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Understanding Institutional Logics by Sense Making

A case study of a sustainability project

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Abstract

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Background: Sustainability is realized by companies to different extends as plenty of pressures operate on projects which influence the outcome. One specific influence are the actors who make sense of the pressures based on organizational and personal experiences. By the combination of institutional logics and organizational sensemaking theory, organizational influences in form of pressures and logics (forming the macro-level) and personal views based on individual sense making (micro-level) are combined to a micro-macro connection. The integration of the both theories leads to a deeper understanding on ‘sustainability integration’.

Purpose: The purpose of this thesis is to understand how individuals handle sustainability in a project in a multinational company with has a focus in sustainability. It is of most interest how the influences, represented by the concept of institutional logics, are constructed by the sensemaking of the actors.

Research question: How do employees make sense of a project with a sustainability purpose based on institutional logics?

Method: The research design of this thesis is an exploratory case study with data collection by the hands of semi-structured interviews. Abductive reasoning was applied. An epistemological position of constructivism and interpretivism was taken.

Conclusion: The findings of this study show that organizational pressures are not explicitly noted by each individual. A collective sensemaking is found in the fact that a sustainable project must be affordable for the customers to meet their needs. This finding however, can be traced back to the organizational level which is coined by a strong value culture.

Keywords: Organizational Sensemaking, Institutional Logics, Sustainability, Case Study, Embedded Agency, Organizational Culture, Organizational Pressures, Sustainability Integration
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1 Introduction

[This thesis focuses on the multitude of influences that sustainability projects are exposed to, in particular on the understanding and sensemaking of the individual actors, which form logics under the influence of institutional pressures.

In the background, the trend of sustainability development is targeted, clarifying the responsibility of multinational organizations in taking the lead in sustainability development. Explaining the different kinds of pressures which form institutional logics, the different influences are discussed by the means of competing institutional logics and their result in sense making. By understanding the different logics and the sensemaking of the actors within it, the purpose of this study is to provide insight to how outcomes in sustainable projects can be made foreseeable. However, the study is delimited by the strict time schedule a master thesis is providing.]

1.1 Background

The complexity of sustainability leads to various different understandings of sustainability, first defined by the UN’s Brundtland report, which mentioned the first sustainability development as “development that meets the needs of the present world without compromising the ability of future generations to meet their own needs” (Brundtland et al., 1987).

This initial definition is now over 30 years old. Especially in the last years sustainability is becoming an emerging topic in companies (Cho et al., 2015). Based on these developments and the recurring discussion about sustainable development, the United Nations released the ‘Sustainable Development Goals’ in January 2016 with the aim to have those goals fulfilled by the year 2030. Therewith, a 15 year plan was released, which describes goals concerning climate change, peace and justice, equality or sustainable consumption among others in 17 chapters (United Nations, 2016).

Even though these goals are not measurable, they emphasize the attention regarding the described topics concerning their criticality in their impact on the sustainable development of countries, organizations and other actors. Due to this, it is also formulated that each organ involved in development, should consider being sustainable in the way they are capable to (United Nations, 2016).
Depending on the means a company has and depending on their understanding of sustainability, individual reactions to the Sustainable Development Goals can be observed.

However, literature emphasizes a significant gap between the goals set by organizations and their actual implementation concerning sustainability (Cantor et al., 2013; Nambiar and Chitty, 2014). This roots in the complexity of environmental issues (Bansal et al., 2014) and ambiguities which are created based on the intersection of business and environment (Sharma and Vredenburg, 1998). Further, Simon (1979) highlights that innovations in a company are not only product of its management but also of the individual characters. Therefore, several personalities with their specific knowledge and experience influence the outcome and direction of a project and likewise of the company. The combination of the complexity of environmental issues and the force of individual interpretation based on experiences underlines the potential of this research field.

According to Salazar et al. (2012) sustainability efforts can best be viewed in projects, as their impact can be evaluated in practice. IKEA provides the case for this case study that deals with the transition of their entire lighting range from conventional lighting elements to LED. LED is a lighting technology and stands for ‘Light-Emitting Diode’. Its energy efficient nature is given by the production of brighter light and the usage of less energy compared to other light (Energy Star, 2018). Therefore, the case provided by IKEA can be considered as a sustainability project. Several actors provided insights into this project for the purpose of this research by participating in interviews.

IKEA follows the UNs Sustainable Development Goals, as they released a new sustainability strategy, which guides them in their business development (Inter IKEA Systems B.V., 2018) (more to that topic in the empirical findings). Further, sustainability is established in their ‘democratic design principles’, which are the core values of the multinational home furnishing company and “steers everything [they] do” (“Democratic Design - IKEA,” 2018). Democratic design including sustainability is seen in each of their products, next to Form, Function, Low Price, Quality. By addressing all five dimensions, IKEA wants to be “unique – having a product range our customers and we feel proud of” (“Democratic Design - IKEA,” 2018). By following the concept of ‘democracy’ IKEA wants to impart the “perspective that everyone has the right to a better
everyday life” (“Democratic Design - IKEA,” 2018). According to the democratic design principles actors involved in the development process are responsible for balancing these principles.

1.2 Problem discussion

Organizations are a social environment, where everything is subject to an organizational forcefield, which consists of normative, regulative and cultural-cognitive institutional pressures (Liang et al., 2007).

Normative pressures are prescriptive, coming from professionalism and from the need of establishing of legitimacy for actions. Regulative pressures arise from the establishment of rules which enable organizational access to resources. Cognitive-cultural pressures come from the shared understanding of the social reality. (DiMaggio and Powell, 1983; Scott, 2014; van Dijk et al., 2011). Logics, which influence organizational practices, are built upon these pressures (Gosain, 2004).

‘Logic’ is defined as “the science of the formal principles of reasoning” (Merriam-Webster, 2018). Institutional logics are based on the assumption that institutions are built upon the interrelationships of individuals, organizations and society (or: individuals, groups and organizations) (March and Olsen, 1989). Therewith institutional logics are a result of the interactions of the different ‘communities’, based on interactions and communication. However, each ‘society’ has its own ‘collective identity’ as it is formed by the actors themselves through the common status with other members of this social group (Poletta and Jasper, 2001). Within these social groups conflicting interests can occur. Based on these conflicts, logics occur. Institutional logics theory provides several metatheories which provide explanations for the different understandings of institutional logics.

While the metatheory of embedded agency, which concerns the intentional influence of individuals embedded in organizational context, refers to different, but equal emphasized levels within a ‘society’ (Berger and Luckmann, 1991) in which every level has their partial autonomy in interests, values and assumptions on power, status and economic advantage (Thornton and Ocasio, 2008), Friedland and Alford (1991) define society as an inter-institutional system. They refer to social sectors within the society of an organization which follow their own logics of rationality. These sectors are for instance professions, families and religions among others (Thornton, 2004).
Furthermore, the topic of power and social norms of organizations has been targeted as an influence on the free will on individuals (Jackall, 2010). This approach is exemplary problematized through the conflicting interests of material and cultural factors and how it influences human behavior, since business-related decisions “cannot be traded off as simple economic alternatives” (Thornton and Ocasio, 2008, p. 105).

Several theorists refer to the issue that actors in institutional theory are not treated as individual actors. Calling them passive recipients and “cultural dopes”, Fligstein (2001, p. 110) notes that actors only use given structures, which are already available in the organization to structure their actions. Other scholars are criticized based on their lack of explanation why actors act as they do based on motivations (Jensen et al., 2009).

While institutional theory provides explanations of institutional structures and their influences, the human agency (intentional influences of individuals) and how it influences social practices which create institutions is mostly ignored.

As mentioned earlier, institutional theory delivers the theory to understand the effects and outcomes of institutional pressures (Gosain, 2004). However, a research gap occurs in the question “how [are] social practices […] internalized and reproduced through human action” (Jensen et al., 2009, p.343 from Barley and Tolbert, 1997). Organizational sensemaking complements this research gap by focussing on details of local practice and the human agency, which is informing as well as responding to the institutions (Jensen et al., 2009).

Based on the process theory of sensemaking (Weick, 1995) micro-level processes allow the display of transformation of institutional forces on an individual level. The process approach of sensemaking concentrates on how constructs are influenced by actors, which are organizationally dependent. This insight is given through looking from a subjective and practice-based angle of corresponding actors (Weber and Glynn, 2006). Jensen and Aanestad (2006) emphasize to use sensemaking when the question is how and why organizational actors act in a local context.

Therewith, micro-level actions can be investigated based on human agency, but also in consideration of the macro-level of institutional environment, including constraints, premises and traditions (Jensen et al., 2009). By complementing these two theories, a micro-macro connection is built, as the institutional (macro) level of pressures and logics is considered from a personal view (micro) which enriches the interpretation of
‘sustainability integration’. For the research on integration of sustainability, a project case is used, where the company has a strong emphasis on sustainability. The project in these terms provides a meso platform, where micro and macro levels can be observed and researched. In other words, the project is used as a research platform to observe which and how institutional rules are governing the actors’ actions and how their understanding of those pressures are.

1.3 Purpose

The purpose of this thesis is to describe how a multinational company with a focus on sustainability handles the concept of sustainability within technology development projects in the face of plenteous interacting and competing logics on an exemplary project case for consumer products. This insight is achieved by interviewing people about the LED project in which they have been involved, after the project has been closed successfully. It is of most interest how the logics are constructed by the actors, based on their sensemaking on a personal level as well as on an organizational/group level.

Based on these achievements this study aims to understand sensemaking of involved actors based on their interactions, interplays and interpretations of logics to make future (sustainability) projects foreseeable and to create a basis for understanding sustainability projects. This is achieved by an analysis of how the involved actors talk about and explain the things that happened in the particular LED project. Furthermore, the study aims to contribute to the theory of implementation approach of sustainability in general by showing how sustainability is brought to life in innovative projects/consumer products.

In this thesis, the concept and idea of institutional logics and the theory of organizational theory is used to add understanding to how organizations implement sustainability via projects and products in their organization. It provides an insight how individuals perceive organizational rules and pressures and transform them via their sensemaking with the focus on sustainability.

1.4 Research question

This thesis aims to answer the following research question:

*How do employees make sense of a project with a sustainability purpose based on institutional logics?*
1.5 Delimitation

The study was conducted after the project was completed which can be considered as a restriction. Data can only give insight on the reflections of the actors on their project and will therewith not correspond to the reality of the considered case. However, one might argue that this filter leads to the most essential and significant outcomes. Further, the project case as unit of analysis is a process over time. As this thesis is not monitoring the project as a process in time but from one point of time after the project has been conducted, it faces the challenges of remodelling of the actual nature of the case. Due to that, the project as a meso level where institutional logics and sensemaking are displayed can show findings, which deviate from actual reality. Also, the processual nature of sensemaking over time is difficult to display due to the short time of field time investigation. Thus, the still picture of the process which this thesis displays limits itself. Moreover, as the case of the study is situated in a project of IKEA in Sweden, the occurrence of institutional logics are restricted to the value system of the company and might therefore not be representative for other companies doing sustainability projects. Further, a constraint for conducting this study was the limited time of four and a half months. Due to the limited time, the insights which the study is reflecting are limiting the approach, for example investigating into a broader approach by focussing on one person’s different realities form the knowledge they have concerning the topic of sustainability.

1.6 Outline

Chapter 1 - Introduction: This chapter describes the focus of the thesis, which is focussing on the multitude of influences that sustainability projects are exposed to, on the understanding and sensemaking of the individual actors, which form logics under the influence of institutional pressures. In the background, the trend of sustainable development is targeted, clarifying the responsibility of multinational organizations of taking the lead in sustainable development. Explaining the different kind of pressures which form institutional logics, the different influences are discussed by the means of competing institutional logics and their resultation in sense making. By understanding the different logics and the sensemaking of the actors within it, the purpose of the study is to provide insight how outcomes in sustainability projects can be made foreseeable. However, the study is delimited by the strict time schedule a master thesis is providing.
Chapter 2 – Theoretical Background: This chapter firstly discusses the theory of institutional logics and how it evolved from new institutionalism. Further, several metatheories are described, referring to different understandings of the institutional logic theory. The second part of the theoretical background goes into detail about the organizational sensemaking theory by Weick (2001, 1995, 1979). Next to declaring the process based nature of sensemaking, the concept of enactment in organizational sensemaking is presented by the hands of a model, which displays the relationship between enactment, organizing and organizational sensemaking by Jennings and Greenwood (2003). The last part of the theoretical chapter explains the theoretical combination of institutional logics and sensemaking. It describes how the sensemaking approach of the enactment theory is beneficially used to understand institutional logics.

Chapter 3 – Methodology: This chapter describes how the study was conducted with appropriate methods. Coming from the research purpose and its equivalent philosophical assumption, including epistemology, constructivism and interpretivism the qualitative approach via abductive reasoning is explained. Moreover, the explorative nature of the conducted case study is discussed. After this, it is described how the actual methodology is carried out. Purposive sampling, depending on accessibility leading to the sample size is declared. Further, the data collection through organizational documents and semi-structured interviews is stated. After this, the data analysis method is explained before finally the ethical considerations, which protect the data and the data source, as well as quality criteria are addressed to ensure the validity and reliability of this research.

Chapter 4 – Empirical Findings: The findings from the interviews are presented in this chapter, first describing the case company IKEA and their perspective on sustainability. After that, an overview of the whole LED case is given. The following sub-chapter is already divided in the different logics, expressed through the purpose and argumentation of the individual characters. Based on the occurred ‘frames’ (logics) the statements of the actors are summarized, categorized in sub-logics, which are repeatedly mentioned by the interviewees. By that, three different ‘stories’ of the LED project are told, each emphasizing the one main logic. A fourth logic was further found as a result from the other logics. This logic is summarized by explicit statements under the fourth logic.
Chapter 5 – Discussion: This chapter discusses the pre-structured empirical data which is displayed in the empirical chapter under the occurring logics with the help of the before presented theory. Having the empirical findings as first summary and categorization, the discussion is divided into four parts, each representing one reoccurred logic. These sections allow individual interpretation of the single logics with the help of the before presented theory of institutional logics and organizational sensemaking.

Chapter 6 – Conclusion: This chapter finalizes the thesis by presenting the conclusion extracted from the interpretation of the findings by answering the research question. This is done by first presenting the key findings. Further, research and managerial implications from the findings of this study are made. This is done by addressing the study’s limitations as well as suggestions for further research.
2 Theoretical framework

[In the chapter of the theoretical background it is first discusses the theory of institutional logics and how it evolved from the theory of new institutionalism. Further, several metatheories are described, referring to different understandings of the institutional logic theory. The second part of the theoretical background goes into detail about the organizational sensemaking theory by Weick (e.g. 2001, 1995, 1979). Next to declaring the process based nature of sensemaking, the concept of enactment in organizational sensemaking is presented by the hands of a model, which displays the relationship between enactment, organizing and organizational sensemaking by Jennings and Greenwood (2003). The last part of the theoretical chapter explains the theoretical combination of institutional logics and sensemaking. It describes how the sensemaking approach of Enactment Theory is beneficial used to understand institutional logics.]

2.1 Institutional logics

Institutional logic theory claims that institutional orders follow an organizational logic, which guides its organizational principles and provides the vocabulary for the actors, which are individuals, groups, and organizations. These actors can use the vocabulary for further elaboration, manipulation or using it in their own interest of interpretation. Constraining action with the provided vocabulary, possibilities of change and agency is provided (Friedland and Alford, 1991). Jackall (2010) defines institutional logics as a set of rules, which was experimentally constructed in a particular contexts in a way that their behaviour and perspective is to some extend predictable. Jackall summarizes it as the way a specific social world does work. Thornton and Ocasio (1999) combine the approaches of structural and symbolic (Friedland and Alfrond) and structural and normative (Jackall) into one institutional logic. The integration includes structural (coercive), normative and symbolic (cognitive) dimensions/pressures (Thornton and Ocasio, 2008). A common ground of all definitions of institutional logics is the goal to understand individual and organizational behaviour by investigating in a social and institutional context, which ought to regulate behaviour as well as providing opportunities for agency and change (Thornton and Ocasio, 2008).
2.1.1 Development of institutional logics

Institutional logics build up from the new institutionalism, which evolved through the addition of cognitive-cultural approach from ‘classical institutionalism’, which was defined by Scott (2008). The original form of institutionalism is based on rational actor models from classical economies. Through time, the emphasis of institutional theory evolved into an empirical analysis of how social worlds are shaped by individual actors by action through legitimated rules. Therewith the emphasis was put into legitimacy instead of efficiency for an indicator of success of organizations (Tolbert and Zucker, 1983). Further, the focus of isomorphism evolved to the focus on diffusion in terms of the effects of various institutional logics on individuals and organizations (Thornton and Ocasio, 2008; Greenwood et al., 2008). The recent development in institutional theory is the concentration on different, partly conflicting institutional logics on individuals and organisations (Jensen et al., 2009).

Institutional logics merge institutions and individuals and therewith connect macro-structures (DiMaggio and Powell, 1983) and micro-processes (Zucker, 1977). A multi-level construct is therewith given. This was first mentioned by (Alford and Friedland, 1985) who established the understanding that institutions include organizations and individuals and are a multi-level constructs.

Several researchers (Fligstein, 2001; Powell and DiMaggio, 1991) state the either implicit or explicit role of culture which shapes and interprets individuals and organizational activities. Considering this interrelationship of individuals, organizations and environment, logics and interpenetrating levels of analysis can be understood. Several meta-theories are developed to understand institutional logics.

2.1.2 Metatheories of institutional logics

The complexity of definitions for institutional logics opens up a field of metatheories, which developed over time and emphasize particular elements within the institutional theory (Thornton et al., 2012).

2.1.2.1 Embedded agency

The embedded agency theory concerns the embeddedness of interests, values, identities and assumptions of individuals and organizations in existing institutional logics. Interplays between individual agency and institutional structure vary in dimensions and
outcomes. Formed by the constraint of prevailing institutional logics, the individual and organizational actors are delimited or enabled in their interests and agency in their search for power, status or economic advantage (Giddens, 1984; Sewell, 1992). This assumption declines the rational choice perspective on institutions but relies on personal individualistic interests.

One phenomenon of the embedded agency is the ‘institutional entrepreneur’, which is characterized as competitive to other institutional entrepreneurs in order to own and frame an idea in their own interest and in that way determine how an idea is institutionalized (Thornton and Ocasio, 2008).

Thus, the embedded agency notes the partial autonomy of individuals, organizations, and institutions in society (Thornton and Ocasio, 2008). This assumes that society is built from three levels. The individual level, where the individuals compete and negotiate; the organizational level, where conflicts and coordination are carried out; and the institutional level, where contradiction and interdependency are taking place (Thornton and Ocasio, 1999). The embeddedness of the three levels is necessary to understand society, where “organizations and institutions specify progressively higher levels of constraint and opportunity for individual action” (Thornton and Ocasio, 2008, p. 104). Important is, according to Berger and Luckmann (1991), not to emphasize one level over another. The relationship between the levels are a significant mechanism for organizational and institutional change.

2.1.2.2 Society as an inter-institutional system

Friedland and Alford (1991) define society as an inter-institutional system. They state that to locate behavior in a context it requires an inter-institutional system of societal sectors. In this, each sector represents a different set of expectations concerning social relations and human and organizational behavior. (Thornton and Ocasio, 2008). Key-institutional sectors follow their own specific logic. Thornton (2004) identified six significant sectors: markets, corporations, professions, states, families and religions. Based on the inter-institutional system, it is stated that institutional logics follow multiple sources of rationality (Meyer et al., 1997) and neglects homogeneity and isomorphism. Instead, institutional logics considers any societal sector as potential influencer on any context. The inter-institutional system brings two advantages in institutional analysis. First, the non-deterministic approach; and second the “understanding of the institutional
foundations of categories of knowledge” (Thornton and Ocasio, 2008, p. 104). Key constructs are therewith not neutral but themselves shaped by the logics of the inter-institutional system.

