The interviews were conducted in February and March 2019. It was necessary to conduct all interviews in a relatively short period of time so that the general situation with Brexit would not have changed. If the Brexit situation had moved forward, the data in subsequent interviews might have been different. This schedule worked as the general situation with Brexit and its surrounding uncertainty remained roughly the same during that period of time.

In the first interviews, my goal was to gain insight on how Brexit and the uncertainty surrounding it was interpreted by Finnish SMEs, if they have taken any concrete actions because of Brexit, and why they have or have not taken any actions. I also discussed with the research participants about their scanning of Brexit, or what type of sources they use as data to make these decisions and how actively do they follow the situation. A list of topics discussed in the first interviews is in the attachments.

In grounded theory data collection, the questions asked by the researcher, if he or she is collecting data through interviewing, are likely to change throughout the data collection process. This is because the data is analyzed

throughout the data analysis process, this is called the constant comparison method (Glaser & Strauss, 1968). Once relevant themes arise during the early stages of data collection and analysis, these themes are tested in the next interviews (Kolb, 2012, p. 84-85), or whatever the data collection method may be. This means that the questions asked in interviews are modified throughout the data collection process.

3.5 Research participants

The data for this research was collected by conducting eight semi-structured interviews. Most of the interviews were done face-to-face, but as recent research has shown that telephone interviews can be just as effective as face-to-face interviews (Sturges & Hanrahan, 2004), a few of the interviews were conducted via Skype due to great geographic distance. The aim of this research narrowed down the potential research participant pool. As the aim was to identify the cognitive frames that are used by managers in Finnish SMEs to make sense of Brexit and the uncertainty surrounding it, it was logical that the research participants chosen for this study were senior managers in Finnish small and medium sized enterprises that have some sort of operations in the United Kingdom. Grounded theory mythology places a heavy emphasis on theoretical sampling, which allows the researcher to potentially change interview questions and interview different types of individuals that might bring additional value to the theory (Noble & Mitchell, 2016; Holton, 2008). It was not deemed necessary in this study to shift away from interviewing managers in Finnish SMEs operating in the UK.

I approached the research participant recruitment process by looking at the Finnish Customs annual statistics on trade between Finland and the United Kingdom (tulli.fi). The report lists the industries that account for the largest share of exports to the UK. The largest export industries were paper and cardboard, oil products, metal and metal products, motors, machinery, chemical products and timber. After I had identified the largest industries that export to the UK, I went to a Finnish financial newspaper's website, where they have a list of "export success companies" (in Finnish: menestyvät vientiyrietykset) (Kauppalehti.fi). I sorted the list of successful export companies down to only the ones operating in the before mentioned industries. Then I started contacting the CEOs of those companies one by one to ask if they were willing to participate in my study. I also contacted individuals in the top management team with other relevant positions, such as Director of International Markets.

In total, I contacted 55 companies of which a total of eight were willing to participate in this study. Many of the contacted individuals expressed interest but said that their company did not have significant sales to the UK or that they simply did not have time to participate. The interviews were conducted within two weeks of the interviewee agreeing to participate, and typically lasted for 30 to 40 minutes, which was then transcribed to 7-10 pages of text, adding up to 70

pages in total. It was agreed that the individuals who participated or the companies they represent were to remain anonymous throughout the entire research process. Therefore, the company's size and the position the interviewee has within the company are revealed in this report. Table 1 lists the size of the companies and the positions of the interviewees.

Order of interview	Size of the company	Position of the interviewee
1st	Medium sized company	CEO
2nd	Small company	CEO
3rd	Medium sized company	CEO
4th	Medium sized company	Business Director
5th	Small company	Export Director and member of the board
6th	Medium sized company	CEO
7th	Medium sized company	CEO
8th	Medium sized company	Executive vice president

Table 1: interviewees, size of the company they worked at, and position at the company

3.6 Theoretical sampling

Theoretical sampling in grounded theory is the process in which concepts, or pieces of theory that arise in data collection are tested in subsequent collection of data (Noble & Mitchell, 2016; Holton, 2008). This means that for example when collecting data through interviews, the interview questions as well as the future interviewees might be changed to test the potential theory. Data collection can be stopped once data saturation occurs. In other words once the data does not provide new relevant information for the theory, data collection can be stopped (Glaser & Strauss, 1968).

The three categories of the sense making process often associated with cognitive framing (scanning, interpretation and response) served as the framework for the interviews in this study. With the simultaneous data analysis, it could have meant that some of them could be dropped from the latter interviews if they prove to be irrelevant. This did not turn out to be the case and all three categories were discussed throughout the interviews.

During the first two interviews, the concept of loss of market share came up. Of course, I did not immediately know whether this concept would play a role in the formation of the theory, but as I conducted subsequent interviews, I would ask about whether they had any concerns over their market share in the United Kingdom after Brexit. Also, we discussed about the potential future of the European Union in the first couple of interviews. This topic was dropped out of the last interviews, as it came clear, that it might not play a role in the theory that was formed from this particular study. The aim of my research was to understand how Finnish SMEs frame Brexit and the uncertainty surrounding it.

Nothing in the data collection process suggested that I should interview anyone besides management from Finnish companies with sales in the United Kingdom. I did not change the general direction on who I should interview.

Data collection can be stopped in grounded theory research, once no new categories or concepts arise that are relevant to the theory that is formed in the research (Glaser & Strauss, 1968). Stanley Bruce Thompson analyzed a hundred different scientific articles from multiple different disciplines that used the grounded theory methodology and more specifically, interviews as their data collection method, in his article *Sample Size and Grounded Theory* (2011). Thompson's findings were that "Thirty-three of the studies used sample sizes between 20 and 30, thirty-two used between 10 and 19, twenty-two used more than 31, twelve used under 10 and one used more than one hundred (114)" (Thompson, 2011, p. 49).

In this research, the data saturation was reached with eight interviews, which is within the same range as twelve percent of scientific articles using interviews as data collection for grounded theory research. More interviews could have been done to test out the theory, but as the research topic was about the uncertainty surrounding Brexit, I felt that it was important not to conduct interviews over a long stretch of time. The circumstances surrounding Brexit were prone to change as new votes were held regarding Brexit in the British Parliament after the final interviews were conducted. New progress with the Brexit process might have affected how it was interpreted, and the data might not have been compatible for this research if the uncertainty was to change, decrease or disappear entirely. Due to the fact that data saturation was reached with eight interviews and that the Brexit scenario was starting to change after the eight interview was held, I feel that the sample size in this study is sufficient.

As was mentioned, theoretical sampling is done at the same time as the data collection and data analysis. The next chapter will be about analyzing data in grounded theory methodology, a process which is also known as the constant comparison method, and how the process was used in this particular study.

3.7 Data analysis with the constant comparative method

The data-based theory in grounded theory research is formed from categories, the properties they possess and the relationship of these categories (Glaser & Strauss, 1968; Holton, 2008). I would describe the constant comparative method as the tool that is used to analyze data in grounded theory methodology. The method is the process of coding and analyzing data from the beginning of data collection until the final theory is formed (Glaser & Strauss, 1968) The Glaserian grounded theory involves three stages of coding: Open coding, selective coding and theoretical coding (Glaser, 1978) as well as something called memoing, which refers to conceptualization of the theory (Glaser, 1978). As the name suggests, the constant comparative method is applied systematically throughout the data collection process, making it necessary for the researcher to revisit earlier

data as the theory formation process progresses (Holton, 2008). In the next chapters, I will talk about the different stages of coding and memoing in theory, and how these steps were implemented in this master's thesis research.

Open coding is the first step of data analysis in grounded theory research. This step starts with going through the data, in this case the transcribed interviews, line-by-line (Holton, 2008; Glaser, 1978), identifying each relevant incident and conceptualizing them by giving them a descriptive name. These conceptualized names can be either developed by the researcher or can be direct short quotes from the data (Glaser & Strauss, 1968). The codes produced by line-by-line coding are then assembled into categories by comparing and combining them. These categories form the basis of the theory (Glaser, 1978).

