School of Economics and Management Department of Business Administration
Master's Corporate Entrepreneurship and Innovation Internship and Degree Project (Master's Thesis 15 ECTS)
Spring 2018
Decision-Making in Decentralized Innovation Departments in the FEI: A Case Study on the Roles of the Middle Management
Authors: Hanneke van Setten & Aurélie Vandewalle
Supervisor: Joakim Winborg Examiner: Sotaro Shibayama

Abstract

Title: Decision-Making in Decentralized Innovation Departments in the FEI: A Case Study on the

Roles of the Middle Management

Date of the seminar: May 2018

Course: ENTN39 Master's Corporate Entrepreneurship and Innovation Internship and Degree

Project (Master's Thesis 15 ECTS)

Authors: Hanneke van Setten & Aurélie Vandewalle

Supervisor: Joakim Winborg **Examiner:** Sotaro Shibayama

Keywords: Front End Innovation, decentralization, decision-making, brokerage, top management,

middle management, employees

Research question: How does the Middle Management affect the decision-making of Employees

and Top Management throughout the FEI in decentralized innovation departments?

Methodology: A qualitative single case study was conducted in a Swedish media company, using semi-structured interviews as a main source to gather empirical data. Iterating between the data and literature, the findings were used to address the gap in literature and to answer the research

question.

Theoretical perspectives: The three main fields of research leading the thesis are the Front End of Innovation, decision-making, the organizational actors (identified as being the employees, the middle management and the top management), and their associated roles in the front end. In more detail, the current academic literature on the roles of the middle management on the employees and top management was analyzed.

Conclusions: For the top management's decision-making, it was found that the middle manager performs an informing role, an inspiring role and a championing role, which are manifest on either the overall department level or on the project-specific level. The employee's decision-making was affected throughout different project phases, where the middle manager sets the focus, brings new insights, and has supporting, sparring, clarifying, and advising roles.

Acknowledgements

We would like to thank everyone who has been of support for us throughout the process of writing this thesis. First, we would like to express our gratitude towards the case company who contributed to this research by providing us numerous valuable insights about their work and shared their open and honest thoughts with us.

In addition, we are especially thankful for our academic supervisor, Joakim Winborg, for his constructive feedback and critics, and valuable guidance throughout the development of our thesis. We thank him for helping us see more clearly the bigger picture of our work and for helping us questioning our assumptions. We enjoyed the insightful discussions and very much appreciated his constant support during the past months.

Finally, we would like to thank our relatives and friends for their support and encouragement.

Aurélie & Hanneke

Table of Content

Abstract	2
Acknowledgements	3
1.1. Background	7
1.2 Problem Discussion	8
1.3. Purpose and Research Question	10
1.4. Case Company	11
1.5. Outline of the Thesis	12
Chapter 2: Literature Review	13
2.1 Front End Innovation	13
2.1.1 Front End Innovation	13
2.1.2 Front End Innovation Model by Koen et al. (2001)	13
2.1.3 Front End Innovation Framework by Florén and Frishammar (2012)	15
2.2 Decision-Making	17
2.2.1 Organizational Design	17
2.2.2 Decision Making in the FEI	19
2.2.3 Actors for Decision-Making in FEI	21
2.2.3.1 Roles, Activities and Decisions of the Employees	22
2.2.3.2 Role, Activities and Decisions of the Top Management	23
2.2.4 Bounded Rationality	24
2.3 Middle Management	26
2.3.1 Strategic Roles of the Middle Manager	26
2.3.1.1 Upward and Downward Influence	27
2.3.2 Strategic Roles of the Middle Manager for Entrepreneurial Initiatives	28
Chapter 3: Methodology	31
3.1. Research Approach	31
3.2. Research Strategy, Process and Design	32
3.3. Data Collection Method	33
3.3.1. Unstructured Interviews	33
3.3.2 Semi-Structured Interviews	35

3.3.3. Interviewee Selection	35
3.3.4. Interview Guide	38
3.3.5. Interview Preparation	42
3.3.6. Ethical Considerations	42
3.4. Data Analysis	43
3.5. Validity and Reliability	45
Chapter 4: Findings	47
4.1 Role of the Middle Manager for Top Manager's Decision-Making	47
4.1.1 Roles of the Middle Manager in Setting the Strategy for the Innovation Department	
4.1.1.1 Informing Role (department-level)	48
4.1.1.2 Inspiring Role	48
4.1.2 Roles of the Middle Manager in Resource Allocation for the Innovation Project	ts . 49
4.1.2.1 Championing Role	49
4.1.2.2 Informing Role (project-level)	50
4.2 Role of the Middle Manager for Employees' Decision-Making	51
4.2.1. Roles of the Middle Manager in the Opportunity Identification Phase	52
4.2.1.1 Setting the Focus Role	52
4.2.1.2 Bringing New Insights Role	53
4.2.2 Roles of the Middle Manager in the Selection Phase	54
4.2.2.1 Supporting Role	54
4.2.2.2 Sparring Role	55
4.2.3 Roles of the Middle Manager in the Development Phase	56
4.2.3.1 Clarifying Role	56
4.2.3.2 Advising Role	57
4.2.3.3 Supporting Role	58
Chapter 5: Discussion	60
5.1 How the Middle Manager affects Top Manager's Decision-Making	60
5.1.1 Informing Role (department-level and project-level)	61
5.1.2 Inspiring Role (department-level)	62
5.1.3 Championing Role (project-level)	64

5.2 How the Middle Manager affects Employees' Decision-Making	65
5.2.1 Opportunity Identification Phase	66
5.2.2 Selection Phase	68
5.2.3 Development Phase	70
Chapter 6: Conclusion	74
6.1 Conclusion	74
6.2 Managerial Implications	75
6.3 Limitations	77
6.4 Future Research	77
References	79
Appendices	85
Appendix 1: Interviewee Participants for the Unstructured Interviews	85
Appendix 2: Interview Guides	87
Appendix 3: Ouotes and 2 nd Order Themes	93

Chapter 1: Introduction

1.1. Background

In today's world characterized by globalization, technological change, increasing competition and complexity of the environment, many companies are forced to leave the market. Strategic renewal and innovation are necessary for survival; companies have to continually change, adapt, adjust, and refine themselves (Kuratko, Morris & Covin, 2011). High innovation performance is directly linked to the ability of an organization to properly manage the entire innovation process, from opportunity recognition to market implementation. The early phase of the innovation process, the Front End of Innovation (FEI), is especially crucial as it presents one of the greatest opportunities for improving the overall innovation process (Koen et al., 2001). In this early phase, opportunities are identified, ideas emerge, and concepts are developed (Koen et al., 2001). The elaboration of an opportunity to a concept implies a wide range of activities that have to be carried out throughout the FEI by the individuals responsible for business development. Koen et al. (2001) regroup these activities into five categories: Opportunity Identification, Opportunity Analysis, Idea Generation, Idea Selection and Concept, and Technology Development. Ensuing these activities, different decisions are made in order to move the early innovation forward.

Antonelli (1997) found that the way an innovation progresses inside an organization depends on the decision-making environment and agents involved. The power for decision-making is influenced by the structure of the organization or specific department (Chindia & Pkhariyal, 2015). In a decentralized organizational design, as opposed to a centralized design, the mandate for decision-making is distributed and actors lower in the organization are able to make their own decisions (Chindia & Pkhariyal, 2015). In innovation departments, this design is typical. This implies that most decisions are taken lower in the hierarchy (Winston, 2005). However, the exact level of independence or autonomy granted to the employees depends on the management (Chindia & Pkhariyal, 2015).

In the innovation process, actors from three different levels are involved: the top management, the middle management and the (first-level) employees (Kuratko, Morris & Covin, 2011). These actors

are therefore seen as the decision-making actors in the FEI. For this thesis, employees are defined as the first-level employees that are directly involved in the operational product development of the front end innovation process, the top management as the actors that are involved with these innovations on the top management level.