2.1.2.3 The material and cultural foundations of institutions

The material and cultural foundations of institutions assume that every institutional order in society has a material and cultural characteristic. Based on the interplay of the both factors, institutional change and development constructed. Human behavior and organizational culture is noted to be rooted in institutional sectors like families, professions, states and religions. Here, the values and utilities origin, which “cannot be traded off as simple economic alternatives” (Thornton and Ocasio, 2008, p. 105). Thornton (2002) specifies the conflict of material and cultural factors and how it influences human behavior instead of considering rational or irrational motivations. This assumption indicates a ‘cultural turn’. Thereafter, the study of conflict and agency is targeted, which wants to elaborate the economic and political struggles of individual agents and the way they deal with them. Resource competition was proved to have great effects on organizational actions and decisions. Causal sequencing was introduced by Stinchcombe (2002) who points out the necessity of culture to define the meaning of power and competition. As it is now established, this cultural explanations are necessary addings to structural explanations (Thornton and Ocasio, 2008). The composition of culture, which shapes action is specified: The symbolic and normative components of culture. Social norms are considered as highly fundamental for social actors (Jackall, 2010), as their behavior is driven by the logics of appropriateness instead of logic of consequences (March and Olsen, 1989). Neglecting the over-socialized concept on institutions, (focusing on internalization and value commitments) and the under-socialized concept (which focusses on resource dependencies and political interests), institutional theory focusses on the identification as a mechanism, which includes cultural norms and how it effects individuals and organizations. Also, Jackall (2010) and Ocasio (1999) describe the institutional logics approach of norms as drawn from experiences and examples of the institution itself. This implied ambivalence of dominant and subsidiary norms expounds the problems of an adherent view to dominant norms of behavior and emphasizes the identification of subsidiary norms, and where they win over the dominant norms (Thornton and Ocasio, 2008).
2.1.2.4 Institutions at multiple levels

Research across multiple levels of analysis can be made with the institutional logic approach. The referred meta-theory can be used in different levels like organizations, markets, industries, inter-organizational networks, geographic communities or even organizational fields (Kuhn, 2012). A variety of theoretical mechanisms has developed among these which operate in the different levels of analysis instead of theorizing a whole phenomenon. Thus, the identification of effects of mechanisms across levels is neither limiting nor broadening the theory. Accordingly, the level of analysis, which should be analyzed, has to be specified (Friedland and Alford, 1991). Several studies have been conducted with different purposes and results which may lead to the assumption that every logic or interpretative scheme can be analyzed as institutional logic. Thornton and Ocasio (2008) neglect this assumption since institutional logics are not only strategies or logics of actions, but also sources of legitimacy, providing “a sense of order and ontological security” (Thornton and Ocasio, 2008, p. 108).

2.1.2.5 Historical contingency

Historical contingency and its approach is related to the institutional theory which also concentrates on the way how larger environments influence individual and organizational behavior. This influence on importance and development is proved to be dependent on time. (Thornton and Ocasio, 2008). Theories find evidence for different understanding over time or even reveal that some topics are not relevant at all during a period of time. Reasons for this are economic, political, structural and normative forces. The focus in this is to understand whether the theories are consistent over time or if they vary in their problematization in historical time and cultural environments (Thornton, 2004).

2.2 Sensemaking in organizations

Sensemaking originates in the organization studies and is defined as ‘making sense’ (Weick, 1995). ‘Sense’ however, refers to the meaning and ‘making’ to the activity of creating or constructing (Jensen et al., 2009).

Sensemaking concentrates on the connection of cognition and action in organizations, in particular the dealing with unexpected events based on cognitive and social mechanisms.
Sensemaking is described as an ongoing process, and it is triggered by situations, where actors face unexpected situations and no predefined reaction is given. Therewith, sensemaking is not about understanding something right. Moreover, sensemaking is the continuous process of reinterpretation of a story, which gets more reliable and valid under the influences of critics, more data, more incorporation. Though, THE story is never found, but better stories who are formed in the consideration of sensemaking, for the reason of plausibility. Plausibility is reached within a group, different understandings can occur between different groups like managers and employees. (Weick et al., 2005). Summarized, sensemaking is “social, retrospective, grounded on identity, narrative, and enactive” (Sandberg and Tsoukas, 2015, p.36).

2.2.1 Process of sensemaking

In the early stages of sensemaking, the phenomenon first has to be filtered and noticed out of the rich input an actor is exposed to. To transform this then into language based exchange, the actor needs to label and categorize the detected phenomenon (Chia, 2000). A ‘functional deployment’ which refers to finding a common ground in the according language is suggested. This leads to actions of managing, coordinating or distributing (Weick et al., 2005) in the organizational environment. Here, actors are treated equally, while forming cognitive representations which allow the development of recurring behaviours (Tsoukas and Chia, 2002). The representations/categories are socially defined and are therewith underlying a plasticity because they are adaptable to circumstances.

However, labelling is only possible in retrospective (Weick, 2001) after an event has happened, as before no one even might assume what is going to happen. Sensemaking is further connecting the abstract with the concrete (Weick et al., 2005), stating an active approach of it. Actors however, tend to act in the appropriate context based on concrete cues, even the concrete case has not entered yet. An appropriate response is consequently found, still paying attention to the detected cues, which might also lead to more unexpected phenomena (from Paget, 1988 in: Weick et al., 2005). This presumption is therewith ‘error-ridden’ (Weick et al., 2005).

Social factors also influence sensemaking, as earlier discussions around the phenomenon with other actors or even other passive social interaction influence the way an actor thinks about a phenomenon. The sensemaking therewith has not only happened in the head of the people but interacted (Weick et al., 2005).
After understanding what is going on in a situation, sensemaking is coming to the approach how to act upon a phenomenon. Action and talk complement each other in sensemaking and are “treated as a cycle” (Weick et al., 2005, p. 412). Weick et al. (2005) describe that actors act thinkingly, which is conform to simultaneous interpretation based on trusted and known frameworks but also testing new frameworks, as the trusted ones might fail. This refers to the assumption that ignorance and knowledge exist simultaneously, where past is honoured and rejected at the same time. This is based on the fact that people are confronted with evolving disorder, which describes the change, development and shape of truths in one moment through time (Weick et al., 2005). An action, which was exemplary right to its time, can be seen as wrong if it was performed now.

Organizing through communication is another major point of sensemaking: “[...] communication [...] takes place in interactive talk and draws on the resources of language in order to formulate and exchange through talk [via symbols, which represent the circumstances]. As this occurs, a situation is talked into existence and the basis is laid for action to deal with it” (Taylor and Van Every, 2000, p. 58 cited in: Weick et al., 2005). Seeing sensemaking as an activity which talks phenomena into existence, assumes that patterns of organizing are based in the actions and conversations.

2.2.2 Enactment theory

The process of sensemaking and the process of organizing are both founded in the fact, that people tend to make sense of inputs which can have several meanings and their tendency to bring this back to the world to make the world more organized and ordered (Weick et al., 2005).

One explanation for the sensemaking process is displayed in the enactment theory, which is summarized in a model by Jennings and Greenwood (2003) who adapted their model from Weick (1979) who constructed the model to arrange organizing processes.

The model is based on the assumption that sensemaking is a reciprocal, meaningful and preserved exchange between actors and their environment (Campbell, 1965; 1997 in Weick et al., 2005). It suggests that a further sensemaking is then applied when environment and actors simultaneously believe or doubt the preserved content for “future enacting and selecting” (Weick et al., 2005, p. 414). A common ground for the lessons
learned is required to adapt actions and meanings in the system and context. Therewith, sensemaking can vary from group to group like managers and employees.

For this concept, Jennings and Greenwood (2003) adapted a model for ‘The Relationship Among Enactment, Organizing and Sensemaking’, which can be seen in Figure 1. In this model organizing is conceptualized as a “change-enactment-selection-retention” logic (Weick et al., 2005, p. 414), where the results of the retention are put back into the circle to the three processes of change, enactment and selection, combined by the specific activities of sensemaking.

![Figure 1: The Relationship among Enactment, Organizing and Sensemaking (Jennings and Greenwood, 2003 p. 202; adapted from Weick, 1979).](image)

**Ecological Change and Enactment**

The reciprocal linkage between those two parts refer to the ‘ongoing updating’ of one-another. ‘Ecological change’ and ‘enactment’, includes the notice of anomalies and the enactment of orientation of the flux while being shaped by external influences.

**Enactment**

*Enactment* is defined as “noticing and bracketing” (Weick et al., 2005) which is an initial act of categorization. This categorization is still broad and is capable to mean different things. The categorization is initiated by salience compared to their normal work environment/behaviour. As this first enactment is mostly preconscious and instant, a sorting and selection has to be made to guide an appropriate action (Jennings and Greenwood, 2003).
Selection

The broad meaning of the *Enactment* gets reduced by the *Selection* in the organizing process. Into this, the sensemaking actions of retrospective articulation based on mental models leads to a “narrative reduction” (Weick et al., 2005, p. 414), which is resulting in a logical plausible story. The core of selection however, is the enabling of the actor to act appropriate to its received ‘cues’ from the previous steps of the model. Reduction of the information leads to sense making of the actor, who is stimulated by the aim to simplify. In other words, the actor applies heuristic rules in the selection process to reduce equivocality through repetitive circling through the process. A retrospective extraction of clues is applied. (Jennings and Greenwood, 2003).

Retention

The story in this stage of sensemaking is tentative as well as provisional, therewith ‘Retention’ is needed for further adaptation to the organizing process. A more substantial story is told, as it benefits from past experience and important identities. This refers to the ‘Identity plausibility’, which states that actors tend to react in environments the way they understand it. This is reinforced through the personal understanding, which is formed by their own experiences through values, preconceptions or emotions (Jennings and Greenwood, 2003). These experiences influence the outcomes of the occurring patterns and how they are communicated and put back into the circle. Weick (1979) defines that retention is always based on the previous enactment and that the following enactments are built up with a delay of time, based on the next moment of ecological change.

Feedback of identity on selection and enactment

The story itself is then subject to further guidance and interpretation, going back in the circle to ‘Enactment’. From this point, the story gets refined in every loop it takes. These feedback loops can be positively or negatively reinforcing, depending on the previous experience the actor had in the past with the pattern. Trust is reflecting that. If the trust is not big enough, the content and pattern elaboration of the perceived stimulus is being decreased and a new circle of enactment is started. If the experience is trusted, the pattern elaboration is increased. (Jennings and Greenwood, 2003). Sensemaking has already been researched in various ways like for example the introduction of a new technology. Henfridsson (1999) for example presents how
technologies are enacted in organizational contexts by continuous meaning making and actions by individual actors. Orlikowski and Gash (1994) claim that people make sense of technology when they interact with it through development of assumptions, expectations and knowledge. The subsequent actions are then based on this.

2.3 Theoretical combination of institutional logics and organizational sensemaking

Only a few studies in a variety of research disciplines combine the institutional theory and sensemaking theory to study social phenomena (Weick et al., 2005). Meanwhile the new institutional theory mainly focusses on macro-level structures which address the organizational field- and organizational level of analysis, the theory of organizational sensemaking concentrates on micro-level processes (Weber and Glynn, 2006) within organizational-level phenomena (Jensen et al., 2009). Consequently, the combination of the two theories provides a multi-level analysis in organizations. Further, the two theories complement one-another, as each theory has its own power in either macro- or micro-level processes (Weber and Glynn, 2006). As both theories have the same origin and philosophical tradition in social construction (Berger and Luckmann, 1991) they can be categorized as social theories. Further they address related phenomena, and are therewith logically consistent and basically request to be combined (Weber and Glynn, 2006).

Even though institutional logics ascribe partial autonomy to the individual in organizations, this ‘embedded agency’ still lacks of explanation how individuals in organizations understand available logics and transform them (Weber and Glynn, 2006). Through the institutional perspective the context of institutional environment is given. The enactment and how individuals respond to these organizational pressures is however, emphasized in the organizational sensemaking theory.

A combination of institutional theory and sensemaking is complementing each other in their weaknesses in terms of meaning giving of the interplay of action and interpretation at the micro-level of individuals to create guiding for further action and interpretation. The connection of the both theories emphasizes the micro-level processes, basing in the human agency, but also the macro-levels of institutional environment, which is formed
by constraints, premises and traditions. In other words, a micro-macro connection is built, as the institutional level of pressures and logics is considered from an personal view. (Jensen et al., 2009).

As the theories of institutional logics are built up on the cultural-cognitive pillar of institutional logics by Scott (2008), the empirical approach of this study is based on the assumptions, which the cognitive-cultural pillar suggests. The basis of compliance is given by the ‘taken for grantedness’ and ‘shared understanding’ of the actors. Further, the indicators are ‘common beliefs’, ‘shared logics of action’ and ‘isomorphism’. Here however, the embedded agency is considered as well, since isomorphism is partly neglected in the evolved theory of institutional logics and replaced by the different understanding of individuals about conflicting institutional logics (Jensen et al., 2009; Thornton and Ocasio, 2008). Further, it is assumed, that legitimacy is based on the ability of the actors to comprehend, recognize and that legitimacy is cultural supported (Scott, 2008). Moreover, legitimacy is achieved through enactment, as this is defined by Weber (1978) as the belief in the everyday routine. This refers back again to the taken-for grantedness and comprehensibility in the cultural-cognitive pillar (DeJordy and Jones, 2008).

**2.3.1 Frames and bracketing**

At the cognitive level of institutional logics, the societal logics can be categorized in available and accessible schemas, which lead to sensemaking and action (Thornton et al., 2012). These schemas are summarized by Thornton et al. (2012) in theories, frames and narratives, which display various levels of abstractions in the institutional field. These kinds of symbolic construction fulfill different functions in the appearance of ‘field logics’ and can vary in level of abstraction and content (Thornton et al., 2012).

In this thesis the frames are equalized with the enactment theory step of ‘bracketing’, which is the initial step of the categorization of unexpected happenings (Weick et al., 2005).

In Institutional Framing theory, these ‘schemas’, which are activated by the individuals focus of attention, are translated to collective frames by groups and higher levels of analysis. A collection of frames is then combined into social narratives/stories. Frames however, are used to explain a variety of phenomena which leads to the usage of different terms to refer and discuss these frames. The general understanding about frames
is, that it is actively transformed by involved individuals, who construct and apply meaning to their surroundings. (Litzky and MacLean, 2008). Therefore frames are seen as interpretational schemas (Goffman, 1974) which allow individuals location, perception, identification and labelling of events from their own subjective perspective. Thus, within a frame, certain aspects are emphasized from different points of views of the individual actors. Frames are also known as generating cultural resonance which is critical for group identification and mobilization (Thornton et al., 2012). Further, “institutional framing affects the perceptions of those both within and outside of the organization” (Litzky and MacLean, 2008). Due to that, framing is used by organizations to gain legitimacy internally as well as externally. Further, frames support the legitimacy of institutional change (Suddaby and Greenwood, 2005). Frames are generalizable and applicable “across a wide variety of practices and social actors” (Thornton et al., 2012, p. 155) and are therewith seen as general symbolic constructions. Research suggests that an initial framing of an issue causes ethical implication, ethical reasoning and decision making (Litzky and MacLean, 2008).

2.3.2 Projects as meso-level
As stated by Salazar et al. (2012), projects can be considered as a level where the macro level of organizational nature and micro level of individual sensemaking fuse to a realistic and practical approach. Through that, projects can be used to display institutional theory and the perceived logics by the sensemaking by the involved actors.

Further, projects as meso-level provide an environment where it can be distinguished between individual sensemaking and collective sensemaking. An attempt of individual sensemaking is specifically described in the metatheory of institutional logics of embedded agency, which assumes that personal individualistic interests are preferred over the rational choice perspective on institutions. Individual status, power and economic advantage build the basis for this assumption (Giddens, 1984; Sewell, 1992). On the other side, collective sense making can be traced back to the societal context and environment, as a group develops its own understanding of the circumstances it finds themself in (Maitlis, 2005). This points out the processual nature of sensemaking, which relies on ongoing construction and interpretation of the social world (Gephart, Jr., 1993) and which implies social dynamics of sensemaking in organizations. The dynamics are mainly triggered by cues, which lead a group in their meaning making which lies “in an ongoing present in which past experience is projected upon possible futures” (Hernes and
Nevertheless, even individual sensemaking is considered as social, since the embeddedness can never be seen apart from its sociomaterial context which influences thoughts, feelings and behavior in regard of other individuals in the context (Maitlis and Christianson, 2014). A strong organizational identity can, according to Maitlis and Christianson (2014) determine the triggers of new meaning making. Here, actors are lead towards collective practices by the organizational nature, which on the other hand restricts the individual agency and sense making. In an environment where certain practices and beliefs are highly established among individuals, triggering a further sensemaking of a situation is prevented based on collective intense positive emotions. (ibid).

However, individual sensemaking and enactment can be still found in e.g. stories, which “hold different pieces of information [and] are able to collectively construct new meaning” (Maitlis and Christianson, 2014, p. 102 from: Weick et al., 2005). The way a story is told can influence the outcome of collective meaning making. This can be connected to the understanding of ‘sensegiving’, which refers to the individuals attempt to influence the sensemaking of others (Sonenshein, 2010). According to Maitlis and Christianson (2014) it can be distinguished between two attempts of collective meaning making. Sense making within individuals occurs as individuals defend their personal point of view in order to shape other understandings. Sensemaking as unfolding between individuals concerns mutually constructed opinions, as a joint understanding of an issue constitutes its realization. By ecological changes, which represent the triggers for sensemaking, the attention of organizational actors is reached individually, forming predominantly a collective opinion, which leads to recursive cycles of enactment, selection and retention. Accordingly, equivocality is reduced. (Maitlis and Christianson, 2014). Assuming that institutional logics are a set of rules, displaying how an organization thinks, projects give an on-hand environment where those rules and logics can be displayed. The earlier introduced concept of ‘frames’ can be used to trace back the process of sensemaking. Frames however, can be considered as the rules and forces which are noticed by the individuals. Collective similar noticed rules, frames or forces display a collective sense making, whereas single-mentioned rules, frames or forces indicate for a strong individual sense making. Enactment connected or loose from the institutional logics can therewith be traced back to individual or collective sense making. Rules which are connected to a strong organizational identity are commonly highly represented in the interpretation of the individuals’ knowledge.
3 Methodology

[This chapter describes how the study was conducted with the appropriate methods. Coming from the research purpose and its equivalent philosophical assumption including epistemology, constructivism and interpretivism, the qualitative approach via abductive reasoning is explained. Moreover, the explorative nature of the conducted case study is discussed. After this, it is described how the actual methodology is carried out. Purposive sampling, depending on accessibility leading to the sample size is declared. Further, the data collection through organizational documents and semi-structured interviews is stated. After this, the data analysis method is explained before finally the ethical considerations, which protect the data and the data source, and well as quality criteria are addressed to ensure the validity and reliability of this research.]

3.1 Assumption of the study

For the understanding of the research it is important to first display several prerequisites as the researcher’s worldview and the dependent philosophical assumptions. These are supposed to represent the first thoughts during the development of the study and the research question. The philosophical assumptions give an insight in how the research question and the study was shaped (Creswell and Creswell, 2018; 2013). The philosophical assumptions clarify the circumstances under which this study has been conducted and provides the reader the possibility to understand the research in a proper way (Denzin and Lincoln, 2013). As this research aims to understand the different views and interpretations of involved actors in the studied case, the assumptions of human knowledge are of special interest for the studied phenomenon. The epistemological assumptions and the worldview of the researcher are therewith clarified in this chapter.