In my research, I was trying to find out what type of cognitive frames are used to make sense of Brexit. As was mentioned earlier, the interviews I conducted were built around three stages of managerial sensemaking, that are often associated with cognitive framing: interpretation, response (Karhu & Ritala, 2018; Tversky & Kahneman, 1981; Cornelissen & Werner, 2014) and scanning (Hahn et. al., 2014) (see appendix 1 for the structure of the semi-structured interviews). Thus, my interviews were guided by questions like "What type of response has the company taken to address Brexit?" and "what issues does the interviewee see as having the most impact on the business' operations?".

When conducting the line-by-line coding of the data, I conceptualized the lines by taking direct short quotes from the data and by coming up with the code names myself. Having coded the first interview, I started to look at what type of categories could be formed from the codes. I systematically applied this coding and category formation process throughout the entirety of data collection, returning to the first interviews multiple times as the categories changed, and the theory started to form. Two main categories that would form the theory emerged from the data. These categories are the threat and the response category. Each are formed from three subcategories, (1) the fear of losing market share, (2) the fear of market profitability and (3) the fear of delivery problems formed the threat category, while entry to new markets, (2) reactive responses and (3) doing more of what they have been doing formed the response category. See appendix 2 for a list of how each open code, subcategory and category was formed in the coding process. Table 2 shows an example of how certain extracts from the data were coded and how these codes were combined into sub and main categories.

Extract from interview	Open codes	Sub-category	Category
"However, we cannot compete with price in this highly competitive industry"	Concerned with Price competition	Concern over losing market share	Threat
"...with Brexit, it will have a large impact on the forms and nature of the trade. (...) Also, they [UK customers] buy the same raw material that we use, and they buy it from several different countries."	Concerned with competition from other countries		
"But [for customers] importing raw material from North Africa or somewhere could be a possibility..."	Concerned with competition from outside the EU		
"If a worst-case scenario would happen, that we would get a disruption in our supplies to our customer's customers. Would they [competitors] be able to convert some, a few important customers to them. It is one question."	Concerned with losing customers to local competitors		
"This is a regulated industry. So the regulations play a role in the demand. It depends on what the elected officials see as the proper investment in this infrastructure. Changes in the investments play a bigger role in the demand for this product than Brexit itself. "	Concerned with investments in the industry	Concerned with the demand from the UK market	
"It's so that if the customers don't have money, then they don't. "	Concerned with customers' purchase power		
"The real question is what the demand from the UK will be and how will the currencies react."	Concerned with demand and currency exchange rates		
"Well, of course. If you think about our importer, These are rough times. If you think about our importer in the UK. What will their purchase power be in the future and so on."	Concerned with importer's purchase power		

Table 2: Example of open coding

As the interviews were transcribed, it was easy to code them with the Microsoft Word application. Each line was highlighted, and the conceptual code was added with the “new comment” tool. This made it easy to compile all of the codes from each interview and move them to a separate word document for comparison, classification and category formation. Also, this way it was easy to return to the interview and see where each comment came from once more data became available and I had to return to previous interviews to modify previous codes and categories.

After the researcher has coded the data and formed categories for long enough, he or she will start to notice that core categories emerge from the data. The emergence of core categories will start the **selective coding** process (Holton, 2008). The core categories are the variables that seem to account for most of the changes in whatever the focus of the study may be. They are the foundation of what the emerging theory will be about. Once these core categories are identified, the researcher stops the open coding process and starts coding only the data that is directly related to these core categories. Once the researcher is sure of the core categories and their variables, they may delimit the collection of subsequent data to the categories that are related to the emerging theoretical framework (Holton, 2008; Glaser, 1978)

In this research, the core categories became clear after five interviews. It became clear that what the interviewee perceived as having the largest impact on the company’s operations had an impact on the response the company took, and how the concept of Brexit was framed. These core categories were later named the “threat” and “response” categories. It was clear from this point on that the eventual theory would form around this issue. Even though it is not entirely necessary in the Glaserian grounded theory methodology, I open coded the entire remaining interviews line-by-line as I had done before. This was done just in case some new relevant categories emerged from the remaining interviews. I also did not drop any topics of discussion from the remaining interviews but did ask more questions on the interpretation and response the companies had on Brexit.

Whereas the conceptualized codes in the open coding phase are mostly substantive, in the **theoretical coding** phase the researcher identifies what theoretical categories best define the coded categories. The theoretical codes are abstract models of the data and serve as the building blocks of theory in grounded theory methodology (Holton, 2008). Through the data analysis process, many theoretical codes might emerge, but only one will eventually be chosen as the theoretical code for the study. Cheri Ann Hernandez (2009, p. 51) describes theoretical codes as “the model through which all substantive categories and their code/categories are related to the core category”.

In this phase the researcher tries to identify the properties of the theoretical categories, the relationships they have with each other and integrate these findings to the theory through memoing. This identification of properties, relationships and their integration is done by comparing the categories, their

properties and different incidents to each other (Glaser, 1978). Once each core category, their properties and related categories have been identified, the researcher may begin looking at relevant literature, which could be integrated into the theory as another source of data (Holton, 2008; Glaser & Strauss, 1968). Previous literature can help in for example naming the terms used in the final theory. Cheri Ann Hernandez (2009) combined a list of potential theoretical code families that were identified by Glaser from 1978 to 2005. Glaser however stated that the list of theoretical codes is not exhaustive, meaning there are potentially more theoretical code families which might emerge in the theoretical coding process of a study (Hernandez, 2009).

The writing of **memos** is one way of identifying these theoretical codes (Hernandez, 2009). Memos are the researcher's "notes" that include conceptualization of the relationships between categories and notes about the data and. Memos are written throughout the data collection and analysis process (Holton, 2008). Writing memos is not very structured, meaning that the researcher has much freedom in what they wish to include in these memos. The purpose of memo writing is forcing the researcher to think about theoretical codes and relationships between different categories (Glaser, 1978). During memoing, the researcher tries to find out which theoretical codes best define and organize the theory (Glaser, 2003).

After I had analyzed and coded the data to their initial categories, I tried to identify the relationships these categories had with each other. This was done by making an Excel file, making a list of all the interview participants and listing all the categories as the sub-categories which were present at each interview. An example of this process is presented in Table 3. After some initial patterns started to emerge, I cyclically formed and modified the theory in memos, went through the relevant categories that were identified in the selective coding phase, re-coded some of the data from the perspective of the theory and updated my Excel file. The Excel file which listed all the interviewees worked as a fine tool to visualize and summarize the theory that was forming. The memos that I wrote were written in a separate Microsoft Word document. After a while, it became apparent that the eventual theory would be based on the companies' perception of threat from Brexit and the responses they took to address it.

Interviewee	1	2	3	4	5	6	7	8
Threats	a, b, c	c	a, b	a, b	a, c	a, b	a, b	a
Responses		1,2	1,2	2	3	2,3	3	1
Legend:								
Threats	a =	Delivery problems						
	b =	Market profitability						
	c =	Market share						
Responses	1 =	Reactive						
	2 =	New markets						
	3 =	Invest more in market						

Table 3: an example of identifying relationship between categories and sub-categories

Once the relationships of the categories was identified, I looked into existing literature for help in the identification of the underlying cognitive frames. I came across the works of Wendy Lewis on Paradoxical and dilemma frames. It had become apparent that companies concerned with their market share had taken two different, contradictory responses to address Brexit. This met the theoretical definition of a paradox; adopting two contradictory responses to address the same issue (Smith & Lewis, 2011, p. 387; Smith & Tushman, 2005, p. 526). The cognitive frames used by companies that had taken only one response were more difficult to identify. To identify this, some more open coding had to be done, to identify the reason companies decided to go with the response they did. The decision making processes met the definition of dilemma, in that a decision had to be made between two or more competing alternatives (Smith & Lewis, 2011, p. 386).