As the FEI and its decision-making is crucial for the further outcomes of the innovation process (Koen et al., 2001), it is important to ensure an effective decision-making process. For taking decisions, actors make use of different kinds of available information coming from different sources. As this information can come from the internal as well as the external environment of the company, the actors themselves and the individuals around them can act as knowledge brokers, which is defined by Gould and Fernandez (1989) as individuals who "mediate the flow of resources or information between two other actors who are not directly linked.". For the purpose of the thesis, the middle management is broadly defined as the organization actors that have daily interactions with the operational workforce, or employees, as well as having regular contact with the top management. When looking to this definition in the light of brokerage, it becomes apparent that middle managers play a distinctive role as they hold a unique position because of their access to the top-levels as well as their access to operational knowledge (Wooldridge, Schmid & Floyd, 2008). Therefore, by using his or her unique position, the middle manager influences the flow of information used by the other decision-makers in the FEI.

1.2 Problem Discussion

Decisions made in the FEI have the biggest impact on the overall New Product and Process Development (NPPD) success (Verworn, Herstatt & Nagahira, 2008). The FEI is broadly defined by Koen et al. (2001) as "the activities that take place prior to the formal, well-structured New Product and Process Development.". The front end is seen as a crossroads of complex information processing, tacit knowledge, and conflicting organizational pressures (Florén & Frishammar, 2012). Due to the uncertain nature of this phase, the available information is less reliable compared to later stage innovations (Rochford, 1991). In decision-making contexts, actors will always be hindered by a limited ability to deal with incomplete information, which causes biases (Smith & Winkler, 2006). In organizational practice this means that decision-makers might not always possess the necessary knowledge to make accurate decisions (Kornish & Hutchison-Krupat, 2017).

A firm's success in creating value from new products depends on how the information flow is managed and transformed into products during the FEI (Akgün, Lynn & Reilley, 2002). For the purpose of this thesis, decision-making will be defined as all decisions that are taken throughout the process, from the earliest opportunity identification to the later product development in the FEI (before entering the NPPD).

A great challenge with a decentralized structure is to ensure that the individual efforts and decisions are in line with the organizational strategy of the company and are integrated with other activities and initiatives within the company (Kuratko, Morris & Covin, 2011). Argyres and Silverman (2004) argued that more impactful innovation is better suited in a centralized department, as a centralized manager has better visibility into the entire organization's activities and can better identify and assess overall opportunities. This can help the employees in the department with their decision-making. Furthermore, from a top-down perspective, it can be more difficult with decentralized departments to align the decision-making with the overall organization's goals (Kornish & Hutchison-Krupat, 2017). Additionally, when the top management is less closely linked to the department, operational information will not always reach them, which hinders them in decision-making due to incomplete information (Smith & Winkler, 2006).

Incomplete information as well as conflicting decision-making strategies can be harmful for the decision-making processes. This can result in less support from the parties involved throughout the process, which is perceived as crucial for the development of innovations (Florén & Frishammar, 2012). Middle managers can be valuable in enhancing the performance of the decision-making as they have access to different actors higher, lower and on the same level in the organization (Kuratko, Morris & Covin, 2011), where they are able to identify, capture, and combine knowledge of these actors, and provide it to others. For instance, Bonner et al. (2002) found that the control exerted by management is able to guide projects in the right strategic direction. Especially in the context of decentralization, it was found that in uncertain environments, the middle manager has a high strategic usefulness in supplying information (Mangaliso, 1995). Also, beside brokerage roles, it has been found by Rekonen and Björklund (2016) that the management performs different functions in the FEI, increasing the performance of the activities undertaken and the decisions made.

The role of middle management has been studied extensively in terms of their general roles as well as their information processing roles and brokerage roles (Bartlett & Ghoshal, 1993; Floyd & Wooldridge 1992, 1996; Kuratko, Morris & Covin, 2011; Rekonen & Björklund, 2016; Shi, Markoczy & Dess, 2009). However, the middle management role in a FEI context has not yet received a lot of attention in the literature (Shi, Markoczy & Dess, 2009). Especially, no research has made attempt to understand the middle management's roles in a decision-making context. Also, finding what roles of the middle manager is predominant in the different phases of the FEI and for which types of decisions has not been done before.

From the existing literature, it can be expected that the top management lacks operational knowledge as managers are typically more concerned with strategic decisions (Kesting & Ulhøi, 2010). This in-depth and context-dependent knowledge is for instance needed for adequate selection decisions and resource allocation in order to effectively carry out the diverse activities implied in portfolio management (Cooper, Edgett & Kleinschmidt, 2001). The employees in turn lack the overall strategic knowledge of the upper echelon managers (Kesting & Ulhøi, 2010), which may limit them in seeing the big picture. The middle manager with his or her unique position as 'linking pin' (Likert, 1961) can be the critical factor in supporting these positions.

1.3. Purpose and Research Question

This thesis will contribute to the knowledge about and effectiveness of decision-making on an individual level as well as on an organizational level. By investigating in particular the roles of middle manager that affect the decisions made by the upper and lower level individuals in the FEI, we aim for a better understanding of the interfaces of the middle management with the top management and the employees in a decentralized context. This provides clarity to the decision-making actors about their own decision-making and how the middle manager affects this. Furthermore, a chronological perspective is added when examining the roles of the middle management, which has, to our knowledge, not been done before. This will be a valuable contribution as the roles of the middle manager can be expected to change over the development of the innovation process, which has important implications for what specific roles are perceived at certain points throughout the development of the FEI. Furthermore, this thesis will bring new

insights to support the middle management on how their role and influence is perceived by the decision-makers. By improving the understanding of how the middle manager influences the decisions-making process, the effectiveness of the decision-making on the different organizational levels can be enhanced. Well-informed decision-making processes will provide early innovations with better chances of succeeding, hence will strengthen the overall New Product and Process Development (Koen et al., 2001). For these reasons, the research question of this thesis will be as follows:

How does the Middle Management affect the decision-making of Employees and Top Management throughout the FEI in decentralized innovation departments?

1.4. Case Company

A single case study was used for data collection and analysis on the topic of decision-making in the front end of the innovation process. For confidentiality reasons, the name of the company will not be revealed (Bryman & Bell, 2011).

The case company is a leading Swedish media company which runs activities in the media industry, including TV, daily newspapers, business press, magazines, film production, books and digital media in different business areas. The media industry faces severe challenges caused by digitalization, which stresses the urge to reinvent themselves. As the urge for innovation was perceived the highest in the News and Book division compared to the other business areas, our thesis focuses on these two divisions.

Both the News and Books division of the case company strive towards a digital transition by initiating strategic renewal. Within the News division, a department for innovation has been initiated in 2014. Since the autumn of 2017, this innovation department especially aims to provide new sources of growth and revenue streams to the case company by creating new digital products and services. This is done by focusing on the development of products outside the core activities of the company, which is traditional print media. For the Books division, a department for digital product development has been created in the beginning of 2017, following the successful launch of a digital self-publishing platform. Both departments facilitate the incubation of early

innovations, which equals the FEI phase as described in the literature. In both departments, there are a Head of Innovation, and business developers, software developers and other employees working with innovations.

The two innovation departments run business development activities separately from the mother company and deploy their own cultures, processes and structures in a high-autonomous context. This independency nurtures the entrepreneurial orientation of the two innovation departments and protects their young and small innovations from the mature and large organization. Consequently, both the News and the Books innovation departments have a highly decentralized decision-making structure, where the individual employees have a lot of decision-making power throughout the innovation process. Likewise, CEO's of the divisions do not take any formal decisions until relatively late in the FEI process, which allows the employees a lot of freedom. To connect both ends of the organizational chart, the departments are supervised by their head of innovation, who is involved with both the CEO and the business developers on a regular basis.

In the context of this thesis, the CEO's of the divisions are considered as the top management, the business developers, working in the front end phases, as the (first-level) employees, and the heads of innovation of each department are defined as middle management.