3.1.1 Epistemological assumptions

Emerging out of the interest of the researcher in sustainability in action and how sustainability is reflected in projects and how and to which extend sustainability is feasible in practical work, the purpose of the study has evolved. Through the provided case by the case company IKEA, which is emphasizing sustainability as one of their core values, an insight can be given into a successfully closed project.
The aim of this research is to study different individual stories of involved actors about one closed sustainability project in regards on influencing factors on sustainability. Since this study was carried out in a retrospective manner (the project has been closed and finished to the date where the study was carried out), its approach is made from cultural-cognitive material, which is based on common beliefs and assumptions which have been taken for granted by involved actors (Scott, 2014). The cognitive material opens an insight on the perception of reality of the several actors, as the understanding for this thesis is clarified under the term of epistemology.

Epistemological assumptions state that in a multidisciplinary field like business environments, several types of knowledges exist and can be considered as legitimate (Denzin and Lincoln, 2013), and also the researcher has its own assumptions about the specific knowledge.

Further, the epistemological assumption concerns the relationship between researcher and participant (Creswell and Creswell, 2007) and the assumptions about knowledge and what legitimates, validates and creates acceptance in and for the knowledge (Denzin and Lincoln, 2013). Thus, the communication of knowledge and the way the researcher is perceiving the knowledge is concerned (Denzin and Lincoln, 2013) and the findings are observer-dependent (Yin, 2014).

3.1.2 Constructivism

This co-creation of the findings by researcher and the participant(s) is described in the constructivist worldview. The constructivist worldview assumes that people build their own understanding of reality (Guba and Lincoln, 2008 in: Denzin and Lincoln, 2013). The reality meanwhile is perceived as the frame of referencing of the one actor (Guba and Lincoln, 1985 in: Denzin and Lincoln, 2013).

As the understanding of the sensemaking of the involved actors is a defined research goal, the study is relying on the individual worldview of each person. This refers to the constructivist worldview, where it is believed that every individual is subjectively forming and understanding its own living and working world. This includes a development of subjective meanings coming from their experiences (Denzin and Lincoln, 2013). As individuals, also the worldviews are complex rather than categorizable (Creswell and Creswell, 2018).
However, the constructivist worldview considers historical and cultural norms of the individuals to understand a phenomenon (Creswell and Creswell, 2018; 2013). Due to that, the context plays an important role in constructivism.

3.1.3 Interpretivism

This study is relying on social actions and constructs, which are defined apart from the natural sciences. Interpretivism defines the distinction between people and natural sciences, which requires a subjective understanding of social interactions (Bryman and Bell, 2015). Saunders et al. (2016) describe that interpretivism is applied if a richer understanding of a social context like in business research is sought.

Due to that, different groups of people allow a different understanding of the researched topic. This ‘interpretation’ however is, according to Saunders et al. (2016), based on the personal, cultural and historical experiences of the actors. Ones intention to make sense of the things that the researcher is getting insight in is affecting the study as well. As this study aims to get an understanding of the different perspectives and stories of the actors in the sustainability project, the study is relying on their interpretation of the specific case.

Moreover, also my interpretation of the interpretations of the actors in the analysis has to be acknowledged. As the research purpose is to get an insight on the weighting and argumentation between different logics, this expectation from the researcher’s side has to be considered as it might influence the direction and outcome of the study.

With that said, the study follows a subjectivist worldview, which is relying on thinking creatures, which make sense of their world. This study is underlying a subjective approach, as the researcher understands its research ‘objects’ as subjects, who create their own understanding of their surrounding based on their thinking. The interactions and interpretations are specific to one person. The understanding and narration of the case is therewith individual but also based on the interactions with the environment, the company itself. This underlines again the approach to study a case in an environment, which is formed by strong values.
3.1.4 Qualitative research

The interest in sustainability in action and how it is coming to life can be ideally researched in social and organizational research. In social and organizational research, the approach can be made qualitative or quantitative. The choice between the two approaches has a major impact on the philosophical considerations (Bryman and Bell, 2011) and is basically made upon the research object and problem (Alvesson and Sköldberg, 2009). As the aim of the study is to rely on existing knowledge about the realization of sustainability in practice, perspectives and actions of the studied persons are approached qualitative, which is, according to Alvesson and Sköldberg (2009) the nature of constructivism. With the aim to contribute to the social sciences with this research, the qualitative approach is the convenient way to get an understanding of human behaviour (Alvesson and Sköldberg, 2009). Further, It is common to use qualitative research in studying organizations, groups and individuals (Ghauri and Grønhaug, 2010).

The experience of the actors which is aimed to uncover the several influences on sustainability in this study, is considered in cognitive cultural terms (Scott, 2014). As a whole project of sustainability is evolving and getting realized over a long period of time, which would outlast the duration of this thesis, this thesis aims to research a project which has already been carried out. This retrospective approach is also reasoned in the fact that only an already realized project can be subject of investigation, since its successfulness is already proven. Further, the intention to study sensemaking with this research, argues a retrospective strategy in data gathering (e. g. Weick, 2001).

However, due to the retrospective, terms of investigation are limited to (cultural-) cognitive rather than the three other pillars of institutions like regulative and normative elements. This cultural - cognitive pillar refers to the shared understanding in a constitutive schema and is indicated by common beliefs and the shared logics of action (Scott, 2014). Since this thesis is relying on the individual assessment and sensemaking, the legitimacy is based in the comprehensibility and recognizability of the several actors. That can only be investigated through existing knowledge and experience.

Further, via the cultural-cognitive element of institutions also the cultural support can be an object of investigation, as it is, according to Scott (2014) also a basis of legitimacy.
3.2 Abductive reasoning

Constructivism rarely starts with theory, but follows a more inductive approach in theory or pattern-building (Creswell and Creswell, 2018). Since induction is using several empirical single cases to assume a connection in order to form general validity and theory, it is perceived as relatively risky (Alvesson and Sköldberg, 2009). The contradicting approach, deductive reasoning, on the other hand applies a general rule to a single case. It is criticized often for its lack of underlying patterns and tendencies (Alvesson and Sköldberg, 2009).

Since this research is done by a case study which is based on both empirical data and a theoretical basis, abductive reasoning is applied. This reasoning has grown in popularity in the last years in business research since it overcomes the limitations of the traditional approaches. Abductive reasoning is often applied to case studies (Alvesson and Sköldberg, 2009) and contains characteristics from induction and deduction, however it is not a mixture of both approaches, as new specific elements are added (Alvesson and Sköldberg, 2009).

In this study, the abductive approach is used, as several empirical single sources are used to provide knowledge around the topic which bases on a pre-understanding of theory. The research process intends to use theory as well as empirical research and is based on an exchange between theory and empirical facts, simultaneously reinterpreted under mutual influence according to the understanding of a research field (Alvesson and Sköldberg, 2009).

The starting point for this thesis comes from a theoretical basis, which is then adapted based on empirical data. In comparison to inductive or deductive research, the abductive approach is considered as a more two-sided and realistic approach, since it follows the actual characteristic of research (Alvesson and Sköldberg, 2009).

In this research, the topic of interest itself is originating from literature. The empirical data however, is giving the direction in the study. Thus, this approach is connected to the research purpose, which intends to learn from organizational knowledge. In institutional theory the abductive approach is itself purposive to creating general validity from organizational knowledge into society.
3.3 Research design

The research design is providing the framework for data collection and analysis. After defining the type of research as explorative, the case study design is presented in detail.

3.3.1 Explorative research design

Exploration is one of the most important approaches when it comes to social sciences (Alvesson and Sköldberg, 2009). In particular in business and management research this type of research is often used (Bryman and Bell, 2015). Exploratory research is appropriate if the research problem is not well understood or when the researcher is uncertain about the results of the study (Bryman and Bell, 2011). A priori information is used to uncover the deeper understanding of the problem (Ghauri and Grønhaug, 2010). As the research for this thesis is concerned about understanding how sustainability is realized in projects, based on the actors’ sensemaking of the involved institutional logics, the different knowledge and understandings of involved people have to be investigated. This can be fulfilled by observing, collecting information as well as constructing an explanation which is theorizing (Ghauri and Grønhaug, 2010). For this thesis, only information collection is applied, as observing is due to its retrospection not possible. The explorative research design is therewith directly connected to the abductive reasoning of the study. Moreover, the explorative research design validates the choice for qualitative research (Bryman and Bell, 2015).

In exploratory design, a broad research question is formulated on the basis of literature which is reviewed and reformulated throughout the research (Bryman and Bell, 2015). Based on the collected data the aim of the study can be redefined and the research can be developed towards it. This refers back to the abductive approach, which this thesis is following.

In this study exploration is used, as the purpose is to investigate happenings or events around the phenomenon of interest (Gray, 2014), which is the understanding and realization of sustainability. As this study intends to get insight on individual and organizational influences and the actors’ sensemaking out of it, the results are highly dependent on the openness of the participants. Therewith the outcoming data is uncertain and the research is conducted explorative. As this study is not developed under structural terms and the results were not certain from the start on, exploratory research was adopted.
Further, the research purpose is to get an insight how the actors in a sustainability project make sense of their work, referring to the logics they describe. Explorative research design is therefore applied, as a pre-classification of the investigated phenomenon in advance to the study leads to implication and unintended reasoning (Litzky and MacLean, 2008).

Investigating a project case upon its influences, coming from personal motivations or from the organizational side predicts uncertainty in the openness of the data sources. As the research intends to understand competing or even rivalling influences from the personal and the organizational side the expected data is to be considered under high uncertainty since not every actor might want to speak about their experiences openly. Results may vary therefore. Accordingly, theory development for the theoretical background is kept to study after data collection. Therewith it can be assured, that the theory is based on the collected data as the empirical findings guide the directions of the study.

3.3.2 Case study

Ghauri and Grønhaug (2010) correlate the exploratory research approach to the approach of the case study. Case studies are appropriate for the investigation of a phenomenon and its context, in this particular case sustainability in real life, since inquiry can reveal why things are happening a certain way and provide understanding of a situation as well as potential implications for action (Saunders et al., 2016). A case study provides opportunity to give insights which integrate theoretical approaches to empirical descriptions. Furthermore, the development of theory is possible with this research method (Saunders et al., 2016), something this thesis aims for. Also Eisenhard (1989 in Ghauri and Grønhaug, 2010, p. 110) underlines the well-suitedness of case studies for new research areas, where existing theory seems not adequate. It remains in contrast to incremental theory.

Case study design is used in thesis research because it is a qualitative research method which allows exploration from real-life events by using multiple sources of information (Creswell and Creswell, 2013; Ghauri and Grønhaug, 2010). Creswell and Creswell (2013) note that the key for defining a case study is the definition of the parameters of place, time and situation. Also Saunders et al. (2016) note the importance of the
determination of the case boundaries which define and enable understanding of the
dynamics and context a case is situated (Saunders et al., 2016). According to Saunders et
al. (2016) context is fundamental for understanding the boundaries of a case. Yin (2014)
notes that defining the context of a case in contrast to the case itself helps to determine
the scope of the data collection.
For this thesis, a case study is carried out since other research designs like experiments
or survey methods are not appropriate due to many variables. Further, the case study is
appropriate as the research question is ‘how’ or ‘why’ based (Yin, 2014). Additionally,
the application of the case study design is reasoned in the fact that case studies are usually
applied in organizations to understand their culture in a single location like
factory/production/office building and is therewith bounded by a situation or system
(Bryman and Bell, 2015, p. 68). A single case can also be an event or another entity beside
an individual such as small groups, communities, decisions, among others (Yin, 2014).

The Case
In this thesis, a case study is provided by the multinational furniture retailer ‘IKEA’. Inter
IKEA Holding E.V. consists of several businesses like Inter IKEA Systems B.V., IKEA
of Sweden AB, IKEA Supply AG or IKEA Industry Holding B.V. (Inter IKEA Systems
B.V., 2016). Due to this complexity and since the origin of the data is not explicable
assignable to one of the trademarks, they are summarized under the term of IKEA in the
further text for reasons of simplicity.
Through the business environment and values the IKEA concern is representing, multiple
projects have been performed in which sustainability plays one big role. Furthermore, the
company has its own sustainability strategy which is used internally as well as for image
purposes.

The company made access to a sustainability project, which was brought successfully
into the market in 2016 and has since then been a flagship for sustainability for this
company. The concerning project is called ‘All in LED’ and resulted in a ban of ordinary
lightbulbs in the stores by January 1st, 2016. Through the company access was given to
several actors, who had been involved in the implementation process of the sustainable
decision, which was made by the management in early 2009. Through their knowledge
and experience with sustainability in general and within the example of the specific case
of LED lights the thesis aims to understand the sense making of the actors concerning
sustainability and how sustainability is understood. As the study aims to understand personal sensemaking within the LED project based on organizational understanding of sustainability in general, actors who are generally responsible for sustainability in the company and who can give insight in this, are also considered in this research.

3.4 Purposive sampling

Even sampling is generally associated with quantitative research, also qualitative research is in need of a sample (Ghauri and Grønhaug, 2010). In the qualitative research the purpose of sampling is to define which persons and how many persons should be included in the study. Instead of having statistical proof for a sample, the sample is defined by the research objects, which are purposive for giving the right insights and are able to provide material, which can lead to theory creation (Ghauri and Grønhaug, 2010). This corresponds to a non-probability form of sampling (Bryman and Bell, 2015).

In this thesis, the purpose is to get insight on the particular case as well as the general organizational environment concerning sustainability. Due to that actors who were included in the LED case and actors who are generally important for the company’s sustainability strategy and implementation are considered as purposive.

3.4.1 Maximum variation sampling

The focus in this thesis is on a maximum variation sampling, whose purpose is to document the diversity of participants or case sites (Miles and Huberman, 1994). The selection criteria for the sites or participants are determined in advance and are supposed to reflect different perspectives on the research problem (Creswell and Creswell, 2013).

In this research maximum variation sampling is applicable since the case itself is living from the various insights. My assumption that a variety of people in different functions in the case also have different interpretations and in a different understanding on the influencing factors supported the approach of the maximum variation sampling. The participants are selected with the goal to represent every business area who was affected by the particular LED case, either as a decision maker or generally involved in
the project. To cover the organizational side for this research, also actors who are generally involved in sustainability issues at IKEA are considered in my research as well.

3.4.2 Accessibility
To get access to participants involves action. In the given study, the contact with the case company is made via a gatekeeper, who works in collaboration with the Master program the thesis is written in. The gatekeeper is connecting me (the researcher) and first contacts of the case company, who are related to the case and purposive for the research study. As it is important to choose the right sample of people in big organizations (Ghauri and Grønhaug, 2010) the gatekeeper provides their accessibility, as most of them are known by the gatekeeper in person. The accessibility is therewith opened and is going beyond the researchers (my) natural reach. However, to avoid bias, only the first sample is suggested by the gatekeeper for this study. Further participants are found during conducting the first interviews by recommendations of the first participants. The principle of sampling in this research is related to a ‘snow-ball-effect’ (Bryman and Bell, 2015) for which I have to choose if the potential data sources are valuable for my work.

3.4.3 Sample size
In every research it is important to define the size of the sample (Ghauri and Grønhaug, 2010). As this study focusses on qualitative understanding of a phenomenon on a special case, the sample size is determined by the quality and detail of data (Creswell and Creswell, 2007). However, people within the sample are selected because of their relevance to the research question (Bryman and Bell, 2015). The sample for this research paper is divided in two groups. The main group consists of people, who share the same participation in the same former sustainability project. The other group are people who are generally concerned with sustainability within IKEA. Ghauri and Grønhaug (2010) suggest determining further interviews depending on the richness of the case and the gained data. However, since the study is following an explorative and abductive style, this is not applicable. Moreover, the sample size was determined by external influences like availability due to other obligations or spring holidays. The fact that the case project was closed in January 2016 and that a long time is lying between this and the date of conducting this thesis also has an effect on the sample
Several important actors were either not working in the company any longer or were working in different assignments and are therefore hard to get in contact with. Yin (2014) proposes to limit the candidates to a maximum of twelve. For this study the sample size was twelve; divided into eight people who were involved in the LED project, and four who were giving insights in sustainability in general.

3.5 Data collection

Two types of data are known in the literature: primary and secondary data. While secondary data is data that has been collected by a third person and collected loose of the research purpose of the own work, primary data is collected by the researcher in the purpose of its own research. It is in the obligation of the researcher to ensure the reliability of the secondary data. Validity to the case must been given and the judgement lies in the responsibility of the researcher. Primary data on the other hand is gathered in a case where the secondary data is not enough to solve research purpose and question. However, collecting primary data is more time consuming than using available secondary data.

For this thesis, both data are used. The first approach to the research problem was made by a brief literature study to get an understanding for the topic of interest. However, the first approach was not made to understand the own research purpose, like Ghauri and Grønhaug (2010) note. In this abductive thesis, recent literature is studied broadly in order to pre-define the area of interest for the study. As the research follows the explorative approach and the abductive reasoning the primary data has the initial effect on the study, which leads to the subsequent study of secondary material that is then able to make sense of the empirically collected material. After the conduction of the primary material, the secondary data, provided by books, research journals, governments, semi-government organizations, among others, helps to make sense of the primary material. Primary data was collected by myself via semi-structured interviews.

3.5.1 Organizational documents

Finding relevant organizational documents as data resources is described as an intensive process as the sources should be related to the study (Bryman and Bell, 2011). Also the appropriate usage of the documents requires a skilled researcher in terms of interpretation (Bryman and Bell, 2011). Glaser and Strauss (2009) state that organizational documents
should be analysed before further data gathering to use the results as a further research focus.

Contrary to the presented literature, I first got access to the used organizational document after my first interviews. However, the one presented source is not used as a basis for further data collection, in this research it is more seen as an additional source for the final analysis. Since the one document is not released to the date of the conduction of the study, it was only possible for me to access and work with it since I signed a non-disclosure form from the company. I could only use the document since it will have been published by the date that this thesis is submitted. The document can be found in Table 1.

<table>
<thead>
<tr>
<th>Organizational Document</th>
<th>Purpose of reference</th>
<th>Published by</th>
<th>Publishing year</th>
</tr>
</thead>
<tbody>
<tr>
<td>People &amp; Planet Positive</td>
<td>Strategy for Sustainability</td>
<td>Inter IKEA Systems B.V.</td>
<td>To be published</td>
</tr>
</tbody>
</table>

*Table 1: Reviewed organizational document*

### 3.5.2 Semi structured interviews

Interviews in general require real time interaction between researcher and the interviewee and are considered as the best data collection method, as a face-to-face exchange approaches best information, opinions and beliefs from another person (Ghauri and Grønhaug, 2010). Also Alvesson and Sköldberg (2009) and Creswell and Creswell (2013) emphasize the importance of the direct contact to the participants via interviews. Being close to the participants also underlines the epistemological approach of this study.

In literature, there are three types of interviews: unstructured, structured and semi-structured interviews. Semi-structured interviews are like unstructured interviews conducted to generate qualitative data. Compared to unstructured interviews, the semi-structured interviews allow the researcher a preparation of the topics and themes he/she would like to cover. A variation of the prepared ‘key-questions’ can vary from interview to interview, as each interview partner has his or her own experiences to share. Also, the order of questions can vary, dependent on the flow of the conversation. Reactive, spontaneous questions can also be included into the conversation flow. (Saunders et al., 2016). Furthermore, semi-structured interviews can minimize bias, as it gives the
opportunity to address bias by for example the way the questions are posed. However, semi-structured interviews combine the best out of the structured interviews, which benefit from a uniformity in the behaviour of the interviewees and the unstructured interviews which approach the interviewee in a more adventurous approach (Ghauri and Grønhaug, 2010).

The semi-structured interview is therefore used in this research, since it follows the explorative approach. Through the semi-structured interview, I aim to get an insight on the various influences that the different actors saw on this project for this study. Moreover, with reference to the constructivist worldview, Creswell and Creswell (2018, 2013) argue that in order to gather the meaning and interpretation of the individuals around the topic of interest, broad and open questions have to be formulated.