3.8 Theoretical sensitivity

Theoretical sensitivity is to the ability of the researcher to form a theory on the studied phenomenon from data (Glaser & Strauss, 1968), without being influenced by pre-existing theories and literature or one's own knowledge and presumptions (Glaser, 1978). In the Glaserian version of grounded theory, theoretical sensitivity is an important aspect in the data collection, data analysis and the theory formation phases of the research (Glaser, 1978).

Theoretical sensitivity plays a role in grounded theory methodology as early as in the *data collection* process. The concern with theoretical sensitivity in data collection is that the researcher might influence the data collection by consciously or subconsciously inserting parts of pre-existing theory or the researcher's previous knowledge into the data collection. This could be done by for example asking a question that is influenced by previous theory in an interview. However, a certain level of knowledge on the phenomenon that is being studied is required when gathering empirical data (Honkonen & Karila, 1995). I would argue that a certain level of knowledge also needs to be required in order to identify a research gap and to know what has been studied in the past about a phenomenon.

When starting this master's thesis project, I was relatively unfamiliar with cognitive framing, or at least what the recent academic literature on the topic. I knew of cognitive framing but did not have great insight into the existing theories. When I was coming up with my research plan and what I wanted to study in my master's thesis, I was simultaneously reading a lot of theory on cognitive framing in order to understand what type of studies have been conducted and what phenomenon have been studied. This might not have been ideal from the context of theoretical sensitivity.

As I was unfamiliar with the theory before starting this project, the knowledge I gained on cognitive framing before starting my data collection was mostly built around to the concepts that are associated with cognitive framing,

such as interpretation, response (Karhu & Ritala, 2018; Tversky & Kahneman, 1981; Cornelissen & Werner, 2014) and scanning (Hahn et. al., 2014). The main purpose of reading cognitive framing literature before collecting data, was to identify the way to approach the data collection process, or what type of topics should be discussed and what questions should be asked in order to understand what cognitive frames are used in making sense of Brexit. According to Honkonen and Karila (1995), a certain level of knowledge on the studied phenomenon is required in order to gather relevant data in grounded theory research. Therefore, I would argue that the theoretical sensitivity in my data collection process was not severely impaired due to reading literature on cognitive framing.

In the *data analysis* process, the concern with theoretical sensitivity is that the researcher will modify and code the data to fit already existing theories. Theoretical sensitivity serves as a tool to make sure that the data serves as the absolute starting point for data analysis and forming a theory (Glaser, 1978) The researcher has to be able to abandon ideas and theories that do not fit the data at hand.

I had become familiar with how data is processed in grounded theory methodology during a course I had taken before starting this master's thesis project and knew the steps I needed to take in order to analyze and categorize the data. As I had not read much on specific cognitive frames, but on the concept in general before starting the data collection and analysis processes, I believe my analyses were not influenced by existing theories.

Theoretical sensitivity also influences the *theory formation* process in grounded theory research. Previous literature is used as new research material which is then integrated to the data-based theory, rather than the premise which is tested with the data analysis (Holton, 2008). The risk from theoretical sensitivity perspective is that the researcher might allow existing theories influence the formation of the theory on their research. In *The Discovery of Grounded Theory* (1968), Glaser and Strauss emphasized the researcher's ability to work with existing theoretical literature without letting it influence the early stages of the theory formation. Once the core categories, their properties and relationships have been identified, the researcher may look at pre existing literature for help in the theory formation (Glaser & Strauss, 1968).

Once the data analysis process was at the stage where overarching themes and categories were clearly visible, I started looking into previous literature on cognitive frames. The aim was to see how previous research might support or fit into my data driven theory. More specifically, I started searching for studies that might have identified cognitive frames that had similar content as the themes and categories I used to come up with the theory. One example of a theme that arose from the data, and which has a rich cognitive framing literature associated with it is the threat frame. I believe my data formation was therefore not impaired but was supported by existing literature on cognitive frames.

Theoretical sensitivity is an important aspect to take into account when planning the data collection, data analysis and theory formation parts of a grounded theory research. This had been taken into account when I was planning

these steps. I read up on previous studies on cognitive framing before I came up with the research topic, as there was a need to identify a research gap, what had been studied previously, and how studies on cognitive framing can be conducted. This knowledge was essential to get relevant data out of the data collection process. Due to my relatively little knowledge on cognitive frames when starting this research process, I think the theoretical sensitivity was not impaired in any parts of the research.

4 FINDINGS

The theory from a grounded theory study is based on the relationships of the emerged categories. The aim of this study was to identify what type of cognitive frames are used to make sense of Brexit and its uncertainty. Two types of cognitive frames were identified through examining the relationships between the categories that emerged from the data analysis process.

While analysing the data for this study, two different categories emerged: the threat category and the response category. Both categories are divided further into sub-categories: different types of responses and different types of threats. The threat category, which is formed from the different threat scenarios that emerged from the data, includes the three sub-categories of (1) losing market share, (2) decrease in market profitability and (3) delivery problems. The response category is formed from the different responses to Brexit that emerged from the data. The response category includes three sub-categories: (1) proactively look for new markets, (2) reactive responses and (3) investing more in the market.

According to the data-based theory that formed from this study; to make sense of Brexit and its uncertainty, managers use two types of cognitive frames; the paradoxical and the dilemma frame. The frame they use is affected by the type of threats they have regarding Brexit. If the concern was of the company's market share, Brexit was framed through a paradoxical frame as the companies applied two contradictory, or paradoxical responses (Smith & Lewis, 2011, p. 387; Smith & Tushman, 2005, p. 526). If there was no concern over the loss of market share, Brexit was framed through a dilemma frame as the companies pondered between at least two different types of responses before settling with the response they did (Smith & Lewis, 2011, p. 386).

When managers framed Brexit through a paradoxical frame, there were two paradoxical responses the company took addressing Brexit. Companies invested more resources in the UK market proactively while simultaneously either (1) spent resources looking for new markets to fill the potential gap caused by potential loss in market share, or (2) waited for the events to fold out and approach the outcome reactively. When Brexit was framed through a dilemma frame, the company pondered between two responses; either proactively begin searching for new markets or wait until the Brexit events fold out and act reactively. This is known as a reactive-proactive dilemma (Huang et. al., 2018; Zucchella et. al., 2018; Pot et. al., 2022).

The findings will be presented as follows: at first the categories (the threat and response categories), their sub-categories and how they emerged from the data will be gone through in depth. After this the relationships of these categories are presented. Finally, the way the categories form the paradoxical and dilemma frames will be gone through more in depth.

4.1 The threat category

The individuals interviewed for this study expressed concern over multiple different threats Brexit might impose on their company. These different threat scenarios are categorized into three sub-categories: (1) fear of decrease in market profitability, (2) fear of delivery problems and (3) the fear of losing market share. These sub-categories formed the threat category. These three sub-categories will be gone through more in depth next.

4.1.1 Fear of decrease in market profitability

The fear of a decrease in the UK market profitability was a concern expressed by seven interviewees of this study. The concerns were related to their customers' and importers' purchase power, currency exchange rates, demand in the market and investments in infrastructure in the UK.