1.5. Outline of the Thesis

This thesis is divided in six sections which describe the process and outcomes of this thesis. After this introduction (*Chapter 1*), *Chapter 2* will outline relevant theoretical constructs in relation to the research question. *Chapter 3* encompasses the methodology section which will go into the methods for data collection and analysis. Subsequently, *Chapter 4* and *Chapter 5* will reveal the findings of this thesis and the discussion of these findings. *Chapter 6* will close with the conclusion, including the limitations, managerial implications and suggestions for future research.

Chapter 2: Literature Review

In this chapter, a thorough academic literature review is presented. Firstly, the existing literature about the Front End of Innovation will be examined, where after the current knowledge about decision-making in the FEI is presented. Finally, the special role of the middle management is reflected upon.

2.1 Front End Innovation

2.1.1 Front End Innovation

The innovation process in companies starts officially with the so-called New Product and Process Development (NPPD), that is when a new product or process is being developed. However, scholars have identified a prior stage, called the Front End of Innovation (FEI), which takes place before the official NPPD. In contrast to the NPPD, this stage is experimental and often chaotic in nature (Koen et al., 2001). It is broadly defined by Koen et al. (2001) as "the activities that take place prior to the formal, well-structured New Product and Process Development". After the FEI and NPPD, the commercialization phase takes place. Florén and Frishammar's (2012) definition of the FEI particularly stresses the importance of the final Go/No-Go decision that marks the end of the FEI, that is whether or not to continue into formal NPPD, which is usually undertaken by the top management (Florén & Frishammar, 2012). *Figure 1* depicts the whole innovation process.

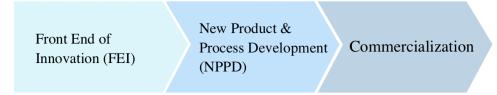


Figure 1. Innovation Process (inspired by Koen et al. 2001).

2.1.2 Front End Innovation Model by Koen et al. (2001)

Koen et al. (2001) present a common language and definition of the key components of the FEI. The authors developed an iterative FEI model, which provides new insights concerning the elements and their interaction in the FEI. It is composed of five parts that encompass different

activities: Opportunity Identification, Opportunity Analysis, Idea Genesis, Idea Selection, and Concept and Technology Development.

The first phase, Opportunity Identification, concerns the opportunities identified by the company that show potential to pursue. This can be executed by formal processes or can occur informally. The activities in this early phase are often driven by the goals of the organization and enable the recognition of opportunities. Koen et al. (2001) mention that an opportunity can be a totally new direction to follow which has nothing to do with what is currently done in the business or it can be seen as ameliorate and make change to an existing product. Opportunity Analysis is used to translate the opportunity to specific business and technology opportunities. To assess the technological and market potential of the opportunity, competitive intelligence and trend analysis are used. These early assessments are uncertain. Idea Genesis is the birth, development and maturation of the opportunity into a concrete idea which may be a formal process but can also emerge outside the boundaries of a formal process. Numerous iterations and changes are to be expected, as new understandings of the idea emerge. The activities that allow to gain customer insights are of great value in this phase, as it provides new input for the opportunity identification. Following, Idea Selection is meant to decide whether or not an idea should be developed further. This selection can be an individual's choice but can, again, also be a formalized process such as portfolio management. The activities employed, such as using selection models to allocate resources and to predict risks, must consider the uncertainty at this stage. Once an idea is selected, resources are deployed for its development. Finally, Concept and Technology Development includes the development of a concept of the idea. More precisely, activities involve the development of a business case based on current information, such as the market, customer needs, investment requirements, competitor, technology unknowns, and overall project risk (Koen et al., 2001).

Summarized, the activities in the FEI are opportunity identification, idea generation, idea screening and selection, concept development, concept testing, customer need assessment, technology verification, and business analysis (Martinsuo & Poskela, 2011). The five phases and related activities are driven by an overarching force of organizational culture and leadership, called The Engine. This process, as well as the innovation process as a whole, is being influenced by the

environment, consisting of organizational capabilities, the business strategy, the outside world and the enabling science that will be utilized. The model can be found in *Figure 2*. The elements are presented in a circular way. This non-linear model suggests that ideas are expected to navigate and iterate between and among all five elements of the wheel in any sequence, and that the elements may be used many times (Koen et al., 2001). Based on Koen et al. (2001), we identified that an idea follows an opportunity and precedes a concept when it is selected to work on.

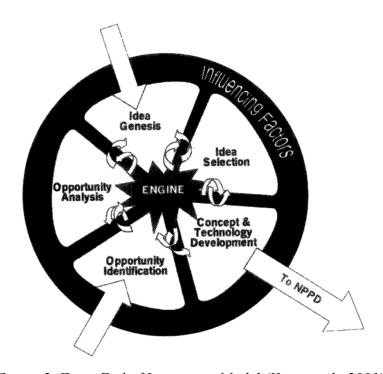


Figure 2. Front End of Innovation Model (Koen et al., 2001).

2.1.3 Front End Innovation Framework by Florén and Frishammar (2012)

The most recent highly influencing researchers presenting a framework for FEI are Florén and Frishammar (2012). The authors argued that the literature on FEI mainly focuses on the success factors. With their research, they expose that the outcomes ensuing from FEI activities should receive more attention. Just as Koen et al. (2001), their presented framework does not include distinctive phases, which implies an iterative process.

The new framework introduces three elements: Idea/Concept (I/C) Development, which is the core of the process, and which has to be complemented by I/C Alignment and I/C Legitimization. I/C

Development is divided into Refinement and Screening which are seen as interrelated. Refinement gives the development its key contents, energy, and direction, where calculating risks and reducing uncertainty are important. Screening is seen as the different and constant activities that a firm performs to decide whether an idea or concept should be further developed or not. I/C Alignment is explained as how firms strategically align an idea with its internal and external environment. It is key to assure a fit between the emerging idea or concept, the firm's strategy and internal operations and the firm's external environment. I/C Legitimization shows the importance of the socio-political context for innovation projects as well as the need for creating organizational commitment. This is seen as crucial and the authors stress the need for mobilizing organizational support and the role of leadership within this process for successful FEI process. Finally, the interplay of the three elements forms a Corroborated Product Definition, which is seen as the outcome of the journey within the framework. Florén and Frishammar's framework (2012) is presented in *Figure 3*.

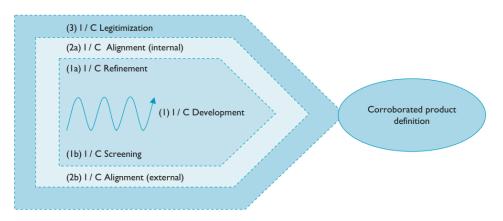


Figure 3. The Front End Innovation Framework (Florén and Frishammar, 2012).

The FEI faces a high level of uncertainty when it comes to time planning, activities and revenue expectations, which makes it hard for companies to predict whether an idea or concept will be successful later on in the process (Florén & Frishammar, 2012). Front end activities often occur in informal and unstructured organizational settings. These activities are often undefined, are characterized by spontaneous decision making, and encompass a lot of complexity, uncertainty and ambiguity (Florén & Frishammar, 2012). The front end is also associated with the processing of complex information, dealing with tacit knowledge and organizational pressures (Florén & Frishammar, 2012). These characteristics explain the widely-used appellation Fuzzy Front End

(Florén & Frishammar, 2012; Koen et al., 2001). However, it is also argued that it is possible to structure and to organize this phase in the innovation process. Moenart et al. (1995) did one of the first studies about the activities in the front end and are one of the first to acknowledge that the FEI is manageable and should be managed. However, the unique and distinctive features of the FEI require it to be managed in an efficient way (Rekonen & Björklund, 2016). Elkins and Keller (2003) state that the responsibility to manage the complex innovation process is in the hand of (upper) management.