*Preparation*

The preparation of the interview can, according to Ghauri and Grønhaug (2010), be divided into three steps. First, the research problem has to be analysed, second, the needed information which is required to answer the research question has to be defined and third, persons which can provide this information have to be determined. According to Ghauri and Grønhaug (2010) the preparation for the interviews is critical since it concentrates on the kind of material the researcher hopes to get from the participants. However, also the identification of the right interview partners according to their background and experience is an important step (Creswell and Creswell, 2013). For a most efficient outcome, it is therefore helpful if the researcher knows the background of its interview partners (Ghauri and Grønhaug, 2010).

In this research I therefore intend to get an insight on the personal details before the interview itself. This is done by the professional online networking platform LinkedIn. However, I have to consider that not every interview partner is available on the platform, nor is the quality of the content of the page standardized. Thus, the gatekeeper of the case company gave access to their position in the case project. Based on these backgrounds of the individuals I hope to gain a better understanding how to interact with them, based on their background which might lead to particular expectations of the participant.

Determining who to talk to helps also in preparing the interviews. According to Ghauri and Grønhaug (2010) it is important for the researcher to prepare an interview guide with
possible interview questions. They also state, that it is necessary to plan a timeline for the conduction of the interviews. According to them, the limitation of an interview is one and a half hour, taking the limited time of the professionals into consideration. Tape recording and note-taking is an often used recording method (Creswell and Creswell, 2013; Ghauri and Grønhaug, 2010).

In this thesis, the research questions were determined in order to get a personal insight from the interview partner on the case-project and their understanding and idea about the different influences that effect the project outcome. As already described earlier in the research purpose it is important to get hold of the stories how the individuals make sense of the happened events. Due to this, the questions are formulated very open to let people talk about their insights freely.

However, through the interest of the thesis in the personal and the organizational side of influences two types of participants are needed. People, who were direct actors in the case project and people, who are generally involved in sustainability issues at the case company. Interviewees from the general organizational sustainability side were only asked the prepared question without purposing the LED project.

A guideline is prepared for the semi-structured interviews to keep track during the interviews. The aim of the guideline is to make sure that the main areas of interest are covered during the interviews. The prepared guideline contains lead questions which aim to be posed in case some participants are not as willing to speak as openly as others. I kept the guideline in my back mind and pose some questions to add some flow to the conversation. Further, the guideline helped me in some follow-up questions which are still open after the conversation. The guideline can be found in the appendix.

A pre-test on the interview question, however, did not take place on participants of the case, since their time is too restricted. Nevertheless, the questions were tested on other researchers, who understand the topic as well, to test the general comprehensibility of the questions. Additionally, a stepwise adjustment of the questions to the case has been made when I perceived it suited better to answer the research question.
**Approaching**

Approaching the interview partners is the next step. In this study, the first sample of interview partners are selected by the gatekeeper, which is given by the case company and who knows the approachable persons.

Further interview partners are elaborated during the interviews with the first sample, as they have the best insight, who might have additional information which they lack.

However, the gatekeeper of the case company approached the relevant persons via email, introducing the research topic as well as me, the researcher. An introduction of the research purpose, which was written by myself with the purpose to arouse interest in the candidates by giving an overview, was sent. Additionally, the time frame for the interview, which was limited to an hour or even less, was introduced, in the hope that this amount of time was appropriate to gather as many voluntary interview partners as possible.

**The interview**

In the beginning of an interview, the researcher has the obligation to inform the participants once more about the research topic. In this research, the interviewee is given the possibility to ask all their questions regarding the circumstances as well as confidentiality. This part of the interview is worth taking enough time for, as it can determine the rest of the interview (Ghauri and Grønhaug, 2010). Generally, the language and terminology which is used during the interviews should be simple and understandable, as the interviewee might otherwise see him-/herself as not appropriate to answer the posed questions. Moreover, I seek to give the interviewees open questions in this study to explore their idea of the happened events and their sensemaking. The story, which the interviewees are narrating, is from great importance for this research. However, I have the intention not to interrupt too easily, as the told stories should not be influenced by the researcher (Ghauri and Grønhaug, 2010).

Following in Table 2, the list of the participants can be found:

<table>
<thead>
<tr>
<th>Interviewee name</th>
<th>Function (in case project)</th>
<th>Date of interview</th>
<th>Duration of interview (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah*</td>
<td>General Sustainability related</td>
<td>20.03.2018</td>
<td>00:35:07</td>
</tr>
<tr>
<td>Jonas*</td>
<td>General sustainability related</td>
<td>23.03.2018</td>
<td>01:26:57</td>
</tr>
<tr>
<td>Tina*</td>
<td>General sustainability related</td>
<td>23.03.2018</td>
<td>01:26:57</td>
</tr>
<tr>
<td>Julia*</td>
<td>General sustainability related</td>
<td>03.04.2018</td>
<td>00:23:30</td>
</tr>
</tbody>
</table>
Table 2: Overview of the interviewees with fictional names

(*for the reasons of anonymity, fictional names are applied)
(**In the case of Hugo, no tape record is available since he did not agree to a vocal record of his interview)

The documentation

Ghauri and Grønhaug (2010) suggest interview documentation by a mixture of note taking and recording. However, due to data security not every participant agreed on recording their interview. Therefore, it is important to take good and valid notes. For ethical reasons, real names are substituted by fictional names. Fictional names instead of other normative descriptions are used for an easier reading flow.

3.6 Analysis method

Creswell (2013) describes the qualitative data analysis as not an implicit step, he rather describes it as a process, which can be done in parallel to the research. He included in the data analysis the organization of data, the coding and organization of the themes and the representation of the data in figures and tables or discussion and interpretation (Creswell, 2013). An interpretative approach of data analysis is also noted by Ghauri and Grønhaug (2010), who note that qualitative research approaches are multiple without a pre-stated classification of the data. A pre-stated classification is also neglected from the institutional logics perspective, which stresses the fact that initial framing of an issue causes implications, that contradict the empirical explorative approach of institutional logics research (Litzky and MacLean, 2008).
During interviews, a big amount of data is collected in forms of transcripts and tape-recordings. For an analysis of interviews in an explorative case study the data analysis involves searching for similarities and differences in the researched case (Ghauri and Grønhaug, 2010). To start with that, data can be divided in its components (Ghauri and Grønhaug, 2010).

Due to Ghauri and Grønhaug (2010), data analysis consists of data reduction, data display and conclusion drawing. While data reduction starts with the selection of the relevant data from the interviews, data display refers to the organized collection and presentation of the data, which allows following analytical activities and conclusion drawing (Ghauri and Grønhaug, 2010). After these steps, Ghauri and Grønhaug (2010) proposes to continue with interpretation.

Categorizing the data includes Ghauris' and Grønhaugs' (2010) data reduction and display and includes, according to Creswell and Creswell (2013), a detailed description of themes which are categorized by the researcher. The description includes the observations of the researcher and is basis for further theme development. Moreover, the goal is to cluster the units of data in the representative outcomes of the study, mainly showing a common or general phenomenon (Ghauri and Grønhaug, 2010).

In order to categorize, naming and labelling can be used (Ghauri and Grønhaug, 2010). Coding of collected qualitative material is an important step to generate theory, as it involves accumulating the sentences and words into categories and searching in diverse databases for a suitable code for the study (Creswell and Creswell, 2013).

For this thesis, I listen to the records of the several interviews repeatedly in order to get an overview over the different topics that are discussed frequently. Miles and Hubermann (1994 in Ghauri and Grønhaug, 2010) describe this as data reduction, which includes the selection, the focus, the simplification, the abstraction and the transformation of data. Based on the data reduction and my understanding of the research topic, categories and patterns can be revealed and the understanding of the phenomenon can emerge. This is a critical point since other interpretations and explanations are most of the time also valid and appropriate (Ghauri and Grønhaug, 2010). During the repetitive inspection of the data, several different overarching as well as more detailed categories occurred. During this process, various versions of patterns were uncovered. However, based on sensemaking theory, I argue that within a given timeframe only a specific degree in understanding of a phenomenon, in particular the case of LED, can be guaranteed.
In this thesis, the labelling of the collected data was not based on a given theory. The patterns which were uncovered are itself representative for this one investigated situation and cannot be found in any theory yet. Due to that, an own approach of data analysis is made.

As the research purpose of this thesis is to understand which logics occur in the sensemaking of actors, the explorative nature of this thesis neglects any type of pre-given structure to put the logics in. In fact Litzky and MacLean (2008) state that a classification in advance of institutional logics avoids the exploratory approach of an empirical institutional logics research.

However, the display of the data for this thesis is based on open coding. Open coding is used in this thesis to break down, examine, compare and conceptualize and categorize the available data (Ghauri and Grønhaug, 2010). Open coding leads to identification (Corbin and Strauss, 2015) and therewith is based on the exploratory nature of this case study. The created concepts out of the process of coding are then used to classify categories, as Ghauri and Grønhaug (2010) suggest.

For this thesis, the open coding was applied when the interviews were finished. Based on the vocal records and the notes from the interviews, I created simplified documents, which displayed the relevant information from each interview speaking for itself. This helped to reduce the amount of data. Based on that reduction I was able to see common points between the individual interviews.

As this thesis aims to understand the logics that the actors make sense of in the LED project, several small logics were found. Based on the argumentation and sensemaking of the individuals, I clustered these sub-logics into the reoccurring main logics.

Using the approach of institutional logics, the concept of institutional framing is applicable, as I aim to symbolically construct schemas in order to display the sensemaking of the LED project. Institutional theory describes the framing process as identification of schemas, which are expressed by the individuals into the collection of these schemas to a higher level of analysis (Litzky and MacLean, 2008). By doing so in this thesis, I aim to interpret how the actors construct and apply meaning to their surroundings, how they make sense of it. Emphasizing the different points of views, I aim to enrich the insights on every sub-logic to the main logic. My applied structure can be found in Table 3. It displays the thematic framework of this thesis, specifically the communicated logics and
sub-logics, which are described in ‘frames’ and their ‘argumentation’. The further arguments behind the ‘sub-logics’ can be found in detail in chapter 4.3.

As the main themes represent the reoccurring patterns in the stories of the interviewees, the themes are defined as ‘logics’ for this thesis. The logics then are reasoned by several argumentations, which represent the noticed rules or forces which appear in the interviewees knowledge around the project.

<table>
<thead>
<tr>
<th>Frames</th>
<th>Argumentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Main Logics)</td>
<td>(Sub-logics)</td>
</tr>
<tr>
<td>Logic 1 - Business</td>
<td>Market and Competitors</td>
</tr>
<tr>
<td></td>
<td>Branding and Marketing</td>
</tr>
<tr>
<td></td>
<td>Being the first ones</td>
</tr>
<tr>
<td>Logic 2 – Development</td>
<td>Individuals with strong ideas</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
</tr>
<tr>
<td></td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td>Circularity</td>
</tr>
<tr>
<td></td>
<td>Longer life</td>
</tr>
<tr>
<td></td>
<td>Health</td>
</tr>
<tr>
<td>Logic 3 - The many people</td>
<td>Affordability</td>
</tr>
<tr>
<td></td>
<td>Change behaviour</td>
</tr>
<tr>
<td></td>
<td>Co-workers</td>
</tr>
<tr>
<td></td>
<td>Nature</td>
</tr>
<tr>
<td>Logic 4 - Simplicity</td>
<td></td>
</tr>
</tbody>
</table>

*Table 3: Thematic framework of this thesis*

Further, the analysis method used the approach of axial coding. Axial coding is the procedure in which data is put back together in new ways after open coding (Ghauri and Grønhaug, 2010). Therefore, it gives conceptual meaning to the pre-categorized data. In this thesis, axial coding is referred to when interpreting the empirical data by the hands of the collected theory. As the data editing is preliminary to the data analysis, a connection
to the theoretical framework has to be considered. For this thesis, the suggested qualitative rigor by Gioia et al. (2013) was applied but not displayed as a first categorization of data led to an overwhelming amount of information. Due to that, the following data structure displays the after the process of seeking similarities and differences.

The connection to the theoretical framework is then made due to its richness and based on the meta-theoretical content of institutional logics. The connections were found based on the interviewees argumentations in the conversation with me the researcher. A detailed description of those can be found in chapter 4.3. As the purpose of this study is to understand individual sensemaking of a sustainability project, the meta theory of Embedded agency is in focus for this thesis. Since the other meta-theories are not completely delimitable to the embedded agency theory, they are minor considered for this research.

Since this study is following an abductive approach a theory development is not applicable. Therefore, the analysed units don’t have to be specified, but only categorized on the logical meaning making of myself, the researcher (Ghauri and Grønhaug, 2010).

3.7 Research ethics

Moral responsibilities of the researcher, which influence the research activities are summarized as research ethics (Ghauri and Grønhaug, 2010). Creswell and Creswell (2013) argue that ethical issues should already be reflect upon in the planning and designing phase of a qualitative study.

Is an organization involved in the research, an agreement about the organization’s rights in terms of providing and protecting information should be made. Also, the researcher’s right of independency by selecting the research area must be clarified to preclude being compelled by the company into areas the company wants to be researched (Saunders et al., 2016). However, for this thesis, a gatekeeper was involved. Is an organizational gatekeeper involved in the research process, a meaningful amount of ethical issues must be considered for the research design and access to the company (Saunders et al., 2016).

In this thesis, a connection between researcher and participants is made by an introduction of a gatekeeper at the case company. Based on the relationship of gatekeeper and participant also the relationship between researcher and participants was started. Further,
the gatekeeper sent out an email in to the participants, introducing the researcher in its own words and its own perception about the study to-be-conducted. This email included a scientific introduction letter, written by myself with the purpose to add a fundament to the study and introduce the scientific background.

However, due to the stated ‘snow-ball-effect’ not every contact can be made through the gatekeeper. Thus, referencing to the gatekeeper in the emails where I approach the interview partner might help getting access to them.

In the data gathering stage the researchers moral responsibility on covering social guidelines for research methods arise (Ghauri and Grønhaug, 2010), since in studies which involve human affairs, the human nature should be protected (Yin, 2014). Sensitivity of the researcher to the research topic is important as well as the consideration that the relationship between researcher and participants has a sensitive impact on the outcome of the study (Ghauri and Grønhaug, 2010). Therefore it is important that the purpose of the study is presented to the participants before the actual inquiry (Creswell and Creswell, 2013). A consent form is a common medium to provide the background information on the study (Yin, 2014) for the participant as well as the respondent’s rights on the study (Creswell and Creswell, 2013). According to Ghauri and Grønhaug (2010) the consent form should include the respondents’ right to freely answer the questions. Moreover, it should be included that no one is forced to answer any questions as well as the right to pull back from the study at all, also after participation until a given time. It should include the information that the data is destroyed after it is used, as well. In the consent form also the obligation of the researcher is stated that he/she is presenting the gathered data objectively, with honest reflection (Ghauri and Grønhaug, 2010) and without siding with someone (Creswell and Creswell, 2018). Furthermore, it should be declared that the data is presented anonymously. Data should be treated like declared in the consent form and been destroyed after it is used for the purpose of the study.

In this thesis the interviews are hold after the introduction and information of the mutual rights including signing the consent forms from both parties, the participant and myself, the researcher.

The consent forms for this research include the above-mentioned points, including the insurance that the data is destroyed after it is used for the purpose of the work. However, against presented theory, which refers to a consent form as a tool to let the participants
talk more freely about their own sight on the things, the consent form had a restricting effect on some of the participants. The consent form made them more aware of the protection of their information sharing. I could observe that some participants were highly paying attention not to say too much.

Next to the presentation of the consent form, time was given to provide the participants to ask questions to get even more familiar with the study and me as the interviewer. Moreover, the interviewee is asked again whether a recording of its interview is okay for him/her.

Also, the company which is providing the case for this study must be insured confidentiality. This thesis is insuring confidentiality of participants as well as unpublished data by the researcher, which follows the rules and obligations given by a signed non-disclosure agreement between myself and the case company.

3.8 Quality criteria

Quality criteria include validity, the degree of generalization of the findings, the reliability degree and further, the study’s replicability (Bryman and Bell, 2015). However, the quality of qualitative data has become a contested area, coming from the field of quantitative research. Thus, alternative criteria to the traditional quantitative quality criteria, have been developed to analyse qualitative research (Denzin and Lincoln, 2017). However, the application of the criteria is depending on the research design and purpose of the study (Creswell and Creswell, 2018; Denzin and Lincoln, 2017).

Since this study collects its data mainly through qualitative interviews, in which individual and subjective opinions and experiences are exchanged, this study is in need for qualitative evaluation criteria. The validity to generalize is critical, as the described case does only represent a piece of the whole reality. The replicability faces the same issues. However, the replicability can be achieved through the methodological procedures. Using the same methodological approach for another case (in another case company) with different interviewees, will lead to a deviation of the results. Accordingly, the approach of Guba and Lincoln (1989) can be used, which evaluates the process and outcomes instead of the used methods (Lincoln et al., 2017) based on their authenticity. This authenticity can be proved by understanding to which extend the
research approach is visible in the study. In this, trustworthiness can be implied, as it introduces the basis on credibility, transferability, dependability, confirmability and reflexivity (Lincoln and Guba, 1985) to the study.

3.8.1 Trustworthiness

Trustworthiness consists, like explained above, of credibility, transferability, dependability, confirmability and reliability (Guba and Lincoln, 1989). In this study however, only the applicable criteria are explained. As Guba and Lincoln (1989) note, dependability can be seen as redundant to reliability in qualitative research. Further, dependability was excluded from this qualitative research, as the study isn’t relying on quantitative data, which needs a consistent measurement. Additionally confirmability is excluded from the quality criteria in this study, as the applied method does not ensure objectivity, but the traceability of the data back to its source (Guba and Lincoln, 1989). The objectivity of the researcher while interacting with the collected data is therewith not questioned.

However, since this study is relying on the subjectivist approach, also the researcher itself is acknowledging its interpretative nature on the gathered data. This piece of information is important to make the reader of this study aware of the personal influences on the study. Next to the subjectivist nature of the study, this study is based on the researchers’ expectations of rival logics and previous contact with the case company.

Credibility

The assurance that a research study is reflecting the studied phenomenon correctly is summarized under the term ‘credibility’ (Denzin and Lincoln, 2017; Lincoln et al., 2017). However, different interpretations of knowledge and realities exist in social contexts. Since this study is relying on the cultural-cognitive data, the sensemaking of the individuals is providing the basis for the study. Due to this, the involvement of the different stakeholders and participants in the study distorts the study’s credibility. The study’s correctness can only be confirmed by those involved individuals (Lincoln, 2001).

Triangulation and persistent observation (Lincoln and Guba, 1985) are methods which are used to achieve a higher credibility. Due to time constrains these mechanisms were not fully applicable in this study. Thus, thick and rich description of the collected data by displaying the different logics from the several actors’ description, is used in this thesis.
to support credibility. An accordingly allocation of direct quotations by the several participants is used to support this credibility.

For me as a researcher it is naturally important to collect and interpret material, which accurately shows/describes the studied reality(ies) in the case. In this study the realities of several stakeholders next to the sources of the data influenced the credibility. Named, these are the examiner and the tutor from the universities’ side, which influenced by questioning the research ability and research purpose throughout the research process. Moreover, the gatekeeper from the case company’s side had a major impact on the credibility, as he/she build up the contact between researcher and company might have influenced the participants with their own reality of the research-to-be-conducted. Also, other students with their personal understanding influenced the researcher (me) itself (myself) in the way the research was carried out and the data was collected.

Transferability
Transferability is an important constraint to take into account in qualitative studies, since they are usually carried out in a specific context, which excludes generalization (Bryman and Bell, 2015). Therefore, the detailed description of the context is essential to enable the reader its own judgement about transferability (Guba and Lincoln, 1989).