The lack of interest to invest in their industry had caused some customers of this company in the UK market to become hesitant on making purchases. When discussing the uncertainty around Brexit, Interviewee 6, the CEO of a medium sized company said:

“It has probably affected our customers' decision making. Of course, when [industry] was doing bad, the customers stopped purchasing, when they ran out of money. And now with these uncertainties caused by Brexit, the desire to invest has been careful. This has an effect on our sales directly (...) if the customers don't have money, then they don't.” Interview 6

The industry this company worked in is heavily funded by the government. There was concern that a political crisis in the UK would cut **budgets for some public infrastructure undertakings**. When discussing the role of the UK market for the company in the post-Brexit world, the CEO of a medium sized company, referred to this concern with a negation:

“If the country doesn't go into a total political crisis with budgets [in their customers' industries] cut off, it will remain an important market in the future as well.” Interview 3

One company had already experienced a decrease in **profit margins** after the exchange rates changed unfavourably after the referendum in 2016. When discussing the role of the market for the company and his initial reactions when the referendum was held, a top executive in a medium sized company, said:

“Brexit, the uncertainty has caused noticeable changes in currency rates which do not benefit us and cause problems (...) the currency ratios being unfavorable for us was the first thing. It was pretty hard. Our profit margins have drained down.” Interview 4

The company had already experienced a decrease in **profit margins** after the exchange rates changed unfavourably after the referendum in 2016.

Potential macroeconomic effects were also seen as having a negative impact on profitability. Unfavourable changes in the **currency exchange rates** were seen as directly decreasing profit margins or customers' purchase power. Interviewee 8, a top executive in a medium sized company, said:

“If the English economy goes to a recession, as it seems to be going into, this will take away the profitability of our customers' operations. In this way our market will melt away from beneath us. (...) If the British pound goes down really heavily, the purchase power will decrease there when it comes to our products. These are all Euro [currency] based products, so you cannot get over or under this in any way.” Interview 8

The possible changes in currency exchange rates will have an inevitable impact in the role the market has for the company. He brought up the scenario of the market for their product “melting away”. These macroeconomic changes were also seen as something the company cannot influence in any way. The possible changes in currency exchange rates would directly influence the purchase power of the UK customers.

When asked about what he thought the demand would be in the UK after Brexit, an executive in a small company said, that the way the industry reacts and grows are some of the concerns they are having:

“There are a lot of questions surrounding this. Like how will the [industry] react to this? And what type of growth will there be?” Interview 5

Concerns over the industry's future and what type of **demand** will there be in the UK for the company's products were present in a few interviews.

The sub-categories listed above; concerns over purchase power, currency exchange rates, investments and demand share the trait of being related to potential macroeconomic effect of Brexit. Another name could have been chosen for this sub-category, but my interpretation is that all these concerns are fundamentally related to the UK market's profitability, thus the name “concern over market profitability” was chosen. The traits of this sub-category are different from the fear of delivery problems, as that sub-category consists of concerns of more practical and concrete Brexit effects. The fear of losing market share also has a very distinct and specific attribute to it, the fear of competitors. Due to these differences, it was easy to separate the fear of market profitability from the other two threat sub-categories.

4.1.2 Fear of delivery problems

The fear of facing delivery problems in the post-Brexit era emerged in each interview. Delays in getting goods cleared through the customs, customs fees and formalities were the concerns that formed this subcategory. Interviewee 5, from

a small company expressed concern over delays in getting through the customs when discussing the actions, they have taken:

“When you get the customs checks to this product. And our product is likely not the first one that goes through the customs. I think the oranges from Spain are the first to go through [laughter].” Interview 5

The potential changes on customs formalities were also a cause of concern in a company operating in a regulated industry. Interviewee 6, the CEO of a medium sized company said that their customers’ needs typically arise very quickly, and changes in customs formalities might hinder their company’s ability to meet these sudden demands:

“The needs arise there typically very quickly, and you should be able to deliver the products quickly. And now, if all of a sudden, the UK leaves the EU, what will happen at the border? the customs formalities will be unclear, and this will slow down our deliveries.” Interview 6

Additional delivery costs caused by customs fees were also a cause for concern. Interviewee 8 said additional costs would directly increase the pricing of their products in the UK market. Interviewee 1 mentioned that customs fees would hinder their ability to deliver smaller shipments:

“It causes some extra paperwork which would be about 60-100 Pounds per shipment, which means if we send a full trailer, if we have to add an additional 60-100 pounds for each shipment, it will be a clear additional expense. However, if we send a full cargo ship of material and add the 60-100 pounds to that, it’s not that significant.” Interview 1

“Customs are also a thing, that if they [customs fees] come on, then they come on. Our products’ prices will increase right away.” Interview 8

These concerns were similar in the way that they were all related to the delivery process. Due to its specific nature, the sub-category was easily distinct from the other two; the fear of losing market share and the fear of market profitability.

4.1.3 Fear of losing market share

Three companies were concerned with losing market share to competitors in and outside the UK. The concern was associated with either price competition or potential delivery problems. Interviewee one, the CEO of a medium sized company was concerned with price competition from neighbouring countries eating away their market share in the post-Brexit UK. When discussing the role the UK market has for the company, the interviewee said:

“The Swedish and the Russian companies have increased their production lately so much that they are “eating” away the position of Finnish companies in the UK (...) if the argument is that the sales volumes should be as large as possible and the price as low as possible, we wouldn’t be able to compete” Interview 1

Interviewee 2, the CEO of a small company said that all companies within the EU were on the same boat and was not concerned with competitors from the union taking over their market share. However, when discussing the uncertainty of Brexit, and the potential delivery problems, the interviewee expressed concern of companies outside the EU benefiting from the situation:

“If the worst-case scenario happened in the negotiations, there might be a slump where we could not ship products, but after a while it would recover. The demand will be there; it’s not going anywhere. But how do [UK customers] handle it is a different situation. Like if they had a deal with another partner, which would be outside of Europe, that way our market share could be gone.” Interview 2

Interviewee 5 was also concerned with customs problems eating away the company’s market share. But unlike interviewee 2, he was concerned with local companies benefitting from the situation. When discussing the potential delivery problems and demand after Brexit, the interviewee said:

“If a worst-case scenario would happen, that we would get a disruption in our supplies to our importer’s customers. Would [UK competitors] be able to convert some, a few important customers to them?” Interview 5

The fear of losing market share was associated with price competition and delivery problems, as could be seen from the three examples above. Based solely on this, these concerns could have been categorized under the “fear of delivery problems” or “fear of market profitability” categories. However, I followed the grounded theory methodology conscientiously and applied theoretical sampling in my data collection process. Interviewees who did not spontaneously bring up the topic of market share were asked whether they had any concerns over it.

All five other interviewees responded that they did not have concerns over their market share. There were three different reasons these companies did not have this concern; (1) the company is well known in the market, (2) the company had a plan for addressing post-Brexit competition or (3) the effects of Brexit would be the same for the competitors as they are for their company. Below are examples of each type of answer to the question whether they were concerned over their market share in the UK after Brexit:

“The thing is that we have been so strong in Britain, and we are well known there for the past few decades, so, we do not think that there will be a hard hit on us.” Interview 6

“Not really, we have planned this so that we could operate in the UK market ourselves if competition gets tough (by founding a subsidiary).” Interview 3

“No, we are not, because our product is something that is made there from raw material. So, we’re talking about and exporting raw material for the end customer. The local competitors operate in the same way (exporting raw material from EU).” Interview 4

Due to the fact that five companies were concerned with delivery problems and market profitability, while specifically saying they were not concerned with their

market share in the UK, I made the decision to make the fear of losing markets share its own sub-category.

4.2 The response category

The response category emerged easily, as it was one of the topics discussed in the research interviews. Its importance to the theory of this study, and its relationship to the threat category was noticed in the theoretical coding phase. The response category is divided into three sub-categories: (1) proactively look for new markets, (2) reactive responses and (3) proactively investing more in the market. These responses are not exclusive, meaning that some companies took more than one response to Brexit. The companies that took the action of starting to look for new markets also engaged in one of the two remaining response sub-categories.