2.2 Decision-Making

2.2.1 Organizational Design

The structure of an organization is defined by the formal reporting relationships between organizational members (Kornish & Hutchison-Krupat, 2017). More precisely, Chindia and Pkhariyal (2015) outline that it determines "how the roles, power and responsibilities are assigned, controlled and coordinated, and how information flows between the different levels of management". There is no universal design and it is subject to change, as every organization develops its own according to its objectives, aspirations and strategies. In the literature, scholars make a distinction between centralization and decentralization. Decision-making is highly dependent on the way that an organization or a department is structured. In centralized structures, the power for decision-making is given to a single point in the organization or in the department, at the (top) level of management, and a tight control over departments and divisions is undertaken (Chindia & Pkhariyal, 2015). Decisions that are made higher up, or in a more centralized design, tend to consider the 'big picture', especially in terms of organizational objectives and strategy (Kornish & Hutchison-Krupat, 2017). Hence the scope of the decision is broader. On the contrary, in a decentralized structure, the decision-making power is distributed among the departments or the individuals within a department, and the degree of independence varies depending the management style (Chindia & Pkhariyal, 2015; Kesting & Ulhøi, 2010). When the decisionmaking power is pushed down, individuals at a lower level are empowered and are responsible for the resources allocation at the operational level (Kuratko, Morris & Covin, 2011). Also, decisions that are made further down enjoy from deeper and more specialized knowledge of the decisionmakers (Kornish & Hutchison-Krupat, 2017). An organization can be a combination of centralized

and decentralized structures and the structures evolve over time (Kuratko, Morris & Covin, 2011). It is key to find a trade-off between decisions made higher and lower in the organization (Kornish & Hutchison-Krupat, 2017).

The literature shows conflicting views on which decision design should be adopted. Argyres and Silverman (2004) argued that more impactful innovation is better suited to a centralized innovation department, as a centralized manager can see better what is happening in the entire organization and can also better identify and assess opportunities. Furthermore, a centralized perspective is beneficial as it broadens the scope of innovation and aligns the decision-making process with the overall organization's strategy and goals (Kornish & Hutchison-Krupat, 2017). Therefore, decision-making is not based on the individual's own objectives. Also, in order to ensure consistency, strategic decisions demand centralized coordination to some extent (Kesting & Ulhøi, 2010)

On the contrary, decentralization offers the opportunity for lower organizational actors to undertake decisions in an autonomous way. O'Reilly (1989) found that the division of autonomy plays an important role in innovative companies, as a high level of top management control in the innovation process hinders creativity (Poskela & Martinsuo, 2009). Furthermore, decentralization can be associated with exploration. This is in line with Kuratko, Morris and Covin (2011), who acknowledge that a decentralized structure is associated with the encouragement of individual initiatives, experimentation and innovation. For Sundbo (1999), this is related to employees' empowerment. Also, decentralized structures are more likely to embrace great opportunities but also more likely to accept bad ideas (Florén & Frishammar, 2012). Opposingly, centralized structures are more likely to miss a great opportunity but are less likely to accept a bad idea. This can be related to a more exploitative strategy as it reinforces the existing structure of an organization.

A great challenge with a decentralized structure is to ensure that the individual efforts and decisions are in line with the organizational strategy of the company and are integrated with other activities and initiatives within the company (Kuratko, Morris & Covin, 2011). The middle management brings consistency in decentralized decisions-making. Bonner et al. (2002) found that the control

exerted by management guides projects in the right strategic direction. Also, in uncertain environments, decentralization has a positive impact on the strategic usefulness of the middle management in supplying information (Mangaliso, 1995).

2.2.2 Decision Making in the FEI

Throughout the innovation process, activities are undertaken, and decisions have to be made in order to process the ideas or concepts to the NPPD phase. The decisions that are made should contribute to the strategic goals of the organization (Ebner et al., 2009; Cooper Edgett & Kleinschmidt, 2001). Mintzberg (1979) defines a decision as the process to specifically commit to a certain action. Decisions made in the FEI are crucial, as they have been recognized as having the biggest impact on the overall NPPD success (Verworn, Herstatt & Nagahira, 2008). They directly affect the content, tasks and costs of the NPPD process (Cooper, 2008; Kim & Wilemon, 2002). These decisions are affected by a certain level of uncertainty which undermines the performance of the decision-makers (Büyüközkan & Feyzioglu, 2004). Uncertainty arises from different sources, including technical, market and process (Büyüközkan & Feyzioglu, 2004). However, uncertainty can be minimized by issuing a structured approach to product development (Büyüközkan & Feyzioglu, 2004) and diminishes as the idea reaches the NPPD phase (Kim & Wilemon, 2002).

The FEI can be seen as a dynamic decision process, where each decision must be evaluated, selected and prioritized (Büyüközkan & Feyzioglu, 2004). The decisions taken in the different stages are mostly iterative and multi-round (Koen et al., 2001; Rochford, 1991). The decision-maker must take into consideration the customer and the market, the company's strategies, resources and the technological opportunities (Büyüközkan & Feyzioglu, 2004). Liew (2015) adds synergies, financial risks and rewards to this perspective. Moreover, to take decisions, individuals need information. Derived from Koen et al. (2001) and from Florén and Frishammar (2012), decision-makers needs among others strategic, financial, political, market, customers, technological and company-related information.

Decisions in the FEI often involve multiple individuals who hold different functional knowledge and expertise (Liew, 2015; Boeddrich, 2004). The person who takes the decision should match

with the organizational context (Kornish & Hutchison-Krupat, 2017). The identified actors involved in the decision-making of the FEI are the top management, middle managers and the employees (Kuratko, Morris & Covin, 2011). All have different roles, which will be elaborated upon later in *Chapter 2.2.3* and *Chapter 2.3*.

A number of decisions usually start in the earliest phases of the innovation process and will be apparent during the whole process before new products are proposed on the market (Krishnan & Ulrich, 2001). As previously seen, the FEI process is structured around well-defined phases: each phase encloses many activities, which are translated into a multitude of decision points (Büyüközkan & Feyzioglu, 2004). It is highly challenging to map on a detail-level all the decisions and activities undertaken as they vary between innovation projects. A generic approach on decision-making is therefore preferred. The literature proposes many ways to categorize the decisions made in the FEI.

Decision-making can be categorized on two levels: operational and strategic (Liew, 2015). This can be associated with Krishnan and Ulrich (2001)'s findings, who consider the decisions made within the context of a single project in developing the product (micro) and the decisions that an organization makes in establishing the organizational context and for planning projects' development (macro). These decision perspectives can be translated within the FEI models introduced in *Chapter 1*. Koen et al.'s iterative innovation model (2001) provides a wide spectrum of activities occurring in the FEI process and the related decisions. The same is applicable for Florén and Frishammar's framework (2012).

In the earliest phase of the FEI, following the activities in the Opportunity Identification phase (Koen et al., 2001), a (set) of decision(s), leading to the opportunity the company want to pursue, can be identified. These decisions tend to be of strategic nature and are affected by the strategic goals of the company and guide the eventual resource allocation for new areas of market growth (Koen et al., 2001). Also, in that phase, methods used to identify the opportunities have to be chosen. Rough assessment of the market and technology at the operational level are performed to define more precisely the opportunity (Koen et al. 2001). In a later phase, ideas and concepts are developed, which consists of I/C Refinement and I/C Screening (Florén & Frishammar, 2012). I/C

Refinement can be paralleled with the Idea Genesis and Concept and Technology Development phase of Koen et al. 's (2001) FEI model. There, strategic decisions, such as the idea or concept alignment with the corporate strategy and the external environment (Florén & Frishammar, 2012) and strategic changes within the idea or concept, are discussed. Also, product decisions on an operational level are made regarding the size of the market opportunity, the target customer, and the technology to be used (Koen et al. 2001). Furthermore, throughout the FEI, multiple selection decisions have to be taken (Koen et al. 2001; Florén & Frishammar, 2012), so that the company pursues the right ideas or concepts. Strategic selection decisions ensure efficient portfolio management and proper resource allocation (Koen et al. 2001; Florén & Frishammar, 2012). Finally, as mentioned by Krishnan and Ulrich's (2001), decisions regarding the organizational context for product development and strategic planning are part of the FEI. These can be decisions concerning the overall strategy that the FEI activities follow, and project management in terms of activities undertaken and time allocated.