For this thesis, the context is described in detail to place the case properly into the case company and to support potential transferability. However, the specific case had only been carried out in an organizational environment, which is highly influenced by their values and by their view on the research area sustainability. Due to this, the used methods in this study are transferable, however the context might have had an impact on the applicability of the applied methods. Because the context is not replicable completely, also the application of the same methods can be questioned. However, also variations of the content might give possibility to applicate the same methods, and transferability can be given. Still, a transferability within the same company on the same purpose with the same methods but on another case might lead to similar conclusions. Here, the goal to understand mechanisms is emphasized instead representing a large population. This also fits into the research objective of institutional theory, which aims to learn from specific mechanisms instead of finding generalizability.
Reflexivity

Reflexivity is the process of critically reflecting on him-/herself as a researcher (Guba and Lincoln, 1989). Reflexivity demands the awareness of the researcher that the study is influenced by his/her own reflections and interpretations. These influences can be derived from the background of culture, social, gender, class and personal politics can influence the outcome (Creswell and Creswell, 2007).

For this research, the researcher confirms the awareness and emphasizes her potential influences on the research and research objects. She intends especially in the data collection phase, which is based on human interaction, to treat this awareness most delicate. I declare that I highly rely not to be influenced by personal preferences or preset assumptions about the research topic or the persons I am interacting with.

3.8.2 Authenticity

Genuine traits are an important part of studies and are described by the concept of authenticity (Bryman and Bell, 2015). In the context of interviews, the participants’ representation of the researched phenomenon should be represented correctly and serve the research purpose. Fairness, ontological and educative authenticity, catalytic and tactical authenticity are used to describe authenticity (Lincoln et al., 2017). However, only the criteria which were applied in this study are described. Since the study’s aim is not to change the participants’ situation through the awareness which this research might arise with its performance, catalytic and tactical authenticity can be excluded in this thesis. The thesis aims to understand the researched phenomenon in the context of the case company.

Fairness

Balanced reflection of the opinions of the different participants and elimination of bias in the highest possible way by listening to all voices to the same extend is described as fairness (Denzin and Lincoln, 2017; Lincoln et al., 2017).

In this thesis, a plenteous of insights are gathered through several interviews, with the purpose to consider every single one equally. The chosen interviewees were picked as they represent a variety of functions within the case company and the case itself. The therewith achieved spectrum of insights can be weighted based on the balanced dispersion. However, bias cannot be determined completely in qualitative research, even though I consider all collected data equally and aim to be not influenced too fast in my
findings. My influence might reason in preformed opinion about the organization based on previous contact with employees. However, I would like to see myself in a neutral point of view as I do not have a specific interest in sustainability which would make me biased.

**Ontological and educative authenticity**

The ontological and educative authenticity emerge from a moral and ethical perspective and are used to rise and measure awareness (Denzin and Lincoln, 2017; Lincoln et al., 2017). While Educational authenticity is described as the awareness of social constructions within the participants and the researcher in the study, ontological authenticity notes the own way of thinking of each stakeholder of the study and its awareness in influencing the very same (Lincoln, 2001). However, this thesis is made available to the public through a research database with the hope to be a basis for a better understanding of the researched topic. I hope to create meaningful contribution for further research in the field. Furthermore, I hope that the case study contributes knowledge to the case company in terms of reflection on their current ‘state of the art’ in handling sustainability topics.
4 Empirical findings

[The findings from the interviews are presented under this chapter, first describing the case company IKEA and their perspective on sustainability. After that, an overview of the whole ‘LED’ case is given. The following sub-chapter is already divided in the different logics, expressed through the purpose and argumentation of the individual characters. Based on the occurred ‘frames’ (logics) the statements of the actors are summarized, categorized in sub-logics, which are repeatedly mentioned by the interviewees. By that, three different ‘stories’ of the LED project are told, each emphasizing one main logic. A fourth logic was further defined, found as a result from the other logics. This logic is summarized by explicit statements under the fourth logic.]

Chapter 4.1 IKEA and Sustainability provides a general overview of the case company and how the company handles sustainability in general. The basis for this overview is the sustainability strategy, which is released in the end of May 2018 (According to the Sustainability Manager of IKEA). Further, the interviews which were hold with the people who were not directly involved in the LED project and had an overview of how sustainability is lived in IKEA, were another referencing level, where this chapter is based on.

Chapter 4.2 is then based on the interviews, which were conducted with the actual actors in the LED project. The chapter introduces the LED case briefly, giving an overview of the reconstructed timeline for the case.

Chapter 4.3 is presenting the main patterns, which reoccurred during the interviews with the actors in the LED case. Three main topics occurred. ‘Business’ and ‘Development’ and ‘The many people’ occurred separable from each other. The overarching ‘The many people’ however, is already mentioned in earlier argumentation for ‘Business’ or ‘Development’ in ‘The many people’. However, ‘The many people’ forms a third main argument, which stands, next to elements from ‘Business’ and ‘Development’, for itself. The fourth argumentation is ‘simplicity’. Simplicity however, provides argumentation for the main topics of ‘Business’, ‘Development’ and ‘The many people.’. ‘Simplicity’ also provides argumentation for the final outcome of the project, which was limiting the whole lighting range into LED technology.
Within the summary of each topic, quotations are collected into smaller sub-logics which reoccurred in the story parts of the actors. For an understandable presentation of these data, the individual logics are presented as a story of LED. By focussing on the perspective and understanding of the according logic.

4.1 IKEA and sustainability

The sustainability strategy People & Planet Positive describes the perspective on sustainability. As for many other companies, the UN’s Sustainable Development goals are inspiration for IKEAs framework of collective action. Business development as well as setting ambitions and engagement with partners is guided by these goals (Inter IKEA Systems, 2018).

IKEA itself wants to make a positive difference by being a positive example for the aimed positive change in society (Inter IKEA Systems B.V., 2018). Jonas notes that IKEA wants to drive the industry with their sustainability agenda: “[We ask ourselves:] what is the change in society that we want to see? “

By committing to the creation of a better everyday life for the many people change is emphasized as a nutrition to good ideas, to reach as many people as possible. The positive impact is aimed within IKEA to generate more than what is used, in order to make a difference beyond the business of IKEA (Inter IKEA Systems B.V., 2018). “It’s not only about changing the product, it is about the implications. Create impact and empower people”, Tina concludes. IKEA defines their main change drivers as ‘healthy & sustainable living’, ‘circular & climate positive’ and ‘fair & equal’ to fulfil their vision to become people and planet positive (Inter IKEA Systems B.V., 2018).

For the case company, the triple bottom line of sustainability is used to explain their specific goals on sustainability, which is summarized in the aim of a balanced economic growth, positive social impact and environmental protection, commonly leading to a “better life for more people” (Inter IKEA Systems B.V., 2018, p. 3). A long-term of thinking is emphasized in order to also meet the needs of future generation. However, making a positive difference is formulated as a responsibility and business opportunity in terms of leading the way forward together with co-workers, customers and partners.
Reaching more people means having a bigger impact on people who enable them to live a better everyday life. However, Tina argues that the “environmental part is the less talked about in sustainability.” A picture of how IKEA understands and lives sustainability is shown in Figure 2.

IKEA states that their inspiration for a sustainable business model lies in their vision to create a ‘better everyday life for the many people’.

IKEA states that their approach to fulfil the IKEA culture and living their values is more important than the actual things that they do: “it is not only what we do, but how we do that matters” (Inter IKEA Systems B.V., 2018, p. 4). However, the four main parts in the IKEA sustainability strategy are living the values, facing bold challenges, co-creating a better world and working long term for positive change (Inter IKEA Systems B.V., 2018) and are explained below:

**Living the values**

Caring for people and planet is one of IKEAs core-values, as the company roots in Småland, Sweden, where the environment does not offer that much and put people in the position to be creative with their limited resources. Waste, thus, has always been considered as “a sin” (Inter IKEA Systems B.V., 2018, p. 4).
Being bold in facing challenges

Ambitious goals cannot be reached by IKEA themselves. Boldness is for IKEA not only about high decisions but also being open and honest about the challenges to be faced. This includes for IKEA being open about difficult decisions which make a positive impact. Also admitting to failures and being open about not having all the answers in included in the success communication, in order to be part of a ‘wider conversation to find new solutions’.

Co-creation

Referencing to sustainability cannot be achieved alone, IKEA emphasizes on partners for their positive change. Creativity and knowledge from various sources can be used to scale ideas and face the challenges in a collaborative way.

Working long term for positive change

The ability to focus on root-causes and not on the symptoms reasons IKEA in their business set-up. This allows IKEA to invest in new technology, innovative materials and clean energy generation. IKEA notes to involve whole value chain in social development.

4.2 The LED case

As this study is a case study, the analysis includes a detailed description of the case itself (Creswell and Creswell, 2013).

In January 2016 the IKEA was the first company which banned all ordinary light sources like incandescent and energy saving light (halogen) bulbs from their stores, only selling LED light sources from that moment on. The journey of this ‘All in LED’ project however, started already in 2005, when it was decided that all ordinary lightbulbs should be substituted starting in 2010.

Due to a rich supplier base in China which the case company had since they cracked the patent around the energy saving fluorescent bulb the case company was able to build up a parallel range beside the traditional incandescent bulb range. Having the fluorescent energy saving bulb in their range positioned the case company “ [...] really in the frontline
of efficiency, low price and also with a much lower mercury level in each bulb compared to competition” explains Oscar.

2005 - The decision was made to substitute ordinary light bulbs by 2010.

2000 - A new technology was developed (on the market), which had its origin as an electrical component for TVs, and other electrics. This LED technology had the potential to be lit up and to be used for lighting. However, this technology in that early stage of development had a “very low light output and the light was rather cold and blueish”, Oscar notes. Despite the technological undevelopment, the idea of developing LED went through the company, rising from the discovery of the development team. Peter claims: “Who came with this idea was basically the technicians. [...] They saw in the market that there is a new type of light and they said they would this be something interesting”.

2006 - First testing products were brought on the market and distributed over the range in seasonal lighting (Anna).

2009 - In autumn the customer interest was tested, Peter remembers. “First we had like a collection test trial: How it [LED] will be perceived on the market”. The Senior Product Developer saw the potential and pitched the project ‘All in LED’ to the management after first experience in the development and calculations for the assumed business case.

2010 - First mass products “came in to the market [...] in October 2010” (Peter). The decision ‘All in LED from 2016 on’ was taken to that time “without knowing how to realize that”. This ambitiousness is, according to Jonas, one of the strengths of the case company.

2012 - IKEA announced to the world that they will switch the total range to LED (Ella, Noah). From this point it took two to three years until the message and realization was driven through all the stores worldwide (Mark).
2014 - The project ‘All in LED’ was fulfilled, already two years earlier than predicted (Oscar). IKEA was then the first retailer in the world which’s light range only consisted from LED technology (Ella).

4.3 The logics

By going through the material, main themes reoccurred throughout the conducted interviews. As described in the analysis method, the main logics were defined based on the reasoning of the participants argumentation. In total four main reasons were mentioned by the interviewees. While three main themes were separable from each other, a fourth theme is used to describe the result and outcome of the project, which is based on the combination of the other three main reasons. In the following sub-chapters, the discovered logics with sub- logics are described: Business, Development, The Many People and Simplicity.

As already mentioned in the analysis method, the main themes represent the reoccurring patterns in the stories of the interviewees. Therewith, the themes are defined as ‘logics’ for this thesis. The logics however, are reasoned by several argumentations, which represent the noticed rules or forces which appear in the interviewees knowledge around the project. In the further reading the reoccurring patterns are described as logics.

As it turns out, the patterns and their specific themes and argumentations in the patterns are linked to the functions of the persons. The different logics are connected to the specific functions the actors had during the project. To provide an overview, the individual actors and their functions are described below. However, to guarantee anonymity, not they specific job title is released but a description of their functions purpose.

Ella – responsible for the communication in the commercial team
Maja – responsible to communicate into the countries all over the world
Noah – responsible for the range transition
Oscar – responsible for the range development
Peter – team leader in development
Mark – responsible for the sales communication in the stores in countries over the world
Anna – fact finding and preparation of the material for the customer
Hugo* – responsible for setting up the network for the LED project

* person did not agree to a tape recording of its interview. Due to that there are no direct quotes by Hugo used in this thesis.

4.3.1 Logic 1 - Business

The project about LED arose from the business point of view. Next to being relevant on the market and competitive, also the logic of branding and marketing reoccurs in the conducted interviews. Further, being the first ones on the market is for several interviewees an important detail, which is elaborated by the interviewees from different angles.

Oscar, who was the main actor in convincing the management of the LED project, remembers that the case was initially important from the business side.

“Until 2008 the case was more considered from the business side, how create a business to be bigger; and from a sustainability point of view: how can we create a message to be more sustainable. Because IKEA used energy saving bulbs as a bit of an icon for driving that agenda” (Oscar).

Anna as well as Noah argue that sustainability is important for their business “it's our future to be able to secure our future business. Because I don't think that we will have a business going forward if we cannot do it sustainably”.

Peter however, argues that IKEA is not having products to have money, but more to gain capital which can be reinvested into the business, to find even more and better products for the customer

“I would say that the first challenge is if you have a new technology to make it affordable for the consumer and for the people. And make them understand why am I supposed to use it. It's not that we are here to make money out of it [Meaning: They don’t buy it because IKEA wants to make money from them]. Of course, we are company […] that makes profit and then we invest the profit in product development in the maybe expansion of the network of the retailer or giving
customer better experience [...] This is what we always do and what we will do”

(Peter)

4.3.1.1 Market and competitors

Several quotes were collected in the interviews, which refer to the market and the competitors. Interviewees describe it in this way:

“There were EU regulations and requirements in the market coming up, [which] actually forces us to be more energy saving. [This peaked in] 2010 [with] the ban of the incandescent light source. It helped creating a solid roadmap forward. Use the ban to create a sustainable stain in a roadmap, convert us into the future, to use momentum and moving forward- not losing business.” (Oscar)

Oscar explains the difficulty with the first versions of LEDs:

“We didn’t actually crack the code to find THE lamp, that could actually solve all the needs that we wanted. To be energy saving, having a nice light from the beginning and a not big and bulky design. The ordinary lamps were not so nice in design giving a light that did not really enhance the environment at home in a good way. We wanted to have a sustainable product, a nice product and a really low price.”

Through observations of the market, the initiative idea of LED arose, explains Peter:

“[the development] started from the light source point of view -not from the lamp point of view. From Philips and other patented products suddenly started popping up products which were showing that you can with less energy consumption emit the similar light that you do with traditional incandescent.”

This observations were “basically made by the technicians” (Peter), who “saw in the market that there is a new type of light and they said: hey, would this be something interesting”.

Peter describes it like this: “The market to that time was regulated by ‘energy efficiency’ [...] markets [...] [were] regulating and pushing the retailers to reduce less and less to consume less and less energy to be more and more efficient. [...] So, the markets regulate if you are using LED. How many hours it must live the life length. And then it as well defines what the energy efficiency must be.”
Oscar states that in parallel “OSRAM and Philips developed halogen technique. [they] tried to get a more energy efficient incandescent bulb. [But] we decided to move forward [for LED] with the key suppliers. [So, we] tried to buy us some time to develop LED to let see now the LED holds in quality and price.”

For Oscar the management made a “Brave decision. [The] first time I presented this at the management group of the lighting in 2009 I presented a graph where we will be full in LED; when we will have our sales top in this. I predicted this will be in 2016. And they made a fool out of me. Actually, it happened in 2014. The whole industry was predicted to be ready in 2020.”

Ella emphasizes the deadline for 2016: “setting a date did really push the organization”.

Oscar remembers:

“The decision itself was based on the business case and how we want to build a range that we could actually achieve. A range by saying “All in LED”. Which was like our project in a 5-year plan we started first to develop some [volume products] with amazingly result [in selling them on the market] so we could actually afford to build the business forward.”

Conquering the market over the competitors, Hugo and Peter describe in a similar way.

“with a volume-based production you reduce the prices dramatically because then you focus and then you increase the thresholds and of course you create volumes and mass production and the channel from the sub-suppliers for the components all the way to the customer.”

Oscar describes the strategy in the following way:

“Every time we added an LED into the range we took out an energy saving bulb or halogen bulb, so the customer only had one choice. Meaning that we simplified the whole buying process at the same time. [...] The range was built bottom up, starting from the lowest price up to the high [price]. This is how ranges are transformed inside IKEA.” Ella considers the stock: “For the new range stock [needs to be built up]. [At] same time and fading out [of] the old stock had to be managed.”

Oscar points out the sustainability aspect: “And I think it’s also being sustainable to being pragmatic and have a really good plan to fade out range and that was being the whole
process”. Also, Ella remembers that “it was not those huge amounts which was trashed away” during the fade out process.

“in the end we are using the same patents for the technologies and it's true that we all go to the same sub supplies because in the end for those electronics there is only limited sources that is producing” Peter notes.

Due to that, smaller competitors got “faded out from the market except Osram and Phillips. [...] none of the other like small companies is existing today. It's an extremely quick and dynamic developing market” Peter continues.

Peter considers that “if you want to continue grow, other technologies from the market have to be faded out [to] be totally independent.”

Hugo knows how IKEA was able to conquer the market: Next to the new production units also new partnerships in purchasing were developed (Hugo). Suppliers had to be convinced to work with IKEA on the new technology, Hugo reports. Trust played an important role, Hugo states. The suppliers had to be convinced that IKEA can drive high volumes. As IKEA was able to convince them, contracts were made, which were able to guarantee a low price. (Hugo).

Mark explains the success in LED by the business strategy of IKEA:

“[...] normally Philips -or other 'cool companies' - come with the new techniques. When we [see that] they have done their things [in development] then we try to make [the product/idea/technology] slightly more simple and [with] lower prices”.

Anna thinks that since IKEA worked with the LED, they made the technique attractive to the many people:

“we're not a technical company. But we were actually [good in] imaging and we did it from that perspective. I think it was one of the successes because LED has been [...] till then -I would say- being one of those 'techie' things. So, if you're not interested in [...] technique then you didn't [get access to] LED.”

Also, the value chain plays a role in the argumentation

“you need to look in the purchasing. are you able to purchase it? Where can you source it? Where are the producers and suppliers? How looks the value chain? And
where do you get raw material? Where you get the components and how you get it to the market? (Peter).

Also, Oscar points out that “Other companies would probably look ‘pure business’” and therewith not consider in investing in an underdeveloped technology, having sustainability in focus. Ella assumes that “with IKEA not being on the stock market we dare to do some investment sometimes” which allows IKEA the “winning in the in the long run [...] instead of seeing instant success for the company”.

In further development of the project the price for the customer was challenged by Ingvar Kamprad in person, who wanted to have a LED bulb for under one Euro. Hugo emphasized this ‘ambitious nature’ pushed the project even further.

4.3.1.2 Branding and marketing

Taking the decision ‘All in LED’ had also its implication on the branding of the company. Different opinions about that occurred in the interviews:

“We believe the first retailer in the world would die to make that announcement and say that we will actually do this” (Ella)

“It was mainly to give the message and give a standpoint that [building up a LED range] is the direction that we will go” (Peter).

Also, Ella points out the “business opportunity” with the “possibility to brand ideas” behind the ‘All in LED’ campaign. Also, Anna argues that “if we would have waited it probably would have been easier. [...] But I don't think we would have played as big role”

Hugo however refuses to argue for the branding, as he points out that this was not made for the story itself but for the DNA of the business.

Mark understands it like this: “[We] decided to go big on this so it makes an impact. so [...] instead of just pushing the old ones away quietly, we went big and say we have decided to be friendly and think about you and your technique”.
However, to promote the LED product (also internally inside the company), design competitions were carried out, where the winner was getting an award, Ella remembers. Beside the LED product itself, the company advertised that for every sold LED light, they donate money to a certain social organization (UNHCR – UN refugee Agency). Ella describes it as a “parallel project”, which happened logically to be combined with the LED approach. However, Ella denies the purposive setting up of the project to promote LED actively.