4.2.1 Reactive response

According to my data, the companies that were involved in taking the reactive response, thought that the eventual end result of Brexit is so uncertain that it is not possible to react pre-emptively. The reactive response sub-category included the following properties: Preparation for different scenarios, wait and see what happens and unwillingness to speculate. A total of five companies had reactive responses to Brexit. The main similarity among these properties was their timing. All the potential actions these companies might take will take place in the future once more is known about the eventual outcome of Brexit. It is also worth noting, that these properties are not exclusive, meaning more than one property can and did emerge in certain interviews. The content of these properties and the way they were identified will be discussed next.

Some companies had **prepared for different scenarios**, mostly on whether the deal UK Prime Minister Theresa May was presenting at the time would go through the UK Parliament or not. The company represented by interviewee 3 had not taken any concrete actions regarding Brexit. Their strategy was to wait until more clarity regarding the eventual outcomes would come out. When asked about his thoughts on the different potential Brexit outcomes, the CEO of the medium sized company responded:

“We have been thinking of some alternative strategies for some time now. And we think about these every day.... ... If it ends up being a soft Brexit, we have thought of expanding our operations in the UK market, possibly through a subsidiary. For a hard Brexit, we have just thought that if there will be tariff costs, our delivery terms state that all these additional costs will be paid for by the customer in the UK.” Interviewee 3.

In some cases, the preparation for different outcomes was done in collaboration with a large importer in the UK. Such as in the case of interview 1, a medium sized company which sells around a quarter of its products to the UK, 70-80% of which

through an importer. When asked about how actively he follows the most recent events around Brexit, the CEO of the company responded:

“Just this morning we had a long email conversation with one of our sales agents who is in contact with our UK distributor. We exchanged thoughts on the situation and looked at the sales of the second financial quarter. How do we need to prepare [for different scenarios] and what might the price level be?” Interview 1.

Although preparing for different scenarios could be considered a proactive response to Brexit, I interpreted it as a reactive response in my data analysis. This interpretation was done because the eventual action the company would take still depends on the Brexit outcome, thus making it a reaction rather than proactive action.

Some companies had not prepared for different Brexit outcomes, either because they did not think it was necessary, or because they did not have the resources to do so. Their strategy was to **wait and see what happens** and react after that. When discussing the different potential Brexit outcomes and whether the company has prepared for these or not, Interviewee 2, the CEO of a small company to which the UK is their second largest market after Finland, and interviewee 7, the CEO of a large medium sized company with regular sales to the UK said:

“There are so many different possible outcomes to this so there’s no way to really prepare for it... there is no other option than to wait and see what happens ... But I would argue that companies our size, and even quite a lot of bigger companies, do not have the resources to be prepared for every possible situation” Interview 2

“Nothing else than we follow what is going on there. It is hard to say what will happen there. But we haven’t done any concrete actions.” Interview 7

An argument could be made that waiting to see what will happen would not be a response at all. However, as the choice to wait out the uncertainty is in this case a conscious decision, I interpreted it as a response. Especially, as some of the companies that applied this strategy had a significant portion of their sales coming from the UK.

One executive of a medium sized company stated that top executives **do not speculate** on potential outcomes. He said that the company will react to Brexit once its outcome is known. The UK was not one of the largest markets for this company, but there was significant interest in getting more involved in the market.

“A business executive does not speculate or guess. He works rationally and reacts... You have to deal with it fully analytically. And whichever thing happened, we will react to that.” Interview 8

Not speculating is also a conscious decision in this case and could be categorized under the “wait and see what happens” property. However, the previous property did not rule out the possibility of speculation and thus these properties were separated into two.

The main factor that combines all these codes to the same sub-category, is their timing. The eventual response these companies would take will depend on the outcome of the Brexit negotiations and thus happen once the outcome is understood better. This makes reactive responses fundamentally different from the other two response categories that had emerged from the data: entry to new markets and doing more of what they have been doing.

4.2.2 Proactively look for new markets

Entry to new markets was a proactive response three companies took to address Brexit. The codes and properties of this response did not vary greatly between different research participants. Some companies had started looking for new markets as soon as former British Prime Minister David Cameron announced that there will be a referendum on whether the UK will stay in the EU. Interviewee one, the CEO of a medium sized company with a quarter of sales going to the UK, said this when asked whether they had taken any actions because of Brexit:

“We have been able to maintain and seek new markets and clients in the past five years due to Brexit and because we knew it was risky for us to have one single market with such a large portion of our sales.” Interview 1

For this company the entry to diversify their markets was a relatively big decision. The company decided to invest in a new production line in order to enter new markets. The company had a significant portion of their sales coming from the UK (20 to 30%) and had previously experienced a drop in sales there, although decades ago.

One company started the search for new markets later, in early 2018. Interviewee 2, the CEO of a small company to which the UK is their second largest market after Finland said this when discussing actions, they had taken because of Brexit:

“...a year ago, we started looking at the Swedish market more in depth in case something so large happened that the demand from UK would decrease, so could we replace it from somewhere?” Interviewee 2

After the interview, interviewee 2 mentioned that in addition to Sweden, they had started looking at markets outside the EU, such as the Chinese market for replacing the potential drop in sales in the UK.

One company had already been looking for new markets but speeded up the process once the referendum results came out. When discussing the topic of my thesis after the interview, interviewee five, an executive and member of the board in a small company, to which UK was one of their largest markets said:

“An interesting topic. We have also, just came to my mind, that I didn’t comment on, that some time before Brexit, and you could say Brexit has speeded up this, that we are trying to put the eggs in other baskets as well (looking for new markets).” Interviewee 5

Although these processes of starting to look for new markets began during different phases of the Brexit timeline, they were similar in that they were all done proactively before the effects of Brexit were known. Also, they share the trait of reacting by investing resources (whether it is time or money) into other markets.

4.2.3 Proactively investing more in the market

The third and final response that emerged from the data was investing more in the market. A total of three companies had taken this response. This is also a proactive response, as it is taken before the true effects of Brexit take place or are even known. This response includes increasing a company’s own or the local importer’s warehouse storage levels in the UK. Interviewee 4, an executive in a medium sized company which operates in the UK through a sales-based subsidiary had started increasing warehouse storage levels in the market. This had been done to the limit of their transportation capacity. When asked about whether the company had taken any action because of Brexit, the interviewee said:

“We have for example, changed our control of the warehouse supply levels. In a way that the clients will get the materials they order. The products are already located there, in England. We will definitely tank up the warehouse storage levels even further. We live in a small crisis, in a way that we are having some problems with the transportation capacity.” Interview 4

The interviewee 6, the CEO of a medium sized company, operating in the UK also through a subsidiary expressed his concern over potential delivery problems. The CEO said they are increasing their warehouse storage levels to ensure their capabilities of fulfilling the most urgent orders:

“We have a Brexit plan, which includes preparation for these logistics issues. We have our own warehouse in [city in the UK], so that we can fulfil the most urgent orders from there. But if we get larger orders, that we do not have stored there, and have to ship them from Finland and manufacture them custom made for the order, we have planned for that as well.” Interview 6

In the case of a small company, the same action was done in cooperation with their UK importer. Interviewee 5, an executive in a small company explained that their importer in the UK is one of their most important customers and the decision was made together. Their response will be the same no matter what happens with Brexit. When discussing the importance of the UK market and the responses the company has taken, the interviewee responded:

“We decided that our situation will not change to one direction or the other because of this. We cannot say that which direction we will go to. The ways we will respond to this are sort of fixed... we are meaning to ship a large batch to the UK in March to increase the warehouse buffer.” Interview 5

What is noticeable with the first two companies taking this response, is that they both operate in the market through a subsidiary. It might raise the question, whether this response is associated with having a subsidiary in the market. This might be the case to some degree, but the data also included another company (company 8) which has a subsidiary in the market but had not taken this action. The fact that company number five had taken this action in cooperation with their importer makes this response also accessible to companies that do not have a subsidiary. This response could have another name, such as “increasing storage”, but as storing products in UK warehouses is essentially investing resources into that market, the term “investing more in the market” was chose.