As Cooper (1993) mentioned, the goals that companies want to achieve are quality of execution of the front end activities and the creation of an initial well-defined product concept prior development. The selection of the right opportunity or idea and the preparation of a clear product concept definition guide the development activities and define how well individuals performs in these activities (Kim & Wilemon, 2002). Therefore, it is important to make the right decisions for successful product development.

2.2.3 Actors for Decision-Making in FEI

As mentioned before, decision-making in the innovation process is affected by multiple actors (Boeddrich, 2004) with different roles. In the innovation process in general, a distinction is made between the top management, the middle management and the employees (Kuratko, Morris & Covin, 2011). Therefore, in the FEI, the actors of decision-making are the top management, the middle management and the employees. For the purpose of this thesis, we will focus on the decisions made by employees and top management, where the middle management plays a special role as influencer of their decision-making processes.

2.2.3.1 Roles, Activities and Decisions of the Employees

The employees or non-managerial personnel for business development activities carry a collective responsibility for entrepreneurial behavior (Kuratko, Morris & Covin, 2011). Employees operate as order takers, implementing the initiatives coming from a higher level, and also perform as autonomous individuals pursuing bottom-up entrepreneurial opportunities (Kuratko, Morris & Covin, 2011). Employees have a better understanding of structures, processes and operational tactics for business development (Kuratko, Morris & Covin, 2011). Furthermore, compared to the top and middle management, employees have a unique position as they are at the core of the daily activities. This enables them to gather information from the outside environment and different stakeholders, and to have a significant potential to recognize and formulate new opportunities (Kuratko, Morris & Covin, 2011). This is in line with the concept of employee-driven innovation mentioned by Kesting and Ulhøi (2010), which assumes that employees have hidden abilities for innovation and that this potential can be made visible, recognized, and exploited. However, Kuratko, Morris & Covin (2011) recognized that an over-reliance on employees for the generation of new ideas can also possibly lock in the company with incremental innovations. Employees work closely with customers for market-pull innovations that can been seen as rather incremental.

A large proportion of the business development activities in the innovation process are endorsed by the employees, which increases their influence in the operational and strategic decision-making of the FEI (Kuratko, Morris & Covin, 2011). Employees identify potential opportunities they wish to pursue and undertake assessment activities where they evaluate the competition, the trends, the market and the technologic impact of the opportunity, idea or concept through the FEI (Koen et al., 2001). Employees also participate in multiple selection activities throughout the process where they agree upon which idea to pursue (Koen et al., 2001; Florén & Frishammar, 2012). Furthermore, they determine how the product will evolve (van Oorschot, Langerak & Sengupta, 2011; Verworn, Herstatt & Nagahira, 2008). Consequently, the employees would take decisions on on how to refine (Florén & Frishammar, 2012), reshape, modify, build upon, turn down, combine and upgrade ideas or concepts (Koen et al., 2001). To do so, the employees develop a business case based on the available information reading the market, the customers, the competition, the technology, the financials and the risks (Koen et al., 2001).

All in all, employees take part in activities including opportunity identification, idea generation, idea screening and selection, concept development, concept testing, customer need assessment, technology verification and business analysis (Martinsuo & Poskela, 2011).

2.2.3.2 Role, Activities and Decisions of the Top Management

The top management plays a crucial role in the innovation process and FEI (Kuratko, Morris & Covin, 2011). The top-level managers should be entrepreneurial when it comes to formulating the business strategy, as their role is to put their vision into words, symbols and actions in order to create an entrepreneurial organization (Kuratko, Morris & Covin, 2011). Furthermore, the top management is responsible for building pro-entrepreneurship organizational architectures, ensuring the right personnel, as well as balancing between current operations and future operations to establish a well-functioning ambidextrous organization (Kuratko, Morris & Covin, 2011). Moreover, the top management is responsible to follow the entrepreneurial imperatives for strategic leadership (Govin & Slevin, 2002). According to these authors, among others, the top management has to nourish an entrepreneurial capability, protect disruptive innovations, make opportunities make sense, question the dominant logic, identify growth opportunities and link entrepreneurship and strategy (Kuratko, Morris & Covin, 2011).

Top management exercises control in the innovation process in different ways, which is needed to give strategic direction and to monitor progress toward organizational goals and project goals (Bonner et al., 2002). During the whole innovation process, top managers have the power to influence the well-development of ideas and concepts by ratifying, recognizing, and directing (Kuratko, Morris & Covin, 2011). Ratifying refers to the top management's ability to articulate strategic intent, monitor, endorse and support. Related is their responsibility to recognize strategic potential, set strategic directions, empower and enable (Kuratko, Morris & Covin, 2011). Finally, top management directs by planning, commanding and deploying resources.

The level of support of the top management for entrepreneurial initiatives is crucial. Researchers stress the need to ensure top management support for innovation projects already in the early stage of FEI (Florén & Frishammar, 2012; Kim & Wilemon, 2002). Sustainable innovations occur

because top executives believe in strategic renewal and set the company's objectives and values to support it (Quinn, 1985).

Top management is also a participant in the decisions made in the FEI for successful product development. However, contrary to the employees, they undertake activities and decide on a macro-level. The top management influences the environment of the front end innovation process (Poskela & Martinsuo, 2009). They have the ability to shape the environment of the innovation department by setting the goals, direction, strategy to follow in the FEI and by creating an innovation culture (Kuratko, Morris & Covin, 2011; Murphy & Kumar, 1997). Marginson (2002) pointed out that the way the top management frames the strategic context has an influence on the likelihood that other organizational individuals create and develop new ideas. Also, the top management can influence the direction taken by the employees when they provide top-down opportunities and ideas.

Furthermore, the top management participates in selection activities in the later stages of the front end, especially before the NPPD phase (Khurana and Rosenthal, 1997). Selection means giving a Go/No-Go decision for further development of the idea or project. Put negatively, this implies that top management has the power to kill projects at any point in the innovation process. Selecting refers also to whether the top management provides the necessary resources for projects (Hutchison-Krupat & Kavadias, 2014). Since resources are limited and the FEI is highly uncertain, the top management has to ensure proper allocation of resources to high potential ideas only (Kim & Wilemon, 2002). Non-efficient resource allocation results in costly operations (Cooper, 1990). Selection decisions are influenced by the level of top management support and commitment (Kim & Wilemon, 2002), as top managers can selectively protect and spur innovation projects by 'cocooning' certain projects (Kuratko, Morris & Covin, 2011).

2.2.4 Bounded Rationality

A notion that generally goes hand in hand with decision-making in general is bounded rationality. Decision-makers use their knowledge and the available information that they have to make decisions. This concept of bounded rationality was firstly described by Simon (2000) as "the idea that the choices people make are determined [...] by the knowledge that decision makers do and

don't have of the world, their ability or inability to evoke that knowledge when it is relevant [...]" (p.25). The researcher argues that decision-makers should be seen boundedly rational. So, decision-making will be based on uncertainty and incomplete information, which will turn out to be biased (Smith & Winkler, 2006). In an uncertain environment, decision-making is a highly challenging practice, as the information might simply be lacking (Elbanna, 2006; De Lurdes Calisto, 2017).

When it comes to decision-making in the FEI, the decision-makers (the top management and employees) should be perceived as rationally bounded. Employees possess the deep and specialized field knowledge (Kesting & Ulhøi, 2010; Kornish & Hutchison-Krupat, 2017). However, it is also argued that these decision-makers lower down the hierarchy do not possess the necessary strategic knowledge for decision-making (Kesting & Ulhøi, 2010). Looking at the decisions made by the top management, Kornish and Hutchison-Krupat (2017) found that decision-making higher up in the organization is more likely to consider the big picture, in terms of organizational objectives and the breadth of opportunity space, hence benefits from strategic alignment with the objectives of the organization (Hutchison-Krupat & Kavadias, 2014). However, the top management may lack the field knowledge (Kesting & Ulhøi, 2010) and task-specific knowledge for adequate resource allocation decisions (Hutchison-Krupat & Kavadias, 2014).