4.3.1.3 Being the first ones

Anna connects the change of the range into LED to a drift of customers: “perhaps we lost customers I don’t know.” However, nowadays with the full developed range “they don’t really have a reason to go anywhere else” to buy their light modules.

Peter thinks that “in the beginning it’s in the hands of some more or less enthusiasts and freaks that love [the new technology and products].” Also, Mark thinks the success lies in the “early adopters” who saw the potential and were curious.

However, Peter remembers:

“You start in the market and you start to adapt it in the market. So how do you start? -You test, you give it to the consumers. You more or less let them decide [whether they appreciate the product or not]. So, consumers start to be interested in the beginning. As these products are more expensive [in the beginning] it becomes a specialty. So, people that are early adopters, that are generally interested in these new technology things […] have more money […]. It’s not a normal household. It may be the father that is working as a physician or is an IT specialist. And he heard from his friends and colleagues [that] there is a new technology. [He] brings it over home, installs it and then his wife sees that it gives a lot of benefit. So, they are happy as a family and then the word spreads that’s how the things go.”
4.3.2 Logic 2 - Development

Under the logics of ‘development’ the excitement for new ideas is summarized, which reoccurred in different considerations during the interviews. The interest in new technology is mentioned by many interviewees as a driving force throughout the LED project.

The participants of the interviews referred to **individuals with strong ideas** who stand behind the project and supported it to be realized; the **technology** development, the **design** aspect of the product as well as the **production** benefits. Moreover, the **circularity** of the new product by the dismantlability of the product was outlined several times by the interviewees. Also, the **quality** of the product and its benefits for the **health** were often considered in the description of technology. The Longer Life feature of the new product was emphasized frequently in the interviews.

**4.3.2.1 Individuals with strong ideas**

This also needed some strong characters (individuals) with the attention to new technology, who could actually bring the idea further. Oscar himself describes his drive for the project in his personal interest in technology and reasons the forthcoming of the idea in the company working hand in hand with another colleague, who also had the spirit to “change the industry” (Hugo): “We just did it”.

Oscar claims:

“I had the strong belief when we make it good - and we are brave in actually taking away things and focus - we will manage. And we did manage. There is the need to have braveness and need to have some people around you also who [...] believe in you [and the idea]. Oscar highlights the importance of his colleague: “Hugo really really believed in this- he was one of the catalysts for driving this forward. He was a major player in making it happen”.

Hugo as well as Noah think that pitching the idea to the management already in 2009 helped them to strengthen their belief and focus even more, since a deadline on ‘All in LED’ had been set.

Oscar explains his driving for the project as based in technology: “I’m always triggered by new technology and the challenge [and] their possibilities. Sustainability was not my
trigger in this point. If it was a dirty technology I would probably not have been interested in this - because it goes against my believe. [...] But I could see that this could really help us in creating a beautiful light – and atmosphere. And [the technology] helps us creating beautiful things for the many [people]. And I come from the creating point of view.”

4.3.2.2 Technology

Referring to the technology, several statements have been made:

“When you stand in front of a new technique - either you can avoid it and improve the technique you have today. Or you can invest in a new technology to make it more reasonable and attractive. And even see how you can invest to get the price to a level that attracts many more people. We [meaning: Oscar and the development team] believed, [considering] that the energy saving bulb together with the fluorescent technique has been around since 1930/1940, maybe we have come to an end how much we can actually develop.” (Oscar)

“[We had to] decide as a retailer it's no beneficial for [us] any longer to the same efforts in the development of the old aging technologies. Instead we want to put all all the power all the investments [from the old] into the [new] technology” (Peter)

“The choice to develop [the new technology] was rather simple: One of the biggest drivers was that we saw that LED [doesn’t] have any mercury and in production a better automatization with the LED is possible”. (Oscar)

The argumentation for the (new) technology was also based in their energy efficiency. Anna summarizes that in a representative way for the others: “Energy saving is obvious”. A “light source that is consuming only 15% of the incandescent consumption” (Peter) is “energy saving” (Mark). Ella argues that “LED is more sustainable as it saves energy and lasts longer than the traditional bulbs”.

For the technological development, there were “quite a view challenges” (Anna), as “new technology was needed” (Noah). Hugo remembers that the (technological) competence was not in house. Peter summarizes it like this: “in the beginning, if the technology is immature [...] it [has a lot of] child diseases. [...] you must as well identify [...] them
and prevent them so it takes some time.” Anna also points out the risks in developing and adapting to a new technology.

4.3.2.3 Design
The design in the beginning “looked ugly” (Peter) because the new electronics required a heat shield as the light output and the heat generation was proportional in the beginning. “The brighter the light, the bigger the required heat shield”, remembers Peter. Oscar points out the product size: “the smaller products you have the warmer they tend to be.” The shield was required because with the shield it “gives less heat so it’s less dangerous for the households and for like children friendly” (Peter). While the shield had to be big in the beginning, but “then over a period of time it’s getting less and less because as well the electronics are more and more energy efficient” (Peter).

Also, Noah states: “the design was bad in the beginning” and reasons this to the set deadline, which did not allow advanced design. The technology was basically ready just in time. Peter states that “LED was so much driven by this idea of sustainability reducing energy that it overtook even the look of the product because the first LEDS light sources [...] looked ugly”.

Also, Mark notes the “light bulb didn't look so nice in the beginning. It was quite ugly, very plastic and quite big... bigger than the incandescent bulb.” Oscar describes it as “big and bulky, the lamp was not so nice in design and giving a light that did not actually enhance the environment of the home in a good way”.

Throughout the continuing development of the range, the design of the light bulb improved: The LED became more “space efficient so you might create extremely beautiful attractive lighting solutions which are very slim invisible or integrated in the products [and allow] extremely interesting solutions that are attractive for the interior and exterior designers” (Peter).

Whereas in the beginning not all lamp designs were possible to recreate with LED and the bulb-appearance was limited, the recreation of even more interesting light bulbs followed throughout the development process (Maja).

Additionally to the design, the light quality improved throughout the development:

“[A] new light experience [was possible]. So, the development of LED has resulted in a better light quality and enables new lamp designs that was not possible to do it before” (Ella).
4.3.2.4 Quality

The question behind the development of LED was to achieve a better light quality (Ella). Oscar summarizes the goal: “How can we secure that we always get the right quality in terms of the light output.”

The development of the light quality describes Anna: “[We wanted to] secure a good enough quality of the bulb and here it was a lot about the color rendering [...]. I mean when you have a normal incandescent bulb you get one kind of light- you can’t change it much. this is and that’s what we’re used to” and refers to the sunlight, what all lamps are supposed to imitate the most perfect way. Though, it was the aim to not let the customer notice the difference between old incandescent bulbs and the new versions of LED: “when they change they don't see a difference or they think that the difference is okay” (Anna).

Mark formulates the challenge like this:

“In beginning we had struggles with these LED lights. [They] didn't give this cozy light as an old incandescent bulb did. That was our biggest struggle in the beginning now I was one of the one fighting for that as well so that we need to do this LED nice and today we have super high quality on the LED and you can have soft light. [...] you need to start somewhere and then step by step we need to approach it.

Also, Ella points out the better light quality. Since the customer experienced flickering in early LED bulbs or in energy saving bulbs their duration of warming up until the full light output is there, IKEAs aim was to give the customer a “better quality than [...] experienced before”.

4.3.2.5 Production

The switch to LED, contains another advantage. A “first full automatic production line” (Hugo) for light elements was possible with this technology. Also, the production of the energy saving bulb contained heavy manual labour, which wasn’t needed in the production of LED (Hugo). Due to this, production was possible for lover costs (Mark, Noah). The automatization in production led also to a higher efficiency. Mark notes that in the nature of fast changing technology “electrics become out fashioned quite quickly” and that the customers always want new products.
4.3.2.6 Circularity

Another design feature which was discussed by the interviewees highly recurrent is the importance to dismantle the product. Mark emphasizes the importance for less parts when the product wants to be disassembled, and Peter describes it as “to disassemble or enable it to be disassembled these segments into the least tiny parts”.

Also, Peter argues aim is to have “less components […]. It started with 22 and now we are on to seven parts. […] So, it’s evolving but we and the customer don’t see it [from outside of the bulb].”

Several statements were made concerning circularity:

“We have to make sure that it's possible to dismantle it at the end of the life cycle; to separate it so that we keep the sustainability of circularity in the product. […] [There is a need to] find a way how to make this technology separable and totally circular and get back into the loop because it will be trouble with some precious metals. […] we would do it like Pantera [means: Swedish word for bottle-pant system] - it goes [from IKEA] into the companies [which] do separations for mobile phones and computers.” (Peter)

“You can throw away functional light source as well to IKEA but today we offer for at least the broken ones to return it. We can take care of the spare parts and so it doesn't destroy the environment. because they need different treatment. You should not throw it in the normal waste bin. It goes in the electric [waste]. In some countries that cost money to throw away electrics. And instead of paying for throw away you can give it back to IKEA.” (Mark)

4.3.2.7 Longer life

The longer life-cycle is pointed out frequently by the interviewees. Peter notes that a LED lasts “like up to 20/25 years”. The argumentations around the longer life cycle are the following:

“sustainability benefits the fact that it actually lives a bit longer because I mean it is a hassle that you would say that customers would have with bulbs is that you need to change them frequently and you never have one at home the way that you need. So, then you are there and it’s dark and it’s ugly and you need to somehow go
to a store and buy a new bulb. With the LED you have instead of an incandescent bulb you have a lifetime of around thousand hours and for an LED you have twenty-five thousand hours, so I mean you don't need to change it for like twenty years or so. Of course, that is appealing to people.” (Anna)

“If you did [means: needed] ten before and you just do [means: need] one today [based on the duration of their lifetime] that's also different on the shipment. Shipment is a quite huge [factor] of destroying the world. To ship one light source has less impact on the environment than ten.” (Mark)

Based on the longer life cycle, however, the difficulty of the saturated market, as less products will be sold on the long run, is problematized. Peter argues:

“the market will be mature and everybody will have it [means: LED technology] in their homes but we can see that there are adaptation phases. Certain customers, certain markets adapt at a different phases. And then you have different generations. So even within the LED lighting you are evolving as a total - planet or awareness- in this sustainability strategy. And there are still white spots where people are not using it so it's a lots of potentials.”

Also, Anna points out to reach even more customers with a wider range:

“well our goal is of course that with our in total range we don't want to reach the same people. We want to reach new customers and more of the many people. So, if we have then I - wish that would [be] true if everyone only had LED bulbs in the home - that's not the case we know - but if we were to be there then of course our vision would be to reach more and more and more. And that 's where we would have the growth.”

Peter emphasizes once more the customers role in it:

“The life length of this product is far longer so then you drive the sustainability and circularity agenda for all our customers”.

Oscar remembers that the reclamation with the LED technology was also less:

“[We had with LED] 1-5% rejection, whereas the old bulbs had a 50% return rate. This helped us also from sustainability point of view”.
4.3.2.8 Health

When it comes to eye safety, Peter argues, “red LED - that was the first generation that was ... some say it was very dangerous for the eyes. Then it was blue. [...] The first blue [LED] was still too aggressive and saying that it’s dangerous, but we have started to use the blue [LED] that was friendly for the eyes of the customers. Approved by the testing certification laboratories”. We “measure our own products when it comes to eye safety for instance because there are a safety standards” which need to be fulfilled by LEDs.

Peter understands the safety standards as the following:

“technical requirements and descriptions [are important] because [...] every time when you have a new technology it needs to be certain that it doesn't hurt or harm a person it must be human friendly. [...] and that's how it starts. It needs to be proven, it needs to be tested at the laboratories, it needs to get stamps as they are used, and then as well these laboratories [...] need to develop the standards how you can test it. Because it's an electricity thing and you don't want this thing to burn out and and damage your house or any type of building”

Anna points out the eye safety:

“it's very important that you don't get any eye problems from that. [...] of course they're really strict with it. But we have not seen the need of conducting these things [means: studies, which explore the impact of LEDs on eyes] by ourselves.”

Anna notes that despite fact building and fact checking is normally one of IKEAs main parts in product development, in the case of LED it cannot be spoken about that an LED bulb is healthier. “we don't have any facts [...] we want to talk about health and like things to be healthy [...] but when it comes to led we can talk about well-being. [...] but health we don't have any facts.”

Ella also steps back from the term healthy: There was “no really evidence that it would be harmful so that was a challenge then as well them to convey that it's not [...] dangerous to use LED. At that time, we were convinced that the LED is not a harmful technology like this”.

However, from the technicians’ side, LED is still considered as a healthy light source: “If you connect led you get extremely good results and it still have healthy light source” (Peter). Oscar points out that also other technologies lack in long-term studies for health impact like for example electrical radiation or Wi-Fi-waves.
4.3.3 Logic 3 - The many people

The logic of ‘the many people’ occurred already frequently in the argumentations for ‘business’ and ‘development’. However, more specific statements were made during the interviews, which refer independently from the other two logics to the LED project and the many people.

To be relevant to the many people, the participants of the interviews emphasized the affordability of the new product, moreover the argumentation to do something good for the nature is emphasized through the many people. It was also considered frequently, that a change in behavior of the customers is necessary, based on the new product features. Further also the co-workers are considered in the many people logic, as they also need to stand behind their product.

‘The many people’ is a wording, which reoccurs frequently in the argumentation of the interviewees. The many people are described frequently as an umbrella term for customers locally as well as globally and as IKEA, including co-workers, the whole supply chain but also other people, who are not in direct contact of IKEA.

Ella explains that “if we all contribute we can do a big change together”.

Facing the LED project, the ‘the many people’ argumentation reoccurs in many considerations and terms. Since the experience with the early LED technology rose not the best perception in ‘the many people’, the development to higher standards had to be communicated. Ella mentions strengthening “the customer and co-worker perception” and convincing the many people from the benefits of this product. The basis for change of that perception is for Ella a clear thing, since “no compromises are needed for sustainable lighting. LEDs enable a new light experience with better quality and IKEA is actually making it available and affordable for the many people”.

Ella emphasizes the importance of the customer to the product:

“It's only takes the small effort of changing a bulb. But we together, we can make huge savings for the planet” and refers to the impact which ‘the many people’ can achieve together.
4.3.3.1 Affordability

Affordability for the many people is the interviewee’s biggest concern. Since the technology was quite expensive in the beginning, “It was probably not a good alternative for customers to buy LED because of its affordability in comparison to other lighting.” Ella states. To make them understand “the return of investment” (Ella) and the technological advantages, which is consequently “lowering the energy bill” (Ella) must be communicated. People “bought ten bulbs for two Euros and when we started with all in LED you paid more or less eight or nine Euros for one [LED] bulb. […] this one will last twice as long” summarizes Mark. Peter mentions additionally the savings in packaging: “our customers will basically save lots of energy and lots of money as well for them in the packaging”.

However, it is always the goal “to bring the price level down” (Anna) and to “achieve the lowest possible price for the customer” (Peter). Mark also emphasizes that “it always starts with the price for the customer”.

Noah explains that “the customer awaits sustainability always low” and declares that the “customer doesn’t care if it [meaning: the product] is sustainable”.

Thus, to convey the customer to go for the LED solution, meanwhile the price was still high in the beginning, needed some other declaration.

“Since 2016 a LED light is finally available for under one Euro”, notes Oscar and reasons this in the ambitious goals of Ingvar Kamprad, the founder of the company IKEA.

With the product which costs less than 1€, that IKEA provides today in year 2018, Ella points out that it is now “affordable for the many [people] since LED is lowering the energy bill and we are also making it available for the many named by selling LED bulbs to the lowest price on the market.”

4.3.3.2 Change behaviour

The Convincing process of the many people in the beginning to choose the LED bulb before the alternative products, describe several interviewees as a change process:

“[The]challenge for the customer to change that behavior to buy and to make an investment in technology that would last for 20 years […] an investment that was quite expensive at first hand but if you count the energy cost -the energy bill- you can see the benefits” (Ella).

Peter describes the change process belonging to the peoples’ mindsets:
“some people that are used to certain light habits at home and certain lighting solutions lamps and so on. If you try to change, they are reluctant to change so it takes time mostly for the people's mind to to make that journey”.

“it's old habits how we've been using our light source or light bulbs historically”. 
(Mark)

Also, the customers understanding about the new technology/product must be clarified. Especially when it comes to the light output. Maja notes that the customer did not understand the new unit for light output. Anna clams: “switching from talking about wattage [was a main challenge in talking to the many people].” They had to assure “reaching people from thinking wattage wise into thinking [in] lumen”

However, Peter also emphasizes the importance of the early adopters such as technic ‘freaks’ or people themselves who work in the light industry. Mark notes the importance of the younger generation, which is “quite open for changes”.

Putting the first LED bulbs into their range, IKEA tested their appreciation. Peter explains: “you start you test: You give it [meaning: the LED technology] to the consumers [and let them] more or less [… ] decide” if the consumer wants this product.

4.3.3.3 Co-workers

Not only the customers and co-workers locally but also the co-workers globally (and following up the customers globally) had to be convinced, describes Mark. As mentioned above, the “quality message [had to be communicated] because it was not only the customers who have the perception that LED was bad quality, it was also the co-workers” (Ella). When it came to the shift the communication was started internally “we always address our co-workers first”. To educate and change perception, a co-worker engagement campaign as well as a presentation of the people behind the project was planned: “It's always interesting to see what are my colleagues doing” (Ella).

4.3.3.4 Nature

The environmental reasoning in this case is mainly referring to the customer, who is benefiting from it. Mark argues that it is “beneficial for the environment globally and
saves lots of energy’ for the customer.” The customer should see that they “support planet to be much healthier and still contribute something good. [It is a] better product”.

Peters summary of the benefits for the customer in the new product is clear:

“they have a good feeling because they save money and they safe environment. That's the best combination that can happen. [...] I think it's our responsibility and that's how this has been driven”

Anna reasons the project back to the “major issues in the world- electricity consumption” and argues that “we are placed on a planet [...] with limited resources”. Therefore, “Solutions [like LED] must be developed within the limits of the planet”. In particular, because LED is “saving [...] a lot of energy”.

Peter argues sustainability and money on the same level for the customer:

“It is a journey. In the beginning you need to explain it to the customer what is there for them. You need to tell them [that] it's sustainable. Some people they are genuinely interested in sustainability. Other people if you’re not saving money they will never be interested in sustainability. So, on certain markets for certain people you need to drive this hand-in-hand. They need to find savings. Savings in money means savings in nature and energy for them. Some people come from the nature other people come from the money and some people they need to connect both together. And [IKEA] needs to answer both questions. You need to address it through the sustainability because some people will only be interested in that way. They don't care about the price [...]. They can afford it like this, but some people can afford primarily lower prices and that is even more important.” (Peter)

4.3.4 Logic 4 - Simplicity

As the whole research case is about switching the range into LED, the alternative products play a big role in the interviews. The alternative products were mainly referred to in terms of simplicity, as the customer shouldn’t be confused by too many products based on different technology.

In perspective to the many people, the ongoing business and the technological range, decision ‘All in LED’ was made to fade out alternative products to the LED products.
Ella remembers that
“we sold three different techniques same time that was very confusing [for the customer]”. Oscar remembers that “one of the main considerations was “how to get the customer to choose the right light [...] in a very easy way”.

“One [main driver of the project] is meeting the customer” states Oscar:
“having one choice [instead of having] 3 or 4 choices and different technologies to choose between. The customer wants to have something that works. He doesn’t care about if its CFL or LED or whatever, they just want to have a solution for their problem”.