4.3 The cognitive frames used to make sense of Brexit

The two cognitive frames identified in this study; the paradoxical and the dilemma frame emerged when comparing the treats scenarios that emerged from the data to the responses companies took to address Brexit. The paradox frame was identified purely on the relationships of these categories, while the identification of the dilemma category also involved a bit of open coding. The main factor that determined which of the two frames the individual made sense of Brexit was whether he was concerned over their company’s market share or not. These frames will be gone through in depth in their own respective chapters.

When the interviewee expressed **the fear of losing market share**, their company had proactively started to look for new markets. Except for one instance, the companies that had concerns over their market share were also concerned with the market profitability and delivery problems. In addition to proactively starting to look for new markets, these companies had taken either the reactive response or proactively invested more in the UK market. The data showed no examples of companies that took all three different responses. For the complete list of threats and responses each interviewee expressed, see table 3 in the methodology section.

According to cognitive framing literature, choosing two contradictory actions to address the same issue is distinctive of framing an issue through the paradoxical frame (Smith & Lewis, 2011, p. 387; Smith & Tushman, 2005, p. 526). In this study, two different types of paradoxes emerged when an interviewee expressed concern over their company’s market share. The first being the combination of adopting both the proactively started to look for new markets and invest more in the market responses. The contradiction here being that the company invested in the UK market and the search for new markets. Taking two simultaneous contradictory responses is known as *accommodation* (Smith and Lewis, 2011, p. 392). The other paradox was when companies started to proactively look for new markets while simultaneously taking the reactive response. This type of paradox where one action is taken at one specific time and the other during a different time period is known as *temporal separation* (Poole & Van de Ven, 1989, p. 566-567).

When an individual specifically said they were not concerned with their market share in the UK, the individual was concerned over the UK market's profitability and possible delivery problems. The relationships of **the fear of market profitability** and **the fear of delivery problems** sub-categories with the response sub-categories were identical. Companies that had these two concerns, adopted either the reactive response or the invest more in the market response. In none of the cases did a company adopt both of these responses. There was nothing in the data that suggested that one of these two threat sub-categories was more related to the reactive response or the proactively investing more in the market response.

A dilemma is a choice between two or more competing options, each with their advantages and disadvantages (Smith & Lewis, 2011, p. 387). This concept of competing alternatives, or dilemmas has been applied into cognitive framing theory as well (Karhu & Ritala, 2018; Smith & Lewis, 2011). The dilemma that emerged from the data in this study was the reactive-proactive dilemma (Huang et. al., 2018; Zucchella et. al., 2018; Pot et. al., 2022). In this case the choice between a proactive response (investing more into the UK market before Brexit) and a reactive response (waiting until the Brexit events play out before taking any action).

To sum it up, companies that were concerned with their market share in the UK, made sense of Brexit through a paradoxical frame, while companies that were not concerned with their market share made sense of it through a dilemma frame. The Paradoxical and dilemma frames will be gone through more in depth next.

4.3.1 Paradoxical frame

The Oxford Dictionaries defines a paradox as "A seemingly absurd or contradictory statement or proposition which when investigated may prove to be well founded or true." (Oxforddictionaries.com). They may be problems that require multiple alternatives that are combined into an overarching solution (Karhu & Ritala, 2018, p. 24). Paradoxical cognitive frames are cognitive templates through which individuals recognize that there are contradictions that exist simultaneously (Smith & Tushman, 2005, p. 526). In management decision making, this involves choosing two contradictory alternatives to address the same issue (Karhu & Ritala, 2018, p. 25).

The paradoxical frame in this study was identified in the theoretical coding phase. After having examined the relationships of the threat and response categories, I looked into the cognitive framing literature for potential ways to identify the underlying cognitive frame. A step which is a part of the Grounded theory methodology at this stage (Holton, 2008; Glaser & Strauss, 1967). I came across the worked by Wendy Smith on Paradoxical and dilemma frames. It had become apparent that companies that were concerned with their market share had adopted two contradictory responses to address the same issue, which is the definition of a paradox (Smith & Lewis, 2011, p. 387; Smith & Tushman, 2005, p. 526). Thus, I identified the presence of a paradoxical frame in these cases.

The interviewees that were concerned over their companies' market share in the UK made sense of Brexit through a paradoxical frame. This cognitive frame was identified as these companies applied two contradictory strategies to address Brexit, which in itself is a paradox, and is a typical response for addressing strategic issues frames as paradoxes (Smith & Lewis, 2011, p. 387; Smith & Tushman, 2005, p. 526). This study identified two different types of paradoxes in companies' responses: (1) responding to Brexit by proactively starting to look for new markets and investing more in the markets and (2) responding by proactively starting to look for new markets while also having a reactive response.

In the first type of paradox identified in this study, proactively entering into new markets, and investing more in the UK market, the paradox is spending resources in contradictory targets to address the same issue. Taking two simultaneous conflicting actions to address the same issue is known as *accommodation* (Smith and Lewis, 2011, p. 392).

In the second type of paradox identified in this study, proactively entering into new markets, and taking a reactive response, the paradox is that the responses are proactive and reactive. The other one takes place before the issue it addresses, Brexit, and the other after it. This is known as *temporal separation* (Poole & Van de Ven, 1989, p. 566-567)

To sum it up, when an interviewee was concerned over their company's market share, they made sense of Brexit through a paradoxical frame. Two types of responses were identified to address the paradox: (1) accommodation or taking two conflicting actions simultaneously and (2) temporal separation, taking two actions over a different place in time, before and after Brexit.

4.3.2 Dilemma

The Oxford Dictionaries defines a dilemma as "A situation in which a difficult choice has to be made between two or more alternatives, especially ones that are equally undesirable." (oxforddictionaries.com). They are situations in which a decision must be made between two alternatives (Smith & Lewis, 2011, p. 386). In cognitive framing, when making sense of an issue, an individual sees the topic as an "either/or" situation, where he favors one alternative over the other (Karhu & Ritala, 2018, p. 25). In this study, companies that did not frame Brexit through a Paradox frame, framed it as a dilemma. More specifically, a reactive versus proactive dilemma.

Unlike the paradoxical frame, the dilemma frame in this study was not identified merely based on the relationships of the threat and response categories. The fact that only one type of response was taken made it harder to identify the underlying dilemma cognitive frame. After some additional open coding and looking at the decision-making process of how these companies came to take these responses, the dilemma frame was identified.

When an interviewee expressed concern over market profitability and delivery problems, but specifically said were not concerned over the company's market share, Brexit was framed as a dilemma. In this case, one of two different

types of responses were taken, either the reactive response or the proactive response of investing more in the market.