Interaction of the employees with the management is important to make the best use of the in-depth operational knowledge, the large number of employees and their relevant networks (Kesting & Ulhøi, 2010). Furthermore, a conduit between the top and operating level is necessary to ensure strategic alignment in decisions (Kuratko, Covin & Morris, 2011). Wooldridge and Floyd (1992) found that the middle management influences the organizational strategy as they are able to improve the quality of the decisions made. Ultimately, middle management participation into higher and lower decision-making is to minimize the imperfections of the decisions, hence to increase the performance of decisions-making processes. The middle management roles will be elaborate upon in *Chapter 2.3*.

2.3 Middle Management

2.3.1 Strategic Roles of the Middle Manager

In the context of this thesis, the notion of the middle management is taken rather broadly. Wooldridge, Schmid, Floyd (2008) define middle managers as the organizational individuals that are situated above first-level individuals and below top management. It is important to stress that what distinguishes the middle managers is not their position on the organizational chart. For the purpose of this thesis, the middle management is understood as the organization actor that has daily interactions with the operational workforce, or employees, and that has regular contact with the top management. This implies that middle managers are unique because of their valuable access to the top-levels, paired with their operational knowledge (Wooldridge, Schmid & Floyd, 2008).

Numerous researches draw upon this unique position of the middle managers. Because middle managers benefit from a central and intermediate position in the organization, it is widely accepted that they serve as key organizational brokerage individuals (Wooldridge, Schmid & Floyd, 2008). The notion of brokerage qualifies individuals who "mediate the flow of resources or information between two other actors who are not directly linked." (Gould & Fernandez, 1989). A broker has the ability to facilitate the access to novel information and resources, ease the transfer of knowledge, and coordinate the efforts across the network, internal or external to the organization (Long, Cunningham & Braithwaite, 2013). It has to be noted that the information transmitted by mediators might be biased, as it is acknowledged that mediators shape the information to suit their interests (Gould & Fernandez, 1989). Hence, by holding key structural positions, the middle management has the power to create opportunities or to impose constraints (Long, Cunningham & Braithwaite, 2013).

Other studies bring a social approach to brokering. Wooldridge, Schmid and Floyd (2008) acknowledge that middle managers are able to build and renew relationships within the internal and external organizational environment. Furthermore, as brokers, middle managers perform a moderating role, where they cope with misunderstanding, confusion and conflicts arising across the management levels of the organization (Long, Cunningham & Braithwaite, 2013; Wooldridge, Schmid & Floyd, 2008).

2.3.1.1 Upward and Downward Influence

The middle manager plays a key role in the innovation process (Kuratko, Morris & Covin, 2011). According to Li (2018), the middle management is one of the key actors in enhancing organizational performance. Many researchers have studied the specific brokerage activities of the middle managers when mediating between the top management and the employees. As Kuratko, Morris & Covin (2011) mention, they serve as a conduit between the top level and the operating level. More precisely, it has been identified that they have upward and downward influences (Floyd & Wooldridge, 1992, 1996).

Floyd and Wooldridge (1992, 1996) found that middle managers have the ability to influence the current organizational strategy by providing unique interpretations of nascent issues and proposing new initiatives. Firstly, they provide the top management with information of high relevance (Shi, Markoczy & Dess, 2009). To do so, they exert a synthesizing role where they use their role to accumulate, interpret and channel the strategic information (Dutton et al., 1997; Floyd & Wooldridge, 1992, 1996). The information transmitted can be relayed directly from the employees (Shi, Markoczy & Dess, 2009). As synthesizer, middle management alternates the strategic direction of the whole organization (Dutton et al., 1997; Floyd & Wooldridge, 1992, 1996). Secondly, the middle management can champion new initiatives to the top management. Shi, Markoczy and Dess (2009) found that when middle managers champion new strategic initiatives, it involves the search for new opportunities, the evaluation of new proposals, nurturing new ideas and advocating ideas when they are proven to be valuable. For instance, the middle management can promote specific projects that are being developed by the employees (Floyd & Wooldridge, 1992, 1996; Kuratko, Morris & Covin, 2011). Related to this, Ling, Floyd and Baldridge (2005) investigated how middle managers can be seen as issue-sellers, as they can selectively choose which issues should reach the top management and corner their attention. By championing initiatives, the middle managers can redefine the strategic context and mold the exploitative thinking of the top executives for strategy formulation into explorative thinking (Floyd & Wooldridge, 1992, 1996). As a result of this upward influence, the strategy as originally elaborated at the top is constantly reshaped by the actions of the middle management (Floyd & Wooldridge, 1992, 1996).

The middle management also performs a downward influence by enhancing adaptability and implementing deliberate strategy (Floyd & Wooldridge, 1992, 1996). First, they encourage lower organizational actors to take part into entrepreneurial efforts by creating an entrepreneurial environment. For instance, they soften the regulations to get new projects started, allow time for experiments, identify and provide resources for the development of entrepreneurial initiatives, and encourage informal discussions and information sharing. By doing so, they decrease resistance to change. Secondly, as implementers, middle managers take action to implement the strategy directed by the top, so that organizational actors are strategically aligned (Floyd & Wooldridge, 1992, 1996). For instance, the middle management communicates the strategic direction, goals and objectives from the top to the employees (Shi, Markoczy & Dess, 2009). Also, they sell top management initiatives (Floyd & Wooldridge, 1992, 1996; Kuratko, Morris & Covin, 2011). Consequently, the middle management influences how the organization aligns itself with the environment. They increase divergent thinking and shape change-oriented individuals (Floyd & Wooldridge, 1992, 1996).

Looking at the different influences and roles embraced by the middle management that can be found in the literature, it can clearly be stated that they should not be considered as simply passive actors. On the contrary, they are acknowledged to be active interpreters, mediators and intermediaries in implementing strategic change (Balogun, 2003). In addition, they coordinate, mediate, negotiate, and interpret connections between the organization's strategic and operational levels (Floyd & Wooldridge, 1992). The middle management is seen as a change agent, for both upward and downward directions (Wooldridge, Schmid & Floyd, 2008).

2.3.2 Strategic Roles of the Middle Manager for Entrepreneurial Initiatives

When it comes to the entrepreneurial context, the middle manager endorses, refines and shepherds entrepreneurial opportunities, and identifies, acquires and deploys resources that are necessary to pursue those opportunities (Kuratko, Morris & Covin, 2011). The middle management endorses entrepreneurial opportunities coming from various points in the organization. To start with, they have the responsibility to evaluate entrepreneurial initiatives emerging from the employees, which encompass the decisions to either lend political support, and if so, how much support should be given (Kuratko, Morris & Covin, 2011). Also, middle managers endorse innovative perspectives

that arise from the top management and promote them to the employees. Regarding refinement, middle managers have the responsibility to shape the entrepreneurial initiatives. In other words, they mold the development of the idea or project, so it makes sense within the specific organizational context, given the strategy, resources and political structure (Kuratko, Morris & Covin, 2011). Furthermore, according to Kuratko, Morris and Covin (2011), the middle managers can be seen as shepherds who champion, protect and guide the initiatives of the employees. They have the responsibility to ensure that these entrepreneurial initiatives receive enough support throughout their development, so that they are not abandoned later on. Ensuring top management support and commitment to pursue innovative projects is crucial for successful product development (Kuratko, Morris & Covin, 2011; Florén & Frishammar, 2012; Kim & Wilemon, 2002).

In addition, Kuratko, Morris & Covin (2011) state that middle managers have to identify which resources are needed to develop the opportunity into a successful concept. Moreover, middle managers acquire resources from inside or outside the organization. This requires persuasion and negotiation skills. Resource acquisition implies that the middle management knows where and how to get the resources. Last but not least, middle managers strategically deploy the necessary resources for innovative projects.