Ella recalls that IKEA wanted to “make the choice as easy as possible for the customer (the introduction of lumen)”

Some more quotes describe the understanding of simplicity:
“Every time we added an LED into the range we took out an energy saving bulb or halogen bulb, so the customer only had one choice. Meaning that we simplified the whole buying process at the same time.” (Oscar)

“People have a less and less energy and time so if you are [too] complicated they will not be with you” (Peter)

Oscar also states that
“the customer doesn’t care about having only one choice”.

“[We needed to] simplify for the customer. Because if they [...] had three types of light sources it was very difficult. [The customer will ask himself] which light sauce am I supposed to use? – [...] Then you give them only one that is covering all their needs” (Peter)

Peter further states that also the retail was simplified through the limiting to only one technology.
5 Discussion

This chapter discusses the pre-structured empirical data which is displayed in the empirical chapter under the occurring logics with the help of the before presented theory. Having the empirical findings as first summary and categorization, the discussion is divided into four parts, each representing one reoccurred logic. These sections allow individual interpretation of the single logics with the help of the before presented theory of institutional logics and organizational sensemaking.

To introduce the discussion, it first has to be reminded, that the collected data originates from a successful implemented project from the past. Due to that, the quality of the data might have been changed, for example based on the time that passed by which led to a wrong display of reality based on cognition of the actors. The findings however, are based on the knowledge the actors constructed around the project of LED, which emphasizes the epistemological approach of this thesis. Not hearing them talk about one topic does mean in sensemaking that they haven’t been considering an issue in their knowledge (Weick, 2001, 1995, 1979). However, due to the passed time between actual project and this thesis, several points might have been simply forgotten. Nevertheless, the argumentation and emphasis of the mentioned points is research subject for this thesis and are for this purpose as taken as their absolute knowledge, as this thesis needs a starting point.

The findings of this case of LED show how actors understand a sustainability project. By the logics and sub-logics for this project the influences, which are noted by the actors, are displayed. In order to answer the research question, these influences (sub-logics) are discussed based on their sense making aspect as a group and as individuals. The institutional logics perspective is taken into account, relating the different levels of sensemaking to organizational, group and personal level (Kuhn, 2012). Further, institutional logic theory is considered by noting which pressures (influences) are taken into account to form the logics of the individual actors or from the collective sense making.
5.1 Sensemaking of logic ‘Business’

To find categories in the logic Business was, in comparison to the other logics, the trickiest one. Different persons had the most different views on the explanations to fulfil the business purpose of the LED project. The frame ‘Business’ is filled with a high variation of phenomena that the actors mention individually in order to reason the business logic.

However,

As there is a high variation in phenomena and reasoning those, I assume that no collective sensemaking has taken place. Most explanations aim to legitimize the own and personal view on this ‘bracket’ of logic. This view is mostly displayed in the sub-logic of Market/Competitors: Whereas one part of the interviewees refers to the market pressures and the EU regulations which pushed IKEA to develop the new technology, others don’t see the market pressure but argue it with IKEA’s culture in sustainability and that the project of LED was used for Branding/Marketing reasons. Further, depending on the circumstances that were given during that period of time, namely the EU regulations, formed the business logic behind LED. The organizational behaviour is integrated in the social system of EU and is reacting on given regulations (Friedland and Alford, 1991). The pressure of normative nature is therewith only noticed by a little number of actors of the group.

Market and competitors

One point however, shows a collective argumentation and indicates that a sensemaking within the group has taken place. This point is referring to that IKEA was able to conquer the business with the new technology. It is pointing out that other companies would have gone ‘pure business’, considering sustainability only on the long run.

Whereas the argumentation of several actors stops here, Oscar continues in explaining that the project was done for the ‘DNA of the business’ instead of marketing reasons. The first versions of LED bulb were however, driven by the aim to be a sustainable product, and therewith the design and light quality lacked. Here, Thorntons (2002) conflict of material and cultural factors emerges, as IKEA culturally seeks to have high quality and nice forms (“Democratic Design - IKEA,” 2018). However, as this factor was neglected at that moment, a first version of ‘sustainable’ and ‘energy saving’ light bulb was developed.
Within the Market/Competitor sub-logic mostly concerns the decision to develop in the new technology LED to be competitive to other big players on the ‘energy efficiency’ regulated market. This is mainly reasoned with the same argumentation that IKEA as able to conquer the market due to its volume-based production which was possible since a network of trusted suppliers was already available. Further, it is believed that the ‘ambitious nature’ of the founder of IKEA to sell the LED bulb for under one Euro, pushed the agenda. This is rooted in the fundament of IKEAs value as well.

Branding and marketing
Generally, is this sub-logic ‘Branding/Marketing’ based on the nature to legitimize the LED project and sustainability strategy of IKEA as this project has been used to show internally as well as externally that this is the way, that IKEA is choosing. Therewith, it was possible to communicate “a sense of order and ontological security” (Thornton and Ocasio, 2008, p. 108).
The arising of the project LED was initiated by the ‘message to be more sustainable’ (Oscar). ‘Message’ as a word might lead to the assumption, that its cognitive symbolic meaning is important in this matter, which is associated with the ‘symbolic and normative’ components of culture in institutional logics (Jackall, 2010; March and Olsen, 1989).
A point which was only mentioned by one actor that was responsible for the communication part of the project, is the ‘parallel project’ of donation of money to a social organization. However, this project was not constructed to support or promote the LED lamp. It is argued that the ‘parallel project’ was already going on and occasionally combined with the LED project.

Being the first ones
Being the first ones is associated with losing customers and business in the beginning, as after the successful establishment of the whole range (to a small price), an increase of customers has entered. However, the initial business success is reasoned to lie in early adopters which are technically interested.
Another argumentation describes the success of the LED technology based on the fact that IKEA, as a ‘non-technical’ company, had the access to ‘normal’ consumers which are looking for products to make their home nicer. It is predominantly believed that IKEA convinced the customer of the new technology by using it not as a technology but as a
home accessories/furniture. It is believed, since IKEA is not a technical company, the cultural and cognitive level the customer was reached was more convincing than a high-tech company could have done.

As the business logic is obviously obligatory for the company for further existence, it comes naturally that most of the employees referred to it in their argumentation. However, their sensemaking behind it varies on a high level, which can indicate that the employees probably know that surviving their business is important but do not have the right information about the existing and realistic pressures that effect on the business itself. It remains unclear if their knowledge around the importance of further business existence derives from organizational-cultural sources or from personal interest. However, the used language in the sensemaking of the individuals matches the language which is spoken inside IKEA and might therefore limit the employees in their further thinking. Through their protectiveness inside of the perceived strong business success no further sensemaking or enactment is triggered which would lead to a more critical thinking of the employees.

5.2 Sensemaking of logic ‘Development’

The logic ‘development’ is the most detailed logic. People, also apart from the function of development-related jobs, were arguing in reoccurring topics around development. A relatively homogeneous picture of the occurring sub-logics is shown. The point of individuals with strong ideas, however, is only mentioned by the persons who were the persons with the strong ideas.

*Individuals with strong ideas*

Their personal interest in new, promising technology and their motivation to use the potential of the technology to change the industry were driving the idea. Both neglect the reason in the purpose to support sustainability with their idea. However, they would have not been engaged with the technology if it was harmful for the environment. Despite first not being taken seriously by the management, the two argue their success in their cooperation. This can be reasoned in the fact that those two actors have been involved in the project initially, meanwhile the other actors were included later, after the
management decision. Through that, a quite ‘intimate’ relationship on basis of this project can have occurred where basic believes have been shared. This form of sub-culture however, had to be argued into the cultural system of IKEA which meant emphasizing the democratic design components to communicate it into the value system of IKEAs co-workers. A legitimization of the attributes of the LED project into the IKEA rules had to be done, which corresponds the ‘selection’ step of the enactment circle (Jennings and Greenwood, 2003). The shared language within the initial project catalysed the evolvement of the idea specifically, the implementation in the IKEA system however, had to be done by translation of these vocabularies (Friedland and Alford, 1991) in the shared set of rules in IKEA.

Based on institutional logic theory the initiators, who saw potential in the new technology and sold it to the management can be seen as ‘institutional entrepreneurs’ (Thornton and Ocasio, 2008), as they negotiated partly autonomy the LED project into the organizational level by using the cultural values to legitimize their idea.

Technology

Technological benefits of the new product were emphasized under similar argumentation among all interviewees. The potential of its development has been high, as the old technologies are argued to ‘come to an end how much we can actually develop’. Further, deciding in one technology to invest instead of several, focuses the technological development in quality. While the argumentation until here is based more or less on the business case, the further argumentation emphasizes the sustainable benefits of the technology. Energy efficiency as well as no mercury in the product (environmental pillar of sustainability) and a better automatization of the production (social pillar of sustainability) are addressed. Further, also the riskiness of engagement in new undeveloped technology is discussed by the participants, as technological competence had to be purchased/acquired and the ‘child diseases’ had to be cured. Time was a limiting factor.

The ‘story’ behind the sub-logic of technology in this group is plausible, as it shows a consistent picture of equal argumentation among the different participants. Therefore it is assumed that the sensemaking process has worked in the complete group is on the same status and no further unexpected events occurred which triggered individuals to question their story of sensemaking (Weick et al., 2005). This also indicates the fact, that the actors
were aware of benefits as well as threats and were able to verbal articulate it (Paget, 1988 in: Weick et al., 2005).

**Design**

Based on the technology, the LED produced high heat, which made a heat shield necessary. Therefore, the first product looked ugly. The appearance did not fit into the democratic design goals of IKEA. Even the old incandescent bulb was described to be more beautiful. However, the ugliness is reasoned in the safeness for the customer, as the heat shield is preventing from injuries.

The pressure of time in that project lead to an overlap of requirements which can be described by the hands of multiple sources of rationality (Meyer et al., 1997)

While the argumentation until here is similar among the different individuals, only one participant can directly formulate the connection to sustainability. Meanwhile the other participants only refer to different categorizations of the design perspective of the product, the one person is constructing a plausible story around it, probably based on his previous experiences within his cultural environment of IKEA. Here, another level of sensemaking can be assumed compared to the rest of the group, as a further reinterpretation, probably based on more incorporation of the organization (Weick et al., 2005).

**Quality**

The sub-logic of quality is described in a homogeneous way among the actors. The argumentation is clear and emphasizes mainly the light experience for the customer.

A main challenge in the development was to improve the light quality. This point confirms the IKEA values in ‘quality’ of the democratic design principles. Further, improving the life for the many people is argued by that customers were not supposed to notice a difference of technology, based on the light output. Only an improvement of light quality was desired. The technology itself was therewith not important but the light. Plausibility is therewith created by reasoning it to the ‘many people’, based on the cultural environment this project is situated in. The sensemaking of the LED project and their sustainability is developed quite high, as their cognitive representations is proven to be articulated by recurring behaviours – similar stories (Tsoukas and Chia, 2002). The categories, which are socially designed are built upon the circumstance of LED as a sustainable product
Production
The sub-logic of production did only occur in those stories of people who have been involved in this point during the project. This is connected to the ‘functional deployment’, which refers to labelling categories in the sensemaking process, which depend on the known things based on the environment of the actors (Chia, 2000).

The automatic production line which is accompanied by lower costs, as manual labour is avoided summarize this point. The additional feature that the automatic production supports is the achievement of higher efficiency.

Circularity
An argument that supports the automatic production is the demount ability of the product is the circularity. Due to that, the product is aimed to be developed with less parts. Achieving this, the argument is brought up that the customer does not see the technological components from the outside.

However, the circularity and possibility to dismantle the whole product is further argued with being able to have a closed loop in the product life of the LED light element. One participant refers to a future development of a pant-system and reasons it in referring to precious and ending resources and metals.

Another participant notes that a system like this is already available from IKEA for broken light elements. Companies, who are specialized in dismantling technical products into their raw materials are business partners for this.

The circularity sub-logic is, connected to the organizational theory, mostly connected to the actual transition of IKEA to become circular. The individuals therewith probably only talk about this topic, as it is relevant right now. To that time when LED was introduced, circularity was probably not yet that developed in the actor’s mindsets.

Longer Life
The longer life-cycle of the LED product is for all participants an obvious argument for the LED technology. However, the arguments why the longer life is beneficial, are quite heterogenous. It is argued that it provides convenience for the customer, as a bulb usually needs to be changed only every 20 years.

While this explanation of the Longer Life sub-logic is homogenous, which means that a ‘common lessons learned’ (Jennings and Greenwood, 2003) in this group of actors was
made. However, the further explanation on the impact of the longer life of the new product is explained on a high variation and is based on individual perspectives.

One actor connected the long-lasting ability of LEDs to a decreased reclamation rate. He argues further from the decreased impact on the sustainability. Further, one participant notes the impact on the shipment, which, for him, means having a less environmental footprint on a global level.

Also, the saturation of the market is considered, based on the longer life cycle of the technology. One participant is referring to the different adaptation phases of customers and markets, and the evolving LED range, which is meeting the consumers with new products. Another person is explaining that the same products are not meant to reach the same people. Due to individual requirement on the product, the range as a total is supposed to find every customer in its specific need. Here, the argumentation is put again into the growth in the business.

In this sub-logic two main categories of considerations are noticed: The impact of the positive sustainability affects and the impact of reaching the customer as well as having an ongoing business. The attention of the actors was focussed on different details of the story.

Health

A highly discussed topic of the development logic is the point of health, as the first versions of LEDs were not good for the eye. Meanwhile some actors argue that the products are tested based on eye-safety standards or on inflammability risk standards that were developed by overarching external organizations, own conduction of a study concerning the impact of LED to eyes in general is not made by IKEA.

Due to that, one person argues that in connection to LED it can only be talked about ‘well-being’, as no facts about the impact on health is proven. Meanwhile this wording lies probably in laws and regulations, from an own study of health impact IKEA is setting themselves apart. An argumentation which is given is that also other technologies in other companies are not tested concerning their long-time implications on human health. This refers on the institutional level back to the organizational-field which is legitimizing the non-actions of IKEA.

Moreover, a distinction between actors can be made, who thought about the application of heuristic rules, mainly provided by external organizations/companies (Jennings and Greenwood, 2003). The other actors were further in their application of the sensemaking
process, as they reflected upon the conduction of own studies of tolerance of the human body. Nevertheless, they trust the experience of others (the competitors and organizational-field) and therewith don’t see the reason to conduct studies on the long-time tolerance of the LED light on the human being. This positive type of reinforcement is seen in the enactment theory in the point of selection of enactment (Jennings and Greenwood, 2003).

The normative pressure of external organizations/rules however applied in this case, however from two opposing sides. Whereas safety standards are proved to be fulfilled by IKEA, legitimization not doing own safety studies on the long-time impact on human health is neglected, based on the argument, that other companies do it either, further referring to other technologies, where a long-time implication is also not studied/proven. This clash of competing rationalities seems to be solved by the organizational level, as it is considered as highly difficult to evaluate. However, due to its discrepancy to the cultural values IKEA is representing, an extended form of human agency is assumed.

Arising from the nature of a new technology and the desire to be further existent on the market, the consequential development logic is communicated by the participants. Meanwhile the outer pressure of the need to develop the technology is mostly not recognized, the development logic concerns mostly the internal understanding and challenges during the process of development. However, the arguments concerning the new development are mostly referring to the purpose of meeting the needs of the customer and are only secondary associated by its technological advantages concerning sustainability. This leads to the assumption in this thesis that the strong organizational identity which refers to ‘the many people’ is blinding from actual facts. The forces and pressures, which are communicated are therewith mostly related to the organizational language.

5.3 Sensemaking of logic ‘The many people’

As seen in the discussion of the logics ‘Business’ and ‘Development’, the many people (or the customer) are already emphasized in the sub-logics. However, also statements of the actors are found in the collected data which directly refer to ‘The many people’ and are more obvious in their wording. ‘The many people’ is the main category for the values
of IKEA (“Democratic Design - IKEA,” 2018; Inter IKEA Systems B.V., 2018). Therewith, all argumentations which are made under this logic are assumed to refer to the cultural background of the company, which shapes individual activity (Powell and DiMaggio, 1991). Mainly, the logic of the many people and LED as an example of sustainability is connected to the impact that all the people can have together.

Since the LED bulb did not have a good start, based on the bad light quality, eye-safety problematics and an ugly design, IKEA had the challenge to overcome prejudices and be convinced in buying LEDs instead of the other bulbs. However, the conviction of the customer is understood by two different approaches. The first approach is discussed marginal, actively emphasizing the quality of the product, based on its light experience. The other argumentation concerns the low price of the product which convinces the customer to buy it. Meanwhile only two arguments were found representing this point of view, the affordability for the customer is multiple discussed and emphasized.

**Affordability**

As mentioned, the emphasis of the conviction of the customer is described as lying in the affordability. In the beginning, when the LED bulb was not as expensive as it is now and was significantly more expensive than the other technology options, the argumentation is brought up that the customer has to understand the return of investment. Therefore, the consumer has to understand that his/her investment is lowering his/her energy bill on the long term. It is further argued that the saving of energy leads to a saving of money. The saving of energy however, is not emphasized specifically, it is more mentioned as the means to save money.

Bringing the price level down was therewith the main action during the development process of the LED. The consumer is seen as someone who is always longing for the low-priced version. This can be interpreted as again bounded to the cultural legitimacy of the organization IKEA. Moreover, one statement is made, that IKEA knows (based on consumer data- as one participant notes) that the expectation of the consumer in sustainability is always low, therewith the argumentation of a ‘sustainable supply chain’ or a ‘sustainable closing the loop’ disposal is not important to them. As this statement is quite bold, I assume that either the other participants did not want to mention it during the interviews, or the other participants are not privy in that fact. However, this argument
reasons the fact this the low-price policy which is operated as the consumer is assumed to not care about the arguments which make him save the world and the environment.

Change behaviour
The challenge to convince the customer to buy the new technology beside the other old technologies, is frequently mentioned as a change process of their behaviour and connected partly with educating the many people. Arguments which are stated are the change in the purchase behaviour, as the customer had to buy a bunch of bulbs at one time before, meanwhile now the longer life-time with the LED bulb required the customer only to buy one bulb which then lasts 20 years. Further, also the peoples’ mindset has to change, which is argued in the peoples’ light habits that people prefer certain lights over others. Moreover, the new unit of light output from wattage to lumen had to be translated and taught to the customer in order to make him/her understand what product he/she actually needed.
In the beginning of the introduction of LED it is argued, that mainly the younger generation and the technic freaks were the ones who adapted their behaviour the fastest. Due to these early adopters the product has been a success in the beginning.

Co-workers
Co-workers are seen as one part of the many people within IKEA. Nevertheless, they were mentioned specifically during the interviews. Also, they had to be communicated the quality message. They were addressed before the external ‘the many people’ were made familiar with the new technology, as this is a communication policy, that is applied within IKEA. In addition to the external communication for the many people, a co-worker engagement campaign was carried out to inform and educate the co-workers about the benefits of the product.
This indicates that the co-worker is seen as a first ‘testing group’ for the communication into the world outside, as he represents consumers as well as organizational roots and level of analysis are mixed (Friedland and Alford, 1991) as this indicates a crossing of institutional levels (Kuhn, 2012).

Nature
The nature as argument is always brought up in connection to the many people. Even though an argumentation is started by ‘beneficial for the environment’ or ‘supporting the
planet’ the reasoning is made by the customer, who should have a good feeling by buying the product. Also, the world electricity consumption is, in a more abstract way, related to the purpose of the many people and not by for example ‘using less energy leading to less production of nuclear energy’.

However, one participant describes it as meeting the customers is the most important thing. While some people want a sustainable product, others want a product for low price and others want sustainability with a small price. Through providing a product that supports sustainability AND affordability, basically all customer needs are fulfilled.