Another company that took the reactive response had thought of multiple alternative actions but emphasized that the eventual response they will take depends on the outcome, thus being a reactive response. When discussing the responses, they had thought of, the CEO of a medium sized company said:

“We have been thinking of some alternative strategies for some time now... If it ends up being a soft Brexit, we have thought of expanding our operations in the UK market, possibly through a subsidiary. For a hard Brexit, we have just thought that if there will be tariff costs, our delivery terms state that all these additional costs will be paid for by the customer in the UK.” Interviewee 3

Another response that was present when companies framed Brexit as a dilemma was the invest more in the market response. The Business Director of a medium sized company, interviewee 4, said they had discussed potential scenarios with their customers to, but decided to go with the proactive response of investing more in the UK market by increasing their warehouse storage levels. He also mentioned the uncertainty that was surrounding Brexit at the moment, by saying they had prepared for a scenario where there will not be any certainty about practicalities after Brexit has happened:

“We have changed our control of the warehouse supply levels. In a way that the clients will get the materials they order. The products are already located there, in England. We will definitely tank up the warehouse storage levels even further. We live in a small crisis, in a way that we are having some problems with the transportation capacity... We have prepared for a desperate situation where no one knows what will happen ... We are somewhat prepared. We have discussed this with customers, we have had conversations on what will and might happen. They understand this supply chain here from Finland and the potential consequences Brexit might have for it and the product they need.” Interviewee 4

In cases when the reactive response was taken, the interviewees stated, that the decision was made because the eventual outcome of Brexit was still uncertain. The Executive Vice President of a medium sized company, Interviewee 8, said that it is not worth speculating on what will happen with Brexit and they took the reactive response because the outcome was still so uncertain:

“A business executive does not speculate or guess. He works rationally and reacts... I cannot take a position on this. Like saying “this will happen, so I will prepare for it like this”. You have to deal with it fully analytically. And whichever thing happened, we will react to that.” Interviewee 8

The necessity to choose one alternative over another is what constitutes something as a dilemma. All the companies interviewed that did not frame Brexit through a paradoxical frame did not take multiple responses to address it. These companies framed Brexit through a reactive-proactive dilemma. They contemplated on different alternative responses before deciding on the one they implemented. The responses they contemplated were proactive (investing more in the

UK market before Brexit) and reactive (waiting until more information on the effects of Brexit is available and react based on that).

5 LITERATURE INTEGRATION

The integration of literature in grounded theory methodology begins once the core category, its properties and relationships to other categories have been identified (Holton, 2008; Glaser & Strauss, 1968). However, the integration process does not stop once the theory is finalized but continues afterwards by comparing the theory to existing literature (Glaser & Strauss, 1968). This helps the researcher to locate the theory's situatedness in the literature field and identify its validity and significance (Lo, 2016, p. 183).

5.1 Institutional theory

An institution can be defined as a "collectively accepted system of rules" (Searle, 2005, p. 21). The European Union could be called an institution, but perhaps more accurately, the bodies that make up the EU, such as the European Parliament, European Investment Bank and the European Customs Union are what could be called institutions. Brexit by definition means the process of the United Kingdom leaving the EU, and its institutions. Therefore, it is important to integrate my study on the cognitive frames used to make sense of Brexit to institutional research.

The majority of institutional research has focused on the macro level effects on the sectoral, field, and global level (Powell & Colyvas, 2008, p. 772). The institutional research field has increasingly called for an increased effort in researching the micro-level processes associated with institutional theory, such as sense-making, identity, typification, categories, and frames (Powell & Colyvas, 2008, p. 279; Cornelis & Werner 2014, p. 186; Glaser et. al., 2016, p. 35). Glaser, Fast, Harmon and Green (2016, p. 60) even suggested that focusing on how individuals frame and engage in frame switching in real, concrete situations might provide more insight into how individuals exploit institutional logics. This study contributes to the institutional theory by shedding light on how institutional change, in this case Brexit, is framed by management in small and medium sized enterprises and how this framing shapes organizations' actions.

According to Glaser et. al. (2016), institutions shape organizations' interests as well as the actions they take to pursue them while also providing opportunities in cases of institutional contradiction. Institutional contradiction can be described as an impulse for organizational change (Seo & Creed, 2002, p. 226) This study found results that align with institutions (or in this case institutional change) shaping organizations' actions to meet their interests. The companies that were present in the data-collection phase had either acted proactively or reactively to ensure and pursue their interests either in the UK market or elsewhere. However, there were no indications that any of the interviewees interpreted any opportunities in the uncertain situation or Brexit in general.

5.2 Framing literature

In this part of the literature integration, this study will be integrated into the framing literature. First, this is done through locating how the theory situates in the framing research field. Secondly, the theory is compared to similar cognitive framing theories on issues affecting organizations' strategy.

The field of frame research is considered fragmented (Entman, 1993; Cornelissen & Werner, 2014). Cornelissen and Werner categorized the frame construct into three levels of analysis, or lines of research: the micro, the meso and the macro level (2014, p. 185). The macro level framing constructs are, as the name suggests, frames that are held across an entire culture or institutional field. The meso level framing constructs are constructed to make sense of issues such as an organization's competitors and technology. The micro level framing constructs are more closely related to this study. They include cognitive framing, frame of reference and framing effects. Cornelissen and Werner (2014) define cognitive frames as knowledge structures that direct and guide information processing. Frames of reference are a baseline expectation that provides a basis for decision making and framing effect is the process in which frames influence the decision making and response process.

Research on framing in institutional change has focused on the process of how these macro level, institutional frames are constructed (Cornelissen & Werner, 2014). Lounsbury, Ventresca and Hirsch (2003) argue that institutional change happens through new frames that are constructed through interactions between individuals in an institutional field. The majority of studies on micro level, cognitive frames have also been focusing on how these frames are formed and accessed on an individual level (Cornelissen & Werner, 2014).

While this study does not necessarily add to the process of how cognitive frames are formed, which seems to be the main focus of framing research, it gives valuable information on how a concrete institutional change is framed by real individuals. A topic of research which has been called for in the institutional research field. (Powell & Colyvas, 2008, p. 269; Cornelis & Werner, 2014, p. 186).

5.2.1 Studies on cognitive framing in management decision making

In cognitive framing literature, topics such as innovation or practice adoption (Kennedy and Fiss, 2009; Raaijmakers et al., 2015), corporate sustainability (Hahn et. al., 2014; Grewatsch & Kleindienst, 2017), environmental action (Zietsma & Vertinsky, 1999), legitimacy (Bitektine, 2011; Tost, 2011) and strategy making (Kaplan, 2008) have been studied in the past. However, as was mentioned previously, studies on the cognitive framing of institutional change are few in numbers.

George, Chattopadhyay, Sitkin and Barden (2006) however, touched on the topic of institutional change in their study *Cognitive Underpinnings of Institutional Persistence and Change: A Framing Perspective*. They studied how organizational decision makers initiate responses when facing **legitimacy-related environmental changes**. Their study shows that depending on if these changes are framed as potential losses or potential gains, and whether the organizations resources or control is affected by this change, decision makers take either an isomorphic or non-isomorphic response. Isomorphic responses refer to actions that are like those of other actors in the same institutional environment, while non-isomorphic responses are those that are different from other actors in their institutional environment.

The loss and gain frames were not applicable to this study, as there were no instances in which any of the interviewees expressed the potential of gaining anything (apart from problems). All interviewees in this study expressed some sort of concern over a potential loss. Concluding that all companies framed Brexit as a potential loss, would not have been a fertile result for this study, thus in this study, the framing of Brexit was analyzed from a different perspective. It is difficult to say whether the responses the companies took were isomorphic or not. Perhaps the data of this study could be evaluated later, once there is an understanding of what was an isomorphic response and what was not. This study and that of George et. al. (2006) was similar in the fact that they both studied how cognitive frames are used to make sense of institutional change, but the cognitive frames that were used were different.

A study by Kennedy and Fiss (2009), studied how framing an **innovation** as either an opportunity or a threat influenced companies' motivation for adopting that innovation and whether they were early or late adopters. Their findings indicate that if the innovation was framed as a threat, the organization be a late adopter and adopt it because of potential economic or social losses. While organizations that framed the innovation as an opportunity were likely to adopt the innovation early due to potential economic and social gains.

While studying the cognitive framing of entirety different concepts, both my study and the study by Kennedy and Fiss (2009) dealt with threat interpretation. In my study, all companies interpreted Brexit as a threat, some more, some less. In cases when the threat was over a company's market share, the company tended to act proactively. According to Kennedy and Fiss, it is not the case in innovation adoption that companies interpreting an innovation as a threat tend to adopt it sooner, or act proactively regarding it. My study supports this finding, that if an issue is interpreted as a threat, it has an impact on the time a response is taken to address it.