When it comes to project management, Rekonen and Björklund (2016) focused in particular on the managerial activities in the FEI process and distinguished these activities according to whether they are task-oriented or people-oriented. The authors found that clarifying roles and setting goals, and coordinating the whole were the most dominant roles played by the (middle) management in the FEI as the task-oriented activities. In the early stages of the FEI, it is necessary to provide a common vision and understanding of the project, but also to set a common direction and to encourage information sharing. Later on, the emphasis was rather on coordinating for resources allocation. Furthermore, for task-oriented activities, the management can provide a suitable context for development work by establishing ways of working, encouraging exploration, and accommodating to diversity (Rekonen & Björklund, 2016). Finally, among others, the management has the task to take responsibility and ownership when it comes to decisions-making. This implies that in a FEI context, decisions can be shared between employees and management,

but that sometimes the management takes over for the final decision, when no clear decisions could have been reached by the employees. The management is also responsible for providing autonomy for decision-making. When it comes to the people-oriented activities, Rekonen and Björklund (2016) discovered that the management has to create an open and trustful environment for project development but should also provide support to the team (employees) by encouraging their team participation, giving them feedback and showing them their interest.

Chapter 3: Methodology

In this chapter, the methodology of our research is outlined. The research approach, strategy, process and design are elaborated upon. Also, a detailed description is given of the data collection and data analysis. Finally, the validity and reliability of the research is discussed.

3.1. Research Approach

This thesis took an interpretivist approach in terms of its epistemological position. This means that the subject matter of the social sciences —people and their institutions— was perceived fundamentally different from that of the natural sciences (Bryman & Bell, 2011). This implies a different logic which focused on the understanding rather than the explanation of human behavior. Concepts were therefore seen as that they can only be understood through the meaning they are being given by the actors. This signifies that knowledge can never be value free, and we acknowledge that prior knowledge, experience and attitudes will not only influence what they see, but also how they see it (Bryman & Bell, 2011). Thus, for this thesis, the case company was perceived as a social construct and its meaning was attributed by the social actors within this construct.

The ontological viewpoint of constructivism was preferred for this thesis. It implies that social phenomena and categories were in a constant state of revision, which directed the focus to the processes by which this is happening (Bryman & Bell, 2011). The knowledge and concepts used in this thesis, were regarded as something whose meaning was built up through interaction, which could therefore vary according to time and place. The actors had an active role in socially constructing the reality. For this thesis, this entailed that we focused on the sense-making of the social world by the actors in the process. Also, just as the respondents, we can never be value free in our interpretation of the world. However, this was recognized not as a limitation but rather as an understanding of the research process and seen as inseparable to this study.

3.2. Research Strategy, Process and Design

The thesis took a qualitative approach emphasizing the ways in which individuals interpret their social world (Bryman & Bell, 2011), which was crucial to get an in-depth understanding of the social phenomena from the actors' point of view. By emphasizing words rather than quantification, this strategy was helpful in the generation of new theories (Bryman & Bell, 2011). As the current literature did not provide a sufficient understanding of the phenomenon studied, a qualitative approach was most suitable.

The research process of the thesis was a combination of inductive and deductive methods. For case study research, it was found that when the predominant research strategy is qualitative, a case study tends to take an inductive approach to the relationship between theory and research (Bryman & Bell, 2011). The inductive nature of this thesis allowed for an understanding of the participants' view and their terms. However, as this thesis is based upon a thorough literature review before starting the data collection, we built upon this cognitive framework. The literature was not used to lead the interviewees in their answers, but rather to provide a clear framework for the research. This inductive approach combined with deductive elements is very common and implies an iterative process, which means a repetitive interplay between the collection and analysis of data (Bryman & Bell, 2011). During the research process, there have been several iterations between the theory and the findings in order to generate new theory.

A single case study design was applied, which entailed the detailed and intensive analysis of a single case (Bryman & Bell, 2011). In the case of this thesis, a single organization served as the object of study, where the different employee positions in this particular company were studied. As the focus was a bounded situation or system, this implied an intense examination of the setting (Bryman & Bell, 2011). The case was an object of interest in its own right, and we aimed to provide an in-depth elucidation of it, which is known as an idiographic approach (Bryman & Bell, 2011). For instance, in this thesis, the roles of middle management for decision-making in the FEI was studied in-depth, which lead to a better understanding of this phenomenon than it is currently available in the existing literature. Following the categorization of Stake (1995), this thesis adopted a instrumental case study, which focused on using the case as a mean of understanding a broader issue or following generalizations to be challenged (Bryman & Bell, 2011). It is not uncommon

for organizations to rely on middle management competencies for efficient decision-making in the FEI. Therefore, the same challenges could be expected. This made the case company a representative or typical case, which seeks to explore a case that exemplifies an everyday situation or form of organization (Bryman & Bell, 2011).

3.3. Data Collection Method

3.3.1. Unstructured Interviews

Unstructured interviews were used in the first stages of the research for this thesis to provide general information about the company, which led us towards the research topic. Also, information was gathered about the structure, culture and history of the organization and different decision-points in time were identified. Also, roles within the decision-making process, as well as overall challenges within the roles of the decision-makers were discovered. For a case study, unstructured interviewing is viewed as particularly helpful in the generation of an intensive, detailed examination of a case (Bryman & Bell, 2011).

We conducted unstructured interviews, where the respondents were allowed to respond freely, and the interviewer simply responded to points that seemed worthy of being followed up (Bryman & Bell, 2011). These interviews mainly had the character of a conversation, where we aimed for an understanding from the participants' point of view. The interviews were not recorded as we felt it was beneficial for making the participants feel comfortable to speak freely: it is known that recording might bias the respondent's subsequent behavior when they are informed about the recording (Bryman & Bell, 2011) and the data was not used for the data analysis of the research which decreased the need for recording. During the interviews, we followed an iterative process which was guided by topics or broad questions to funnel down the research topic from many different areas. During the process, we changed the interviewing strategy from asking open questions towards an even more broader approach where the participants were asked to chronologically visualize the innovation process from the beginning to the end using an empty sheet of white paper and a pen. This second approach provided even more broad as well as deep insights about the process as well as critical events of the innovation projects. It appeared that the decision-points in the front end process differed substantially among the interviewees, which

stressed the need to create a common language (not based on specific decision points as they were too different) for the interview guide for the semi-structured interviews. Also, we learned that the different employees have been working on different projects over time, which directed us towards choosing a chronological approach in structuring the questions for the semi-structured interviews, in order to get an overall development view over different phases, regardless of the current situation of a single project. By working iteratively with the interviews and the literature, we were able to identify a research area and a literature gap.

For these unstructured interviews, we identified thirteen persons via a purposive sampling method with the goal to sample the people that are relevant to the research (Bryman & Bell, 2011). The people were selected because of their relevance to understand the social phenomenon that is studied. Within this, we used snowball-sampling and theoretical sampling in order to get to the right people who could provide the necessary information. We collected insights from persons who were involved with the early stage innovation process from the beginning up to the implementation of the innovation within the organization, employees who are currently involved in the early stage innovation and their supervisors. Besides the News innovation department, insights were gathered from the Books innovation department within the case company. We identified two middle managers, ten business developers, one former business developer and one software developer. People with a position as business developer were seen as the employees working on (semi-)individual business innovation projects within the respective innovation department. We also interviewed a former business developer from the News division, who is currently running another department within the company. This department evolved from this person's former innovation project. The software developer employees represent the technical programmers who support the team of business developers in their strategy for the projects. The News and Books department's head of innovation refers to the employees' supervisors and are characterized as the middle management as this represents the 'linking pin' function which matches the middle management position in the academic literature. The top management of the case company and departments was excluded from the unstructured interviews due to availability constraints and our perception that the other interviewees provided us with sufficient initial insights into their decision-making role in this phase.