As already mentioned in the description of the two previous logics ‘the many people’ is the prevailing argumentation for the project LED. Both ‘business’ and ‘development’ are mostly reasoned in ‘the many people’. Repetitive to what was already said before, the many people are a result of the strong organizational identity. The reasonings behind the logic are various, still formulated by the participants in the language of the organization. The allocation of individual sensemaking, which hasn’t been transformed into collective sensemaking is therewith difficult. Based on the strong organizational identity it is assumed in this thesis, that potential criticism on the existing organizational identity is not even mentioned by the individuals. Potential for improvement, deriving from a further sense making by individuals, is therewith oppressed by the organizational nature. Personal interests of power in the company, like keeping one’s job and image, are reasons for individuals not to speak up and remain in the companies’ language and mindset by expressing their insight of project issues.

5.4 Sensemaking of logic ‘Simplicity’

The three logics Business, Development and The many people are the argumentation for the actual decision to go 100% LED. Therewith, the logic ‘simplicity’ can be more seen as a solution, which simplified in terms of an avoidance of arguing for the technology.

Only they go for sustainability, does not have to mean that they are losing business. All troubles of ‘ugly design’ and little light quality as well as technical difficulties and losing customers we able to be overcome due to the high pressure of time. IKEA therewith had the privilege to cut out the alternative products and to limit the range to the LED
technology. This was mainly possible, since a whole range was already available during that time.

The argumentations are supposed to justify IKEA action to ‘simplify’ the decision for the customer to go with the LED product. There are several argumentations that the actors stated who address the logic of Simplicity directly.

The argumentation is built, that the decision for the customer was confusing or difficult and that consumers have less and less energy and time in their purchasing process and want an easy solution, a solution that works. Further, it is argued, that the consumer does not care about the technology. However, it is argued to ‘get the customer to choose the right light’. Further the bold statement is made that the customer does not care about only having one choice.

As referred to in the beginning of this thesis, the LED case is from a processual nature. Through the given circumstances only a retrospective insight during one moment in time after the closed project is closed successfully could be made. The process nature of the project could therewith not be displayed completely. However, the argumentation of ‘simplicity’ as a consequential reaction to take benefits from business, development and the many people is rudimental displaying the process nature of the LED project case. Therewith one could argue that ‘simplicity’ is the main goal of the case of LED as it finds its justification in each previously described logic. However, simplicity leaves the external power relations unnoticed. An internal convention of speech could be the reason for this, also emerging from the specific purpose of the specific project of LED. However, simplicity could be transformed for other IKEA projects as well, as for example the Scandinavian design which they sell, is based on this concept. Also, the company’s heritage in the Småland region of Sweden is related to that concept and shows a bridge between the employees’ language and the strong organizational values of IKEA.

5.5 Discussion LED

The implementation of the LED technology as a consumer product relies on both institutional logics and sensemaking theories. Institutional theory provides evidence for the institutional pressures, which form the logics and has its focus on the macro-level. Sensemaking theory however explains the micro-level processes, and how the actors
within the LED project notice and react upon the pressures. Sensemaking can be seen in this case collective on the organizational/group level and further on the individual level. The project LED is therewith seen as a meso level, where macro and micro level are integrated. The project provides the platform to display the two theories of institutional logics and sense making on a realistic basis.

**Process of sensemaking**
This study shows that sensemaking did not only apply individually, but also on the project group and organizational level. There are different influences which reoccurred on the group level, others only appeared in their individual sense making. Some however, can also be traced back to the organizational level. It is noticed that the actors through their continuous engagement with the LED project make sense of it depending on their professional identity (Weick et al., 2005).

For the provided case of LED institutional theory offers strong explanations for the organizational field level, providing constructs of isomorphism which are based on regimentations and safety standards. The coercive pressure is introduced by the implementation of LED, and even more stressed through the aim ‘All in LED from 2016’. Moreover, the normative pressure of the changing market into ‘energy efficiency’ adds pressure and creates legitimacy for the company and the co-workers. Those pressures, thus, are not noticed by all actors in the same significance. Evidence here for provides the discussion around the starting of the project, which some actors describe as coercive and normative pressure, like mentioned above; others however explain it by referring to the construction of legitimatization based on the cognitive-cultural pressure to please the customer and to build up a sustainability image.

Institutional logic and organizational sensemaking theory however, provide explanation for the organizational/group level. At this level, sensemaking only provides little explanation, as the homogeneity of arguments in the logics are based on the common belief in the organizational culture. However, the data provides evidence for a collective and ongoing sensemaking process. The collective sensemaking is based on cognitive (cultural) pressure (Thornton and Ocasio, 2008). As the LED supports the cultural values of sustainability, the technology has an easy job to introduced into IKEA as a development project. When the LED project
was then decided by the management to be introduced completely, the cognitive pressure formed the reciprocal way the LED was communicated within IKEA, and further also outside of IKEA to the customers. The legitimization of the LED technology was therewith only possible, as its attributes were representing the IKEA values of democratic design. With that said, the ‘technology innovation’ of the LED bulb can be seen as the carrier of the inscribed institutional logics (Gosain, 2004).

The individual level provides strong prove for work-title related sensemaking, for example provides the person who is responsible for the build-up of the network arguments that the strong relationship to suppliers helped IKEA in succeeding in low-cost products. Another explanation is the reference to the ‘parallel project’ which is only mentioned by the persons who were involved in communication of the project. Further, also the less shipment where the LED is resulting in is only mentioned by the person who is responsible for the sales and distribution over the world.

While institutional logics and institutional theory consider actors as passive recipients of the organizational framework (Thornton and Ocasio, 2008), this study indicates a higher agency in the case of LED. Although those individuals, who saw potential in the idea and communicated it to the management acted in a frame where they followed the democratic design principles, they were able to actively enact/form the course and the outcome of the LED project. Whereas they saw the potential, they were able to construct the story around the LED technology, which the organizational management level and the organizational co-worker level took as a basis to interpret and create meaning for the LED in their work practice. The concept of LED and how it is made sense of to legitimize has been established by that. Based on this pre-establishment of LED, which then also fit in the cultural values of IKEA, the decision to go all in LED made its way back into the co-workers.

Further enactment is also seen in the other co-workers, retrospectively expressed by their ‘bracketing’, which is summarized in the empirical data of the presentation of the single logics and discussion. Several explanations where an organizational explanation was not given, implies a further individual sense making. This is noticed in the data when a further explanation on an issue is made. It is then noticed, that another loop of enactment-selection-retention circle (Weick et al., 2005) has been made. However, the explanations still fit to the organizational values. This is also valid for equivocal natures of the
formulated sub-logics, which leads to different arguments in sensemaking of the individual actors (Jennings and Greenwood, 2003).

The occurring logics in the LED case

In the sensemaking of the actors of the sustainability project ‘All in LED’, four main logics occurred. While an overview and a detailed description of the logics can be found in the empirical findings as well as in the discussion, the following conclusion aims to summarize the interactions of the occurred topics ‘Business’, ‘Development’, ‘The many people’ and ‘Simplicity’. For this display of interactions, it is assumed that arguments that were urged by only one individual actor represents the opinion and argumentation of the whole group.

The most present logic for the actors is the logic of ‘the many people’. This is reasoned in the fact that ‘the many people’ can have a big impact together. Impact however, can be noticed as positive as well as negative. In the LED project, the impact concerns mostly the positive impact. In the following conclusion, ‘the many people’ is substituted by the word ‘consumer’ to simplify the reading flow.

It is significant that the sustainability aspect is mainly mentioned in connection to ‘the many people’ and seems to find its empowerment there. Sustainability therewith, barely finds its argumentation in the benefits of the nature, which might be obvious. The ‘energy saving’ characteristic and its with coming sustainability aspect rather justified its implementation in the company of IKEA.

The project is prevalently initiated and conducted because of normative pressures, namely regulations concerning energy efficiency of lighting modules. Notwithstanding, for most of the actors the LED project was conducted because IKEA wanted to run a sustainability marketing campaign. Moreover, IKEAs success with the new technology is reasoned in the argumentation, that it does not look purely into business, but also into sustainability. Reasoning this in the cognitive-cultural core values of IKEA, actual facts are brought up, why the pursuing of sustainability projects is possible. Named by the actors this is the available trust-built relationship with suppliers, which made it possible to produce high volumes to low costs.

Nevertheless, the introduction of the new technology was only possible due to market tests, in which the customers approved the new technology. However, it is brought up by the actors, that the consumer does not care if a product is sustainable or not. The consumer
is expected by the actors to have a low expectation in sustainability and is known as preferring low costs as convincing buying argument. As the LED was cost-intensive for the customer in the beginning, the affordability of the product was communicated by its low running costs of the accompanying energy bill. In the development, the technology itself, being based on lower energy consumption and avoidance of mercury supported the sustainability nature of the product in the eyes of the actors. The possibility of the automatized production is a further argument for the project, as it lowers the manual labor and is therewith more efficient and less cost intensive. Moreover, the social sustainability aspect is mentioned incidental.

As the product focused predominantly on the sustainability character of technology in the beginning of the development process, the resulting product was ugly due to a heat shield which was installed for safety reasons. Emphasizing at the one hand the customers health and on the other hand the design which the customer expects from an IKEA product was neglected. Still, early adopters which were according to the actors mostly ‘technology freaks’ and young people who did not care about the price approved of the product in this phase and IKEA continued developing the technology. In the further development, the light experience itself was targeted by IKEA, as the aim is to develop products which enrich the living experience. In the following development sustainability is pushed to the background as the light experience which was possible with the new technology is understood to be more important to the customer.

As the new technology comes with a longer life, the product is argued to be more convenient for the customer as it must be rebought less often. In this matter though, the actors communicated their concern about the old buying habits of the customers. Those needed to be overcome by education of the customers about the new technology, resulting in the change of their purchase behavior. Next to that, sustainability aspects like less shipment and less returns based on reclamation are emphasized by the actors regarding the longer life aspect.

The prevalent argumentation of the previous arguments lies in the fact that sustainability is given by the implemented technology. Since however, the customer is understood not to care about sustainability, the product must be sold to a low price.

Sustainability however, is not only argued in connection with the customer in this project. The only argument, which emphasizes the sustainability factor but not ‘the many people’ is circularity. In the description of the actors, circularity is supported by the product of
LED, as it consists of less parts which leads to a dismantlability, which makes it sustainable. What is not mentioned in the argumentation of the actors is that the circularity further depends significantly in the customer, as the customer is responsible for the returning process, which makes the concept of circularity working.
6 Conclusion

[This Chapter finalizes the thesis by presenting the conclusion extracted from the interpretation of the findings by answering the research question. This is done by first presenting the key findings. Further, research and managerial implications from the findings of this study are made. This is done by addressing the study’s limitations as well as suggestions for further research.]

In this thesis, I use the theory of institutional logics to investigate how employees make sense of the several influences a sustainability project has. The aim of this study was to problematize the implications of sensemaking on an abstract construct like ‘sustainability’ aims to be achieved on an organizational level. This is done by the specific case of IKEA considering the theoretical framework of institutional logics and answering the research question “How do employees make sense of a project with a sustainability purpose based on institutional logics?”.

6.1 Key findings

In this research, the actor-described sensemaking on a sustainability project is summarized in different logics which show a significant correlation to the organizational approach of sustainability. By discussing the different reasonings and arguments of the participants, two main logics were found.

The first logic, which was predominantly mentioned by the employees is ‘The many people’ as they can have a big impact together. Accordingly, sustainability seems to find empowerment in ‘the many people’. This also confirms the finding that there is a limited direct reasoning in the LED’s benefit for the environment. Alone the energy-saving characteristic of the LED legitimizes the establishment in the organization of IKEA.

That sustainability finds its empowerment in ‘the many people’ can be seen on the example in the reasoning of the establishment of the project in IKEA. While the prevalent opinion represented by the employees is that the initial start for the project originated in driving a marketing campaign for sustainability, the actual pressure, which arose the project were regulations, which pressured on the existence of the lighting range. The understanding of the employees is here driven into the direction of the many people
instead of the facts of business threat, deriving from governmental sustainability goals. Another example that sustainability finds its empowerment in the many people can be found in the argumentation around the successfulness of the LED. It can clearly be seen that the product is made for the customer and therewith needed to be appreciated by them. Little however is mentioned about the facts that tell that the cheap production, which was based on existing relationships with suppliers made it possible to win the customer for the product.

The second logic in this thesis is that **the customer is expected to have a low expectation in sustainability**. However, in the internal language, sustainability is important for the development as the new technology does not need any mercury, leads to a low energy consumption and supports fully automatized production. Still, the customer is perceived only to be reached by the argument of low costs, which are given by the low investment costs and the running costs through the reduced energy bill. Sustainability is not meant to be communicated primarily.

As a conclusion it can be stated that the dilemma that the sustainability aspect in the LED case faces is that on the one hand sustainability finds its empowerment in the many people and on the other hand, that the many people, or the customers, is expected to have a low expectation in sustainability. A single person from the interviews in this thesis was able to summarize this finding in the following words:

“**Savings in money means savings in nature and energy for [the customer]. Some people come from nature other people come from the money and some people [...] need to connect both together. And [IKEA] needs to answer both questions. You need to address it through the sustainability because some people will only be interested in that way.**”
6.2 Research implications

During the research process, related questions came up for further research. First, the logic of ‘simplicity’ arose the interest in further research of ‘choice editing’ and how individuals understand their impact on that: Through the organizational solution to ‘Simplify’ via eliminating all alternatives to LED lightings for the customer, the whole argumentation for and convincing of the customer is obsolete. This is because the customer doesn’t have a choice anymore. He must buy the sustainability product at IKEA or he buys no product at all. This relates to the theory of choice editing and concerns the removing of unsustainable products and services from a company’s side and is therewith taking the choice away from the customer (Young and Dhanda, 2018).

It can be noticed by going through the theory is the broadness of the topic of institutional logics. Several metatheories describe different implications and put different emphasis on the topic of institutional logics (Thornton et al., 2012). Throughout this approach, a wide field of interpretation is possible, which on the one hand match the explorative and empirical nature of institutional logics; on the other hand, broaden the results. By considering only one metatheory, the corresponding analysis could be explored more significantly into one direction, which leads to a more specific result. For the compression of this study, I suggest focussing on ‘embedded agency’ to concentrate more on the impact of the individuals.

Moreover, the consideration of the phenomenon ‘sustainability’ is defined in this research due to the interest of me, the researcher. However, ‘sustainability’ can be replaced by any other phenomenon to understand institutional logics based on organizational sense making. Due to that, no further theory on sustainability is presented in this research, as ‘sustainability’ itself is not the purpose of research. However, further research can be carried out by studying the individual understandings of sustainability and the understanding of personal influence on the topic of sustainability, by the hands of a sustainability project.

Another possibility to gain more insights through this study would have been to research the sensemaking aspect in the direction of why organizational actors act in a local context and not only how (Jensen and Aanestad, 2006). This approach could further be combined
with the occurring organizational pressures (Liang et al., 2007) and why these pressures are individually interpreted, based on the institutional logics theory.

Further, the case of LED could be researched by the institutional theory with the focus on the translation theory. The translation theory can be applied as the introduction of LED can be considered as a change process, which is formed by both, the individual organizational context and the spreading construct (Waeraas and Nielsen, 2016) of LED. According to Waeraas and Nielsen (2016), three phenomena can be studied: First, the way that companies pick up, adopt and incorporate conceptual ideas like sustainability by the hands of the LED technology. Then it can be investigated how the concept of LED is translated into different discourses and meanings (considering generic rational myths which are translated into specific ones). Last it can be studied how technology enabled ideas are legitimized and translated into daily business practices. Parts of this last approach are already touched in this thesis, further research however with the emphasis on translation theory would give more specific insight and theoretical confirmation.

A last implication of this research is that like the content of sensemaking of this thesis, also the conducting approach underlies a refining process, as I, the researcher, dig into the story of LED and try to understand it from the ground. Due to the limited time, this thesis has a limitation in its own sensemaking, which comes from me, the researcher. With more time, a more sophisticated research could have been conducted in terms of redoing the enactment loop with the available empirical data until the story of LED is understood in more detail. Accordingly, other logics could have been found and analysed, like for example ‘change’, which reoccurred frequently during the interviews.

6.3 Managerial implications

Acknowledging that only one person in the project team of LED was able to formulate the dilemma of reasoning sustainability in the customer, while the customer does not appear to want sustainability, leads to the assumption that the individuals are confused about the many people and their sight on sustainability. Due to that, this research implicates that a clear statement from the organization is made concerning this issue.
Related to that, in recent times it is most important that the customer is made aware of both the positive and negative impacts he/she has on the environment. This study reveals that having sustainability in the core values of a company does not necessarily mean that the customer, or even the employee understands the consequences of their behaviour and purchase decisions. As this paper reveals that the customer is known as ‘not caring of sustainability’ by the co-workers of IKEA, shows the first starting point for change. Coming from a shift in mindset of the co-workers of IKEA, believing in the wise choice of the customers must be implemented.

This however cannot stand for itself, as customers have to be made aware of the implications their choices have. For a collective impact of ‘the many people’, IKEA needs to actively get into the mindsets of the customers. This lies in the fact, that not every buying decision can be directed by IKEA, which has the means to invest plenty of capital in a sustainability-supporting product. Also, other buying decisions, not in the reach of IKEA, can therewith be influenced and a collective impact of ‘the many people’ can be made.

This study indicates that the organizational culture is mostly represented by the individuals and their sensemaking is significantly dependent on the values that the organization represents. However, the data revealed that specifically those individuals who brought the technology in and saw the potential of it, referred to themselves as ‘not having sustainability in focus’. Moreover, they explained their motivation as being the interest in new technologies and in the drive to change the industry. As already presented in the key findings, the drive of those ‘organizational entrepreneurs’ is from high importance for the outcome and development of the project within IKEA: Their ability to ‘translate’ the idea LED’ helped the project to be accepted and implemented. The translated concept was accepted by the management and led to the initiation of ‘All in LED’. Their knowledge about the organizational values made it possible for them to be heard by the management. With that said, the importance of ‘unconventional thinkers’ is expressed for a multinational company, which has found its routine in their well-matching and appreciated value culture.
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Appendix

Interview guideline
[p. stands for participant]

1. Background information
   - Since when does the p. work at/for IKEA
   - Since when does the p. have actual position
   - Which education/background has the p. before the relevant position in the LED case?
   - Which position/actor in the LED case
   - Has the p. been involved in the LED case?

2. What is the participants’ perception and idea about generally sustainability and LEDs
   - What is sustainability for the participant
     How does he/she describe sustainability
   - How does it differentiate to the company’s requirements of sustainability

3. The individual case
   - How is the idea individually described?
   - What does the p. think was the purpose of the project?
   - Can the p. reconstruct the way that this decision was traveling?
     o Who was involved?
     o Who brought the idea to IKEA
     o What were the main influencer on the process?
     o Can the main influences been recalled by you?
   - How did the p. perceive this idea
   - Which influence did the p. have on the Project
   - When was the p. included into the project
   - How did the p. influence the project/ think he/she influenced the project
   - Who guided/restricted the p. in its way he/she influenced
     (Persons/Regulations/Norms)
- What did the p. **consider** in this case (Arguments/Way of thinking)
- How was the **argumentation** of the p. concerning one ‘decision’ in the process?
- **Why** did the p. **argue** this way?
- Did the p. **put all reasons on the table or did hide some**? **Why**?
  - **Which**?
- Why does the p. think did **other actors agree/disagree** to his idea/influence?
- Does the p. think that the **project makes (made) sense**? Why/Why not?
- Does the p. **think differently about it now than before**?
- If the participant had to make the decision on his own:
  - What would he/she consider?
  - How would he/she have decided
  - **Why**?
- Which ‘decision’ or ‘argumentation’ does the p. think was stupid/did not make sense to him/her

4. **Other related cases? Generally (inside the whole company) other sust. Projects but different opinion about this**
  - Has the p. been involved in the meantime in other sust. Projects and recalls his/her argumentation or influences?
  - How would the p. argue if he/she had the same task again? Why? And Why different to the former event?