Hahn, Preus Pinkse and Figge (2014) proposed a cognitive framing perspective on ambiguous **corporate sustainability issues**. They propose that sustainability issues are framed either through a paradoxical or a business case frame. Hahn et. al. studied how differently sustainability issues are scanned, what is their sense of control, issue valence and what type of responses companies took to address sustainability issues when framing them as either paradoxes or business cases. Companies that framed sustainability issues through a business case

frame were expected to take a pragmatic, workable solution. Companies that frame sustainability issues through a paradoxical frame were expected to take prudent, or careful responses, while also applying responses that break the established routines and business practices of the company. These companies with a paradoxical frame tend to approach these issues by moving at a slower pace and carefully (Hahn et. al., 2014).

There are similarities with the responses taken to address Brexit and corporate sustainability issues when they are framed as a paradox. In my study, the companies that framed Brexit through a paradox frame started proactively looking for new markets, which could be said to be an action that breaks established routines and business practices the company typically engages in (as all companies interviewed were very invested in the UK market). In sustainability issues, companies framing them through a paradoxical frame were expected to approach these issues by moving slowly and carefully. This aspect of the companies' response was not specifically studied in my thesis, so whether the paradox frame responses could be categorized as moving slowly and carefully remains unknown. Perhaps the reactive response could be defined as moving slowly, due to the fact that it postpones the eventual time of taking action. Proactively searching for new markets in the fear of losing market share in the UK could be seen as a careful response. However, this aspect of moving slowly and carefully was not specifically studied and thus only speculations on this matter can be made.

6 CONCLUSION

The aim of this study was to answer the research question: *What types of cognitive frames are used by managers in Finnish SMEs to make sense of geopolitical change?*. During the course of this thesis, the United Kingdom was in the process of leaving the European Union, which provided a good real life context where the research question could be studied. This study used the grounded theory methodology and formed a theory from the data that managers framed Brexit as either a paradox or a dilemma based on whether they saw it causing a threat to their market share in the United Kingdom or not.

The data for this study was collected via semi-structured interviews with top managers in Finnish SMEs that had trade with the United Kingdom. The way the managers scanned and interpreted Brexit as well as the response companies took to address it were the structured topics that were discussed in all interviews.

While the main focus of cognitive framing research seems to be the way cognitive frames are formed, this study contributed to existing literature on cognitive framing by providing a real life example of what types of cognitive frames are used to make sense of a specific issue.

6.1 Limitations of this study and future research

One limitation of this study in the sample size of eight interviewees. Although the theory of this study formed and data saturation occurred during those eight interviews, it would have been beneficial to conduct at least a few more to make the theory more reliable. Unfortunately it was quite difficult to get interviews with busy executives such as CEOs, as only eight agreed for an interview out of 55 asked.

Another limitation of the study is that the data collection had to be done in a relatively short period of time, as it was necessary for the Brexit situation to remain roughly the same during all interviews. Although the scheduling of the interviews worked well, and no major changes in Brexit occurred during that time, it would have been beneficial to have some additional time between each interview to analyze the data a bit more. Despite the tight schedule, the grounded theory methodology was followed correctly. However, perhaps some different parts of the data might have become more prominent, if there had been more time between each interview to dive into the data.

Although this study provided a real life example of how geopolitical change is framed, the results might not be exhaustive. There might be geopolitical changes that do not affect a company's market share whatsoever. In these types of cases the change might be framed differently. More studies on framing of real geopolitical changes managers have to face are needed.

Also factors such as the industry the company operated in. This was not taken to account in this study, as the research participants were from companies

from a variety of different fields. Whether the company exports raw material or high tech equipment might face different types of difficulties because of Brexit. During the time of the interviews, the eventual outcome of Brexit was uncertain in all aspects, so it might not have been possible to study these framing differences between industries. This factor could be addressed in future research with other real life scenarios.

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APPENDIX 1: Semi-structure of the interviews in Finnish

Kysymyksiä haastatteluun:

1. Kuinka aktiivisesti ja säännöllisesti teidän tulee seurattua tämänhetkistä keskustelua Brexitistä?
2. Minkälaisista lähteistä keräätte tietoa Brexitistä?
3. Minkälaisia ajatuksia teillä heräsi, kun tulos kansanäänestyksestä EU:sta eroamisesta tuli julki?
4. Minkälaisia vaikutuksia ajattelite tällä olevan yritykselle?
5. Onko suhtautumisenne Brexitiä kohtaan mahdollisesti muuttunut viime vuosien aikana?
6. Miltä Brexitin ympärillä pyörivä epävarmuus on tuntunut?
7. Minkä luulette olevan suurin Brexitin tuoma vaikutus liiketoimintaanne?
8. Kuinka vakavana uhkana pidätte Brexitiä?
9. Kuinka todennäköisesti uskotte Brexitillä olevan vaikutusta yrityksenne toimintaan?
10. Oletteko ottaneet toimenpiteitä yrityksenä Brexitin seurauksena?
 - Jos kyllä, minkälaisia ja miksi?
 - Jos ei, miksi?

APPENDIX 2: open code, sub-category and category formation

Extract from interview	Open codes	Sub-category	Category
“We have been able to maintain and seek new markets and clients in the past five years due to Brexit...”	Preemptively started looking for new markets	Enter new markets proactively	Enter new markets
“We try to diversify our product portfolio and enter new markets.”	Enter new markets		
“But, a year ago we started looking at the Swedish market more in depth in case something so large happened that the demand from UK would decrease...”	Started looking for new markets preemptively		
“...some time before Brexit, and you could say Brexit has speeded up this, that we are trying to put the eggs in other baskets as well [looking for new markets].”	Started looking for new markets preemptively		
“We have for example, changed our control of the warehouse storage levels. In a way that the clients will get the materials they order. The products are already located there, in England. We will definitely tank up the warehouse storage levels even further. “	Have increased warehouse storage levels	Increase warehouse storage	Invest more in the UK market
“We have our own warehouse in [city in the UK], so that we can fulfill the most urgent orders from there”	Have increased storage in UK warehouse		
“we are meaning to ship a large batch to the UK [importer] in march to increase the warehouse buffer.	Will ship a larger batch to UK customer before Brexit	More shipments to importer before Brexit	
“we have thought of expanding our operations in the UK market, possibly through a subsidiary”	Thoughts of founding a subsidiary	Getting closer to the market	
“...there is no other option than to wait and see what happens. Thinking about what are the options? But there is no real way to prepare for this.”	Wait and see what happens		

"The biggest problem here is the uncertainty"	Uncertainty	Uncertain on what will happen	Reactive response
"A business executive does not speculate or guess. He works rationally and reacts. [laughing]"	Will not speculate with what will happen		
"It is hard to say what will happen there. But we haven't done any concrete actions."	Have not done anything yet	Have not taken any action	
"However, we cannot compete with price in this highly competitive industry"	Price competition	Concern over losing market share	Threat
"...with Brexit, it will have a large impact on the forms and nature of the trade. The impact is huge. Also, they [UK customers] buy the same raw material that we use, and they buy it from several different countries."	Concerned with competition		
"But [for customers] importing raw material from North Africa or somewhere could be a possibility..."	Concerned with competition from outside the EU		
"If a worst-case scenario would happen, that we would get a disruption in our supplies to our customer's customers. Would they [competitors] be able to convert some, a few important customers to them. It is one question."	Concerned with losing customers to local competitors		
"This is a regulated industry. So the regulations play a role in the demand. It depends on what the elected officials see as the proper investment in this infrastructure. Changes in the investments play a bigger role in the demand for this product than Brexit itself."	Concerned with investments in the industry	Concerned with the demand from the UK market	
"It's so that if the customers don't have money, then they don't."	Concerned with customers' purchase power		
"The real question is what the demand from the UK will be and how will the currencies react."	Concerned with demand and currency exchange rates		
"Well, of course. If you think about our importer, These are rough times. If you think about our importer in the UK. What will their purchase power be in the future and so on."	Concerned with importer's purchase power		