Appendix 1 shows the participants of the unstructured interviews. The participants' involvement within the innovation department should be seen as the time where the participants were personally involved in the FEI process. The case company faced a merger of different companies, which could lead to some interpretative differences of the participants' exact starting date. Therefore, the dates as stated in *Appendix 1* should rather be perceived as a generic overview of the different involvement periods of the participants.

3.3.2. Semi-Structured Interviews

For the data collection, semi-structured interviews were conducted using interview guides. Semi-structured interviews use a list of questions on fairly specific topics to be covered, but the interviewee has a great deal of leeway in how to reply (Bryman & Bell, 2011). This allows for more flexibility for the interviewee and the interviewer to ask and to answer questions, as new questions may be asked during an interview based on the answers of the respondent. Asking open questions allows respondents to answer in their own terms and it allows for unusual responses (Bryman & Bell). This encourages participants to express their own meanings and interpretations, which is of crucial importance in interpretivist research, as it aims for an understanding of how the actors involved give meaning to reality. However, there is still some structure involved as the purpose is to find an answer to the research question. Therefore, all questions were asked, and a similar wording was used from interviewee to interviewee (Bryman and Bell, 2011), which contributes to the validity.

3.3.3. Interviewee Selection

The population whereof the sample was taken consisted of all employees of the case company. As the research question guided the sampling of participants for the research, a non-probability sampling method was used. A theoretical sampling approach was used, which entailed sampling interviewees until theoretical saturation and selecting further interviewees on the basis of the emerging theoretical focus (Bryman & Bell, 2011). This method is limiting the external validity. However, this was not seen as a major problem: it reflects the notion that issues of representativeness are less important in qualitative research than in quantitative research (Bryman & Bell, 2011).

A lack of transparency in the sampling process is a criticism towards qualitative research (Bryman & Bell, 2011; Gioia, Corley & Hamilton, 2013). In order to increase the transparency of the thesis, the decision-making structure of a part of the case company is shown in *Figure 4*, as well as the people who were selected for the interview sample. The different colors represent the different organizational decision-making hierarchies, grey being the top management of the whole case company, blue being the top management of the different divisions, orange being the middle management of the innovation departments and green being employees. In the white boxes, the first number shows the amount of people that were selected, and the second number represents the total number of people working in that position. For the News division, there were in total one top manager, one middle manager, six business developers and two software developers for in News division. For the Books division, one CEO and one middle manager were identified, as well as one business developer and one business controller. In *Figure 4*, the other departments, middle managers and employees are also presented.

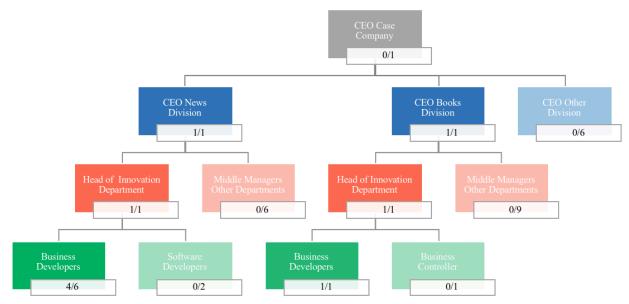


Figure 4. Part of the organizational chart reflecting the hierarchical decision-making and the selected participants for the semi-structured interviews. Source: unstructured interviews.

For researching the influence of the middle management on decision-making in FEI, two middle managers (orange) from the innovation departments were selected for the interviews. Furthermore, as we identified the decision-makers as being the top management and the employees, a sample

from the top management of the divisions (blue) and employees (green) having a direct connection with the selected middle managers was selected. The sample for the top management consists of the CEO for the News division and of the CEO for the Books division. The CEO of the mother company (grey), one level above the department CEO's, was excluded from the sample as this person was not in daily contact with the middle management, which limited his ability to reflect upon this role. Concerning the employee's sample, the role of the different employees in the decision-making process was examined. The employees who were responsible for decisionmaking in the project development in FEI were selected as interviewees: this excluded the software developers and business controller from the sample. This information was derived from the unstructured interviews. Due to one business developer being unavailable and a change in personnel (which meant that one of the business developers was no longer reachable and the new business developer was not yet able to reflect upon the decision-making process), we interviewed in total five out of the seven sampled business developers. This process resulted in sampling two top managers, two middle managers and five employees, with representatives from both the News and the Books divisions of the case company. These persons are represented in Table 1. Unfortunately, due to availability problems, the interview with the CEO of the Books division (Interviewee 9) was cancelled last minute and there was no possibility to reschedule.

Participants	Position in company in relation to decision-making	Location	Date
Interviewee 1	News division business developer 1	Malmö	20-04-2018
Interviewee 2	News division business developer 2	Malmö	19-04-2018
Interviewee 3	News division business developer 3	Malmö	18-04-2018
Interviewee 4	News division business developer 4	Malmö	20-04-2018
Interviewee 5	News division middle manager	Malmö	20-04-2018
Interviewee 6	News division CEO	Malmö	23-04-2018
Interviewee 7	Books division business developer 1	Stockholm	25-04-2018

Interviewee 8	Books division middle manager	Stockholm	24-04-2018
Interviewee 9	Books division CEO	Stockholm	Cancelled

Table 1. Interviewee Sample for Semi-Structured Interviews.

3.3.4. Interview Guide

As there are three different actors involved in the decision-making of the front end, we created three different interview guides: one for the employees, one for the top management, and one for the middle managers. To suit the context and language of the interviewees better (Bryman & Bell, 2011), in the employee-interviews we referred directly to (other) business developers when the interview guide mentions 'employees', to the first name of their supervisor when it comes to the 'middle manager', and to the first name of the CEO when it comes to the 'top management'. For the top management interview, the middle manager was referred to with his or her first name, and employees were named business developers. For the middle managers interviews, we followed the same labelling. The interview guides are exposed in *Appendix 2*.

The several topics as described by the decision-making categories were based on the categories distinguished in the literature review. However, these were not perceived as rigid topics but rather as guiding. If other decision-points came up during the interview, there was room for elaborating on these as well, as the semi-interview structure allows for this flexibility (Bryman & Bell, 2011).

All interview guides consisted of three parts and started with a part asking for general (fact sheet) information. This first part aimed at collecting general personal information that helped in contextualizing the interviewees answers (Bryman & Bell, 2011). This included questions such as age and educational background, company-related background information and questions regarding their position in the innovation department. Also, questions were included about their experience with business development and their involvement with the middle manager, as this could influence the findings. The second, third and fourth parts were customized according to the position of the decision-makers: different questions were asked for the employees, the middle manager and the top management.

The second part of the interview guide took a timeline approach and is inspired by Koen et al.'s FEI model (2001). It aimed at understanding which activities are undertaken in each phase and which matching decisions could be expected to derive from it. The employees were asked to refer to activities and decisions in a certain project phase where they have been involved with. 'Projects' were defined as the different early phase start-ups within the innovation department. The employees could reflect upon different projects, as they usually worked on different projects in different stages. The middle and top management were asked to relate to activities and decisions in general, but if it made it easier for them to answer the question(s), they could also refer to a certain project.

As described in the literature review, different scholars wrote about the activities in the front end. Chronologically seen, the Opportunity Identification phase precedes the other activities. In this research, this is defined based on Koen et al. (2001) as where the person, by design or default, identifies the opportunities that the organization might want to pursue, which can be business or technology driven. The question matching the Opportunity Identification decision-point was: "How did you identify the opportunity leading to *name of the project*?" for the employees and "Have you yet identified an specific opportunity for *name of the innovation process* to be worked on/ to be carried out/explore by the company?" for the top management.

Based on Koen et al. (2001), we identified that an idea follows an opportunity and precedes a concept when it is selected to work on. A concept refers to the composition of the project in terms of business and technological characteristics. This selection process encompasses the whole range from individual choices among self-generated options as well as a prescribed portfolio method and is therefore applicable to employees as well as the top management. The decision points related to it, were also mentioned by Florén & Frishammar, 2012. For the employee, this implied the initial selection of starting to work on an idea as well as the later decision of (not) continuing with the project, which was operationalized into "When you started working on *name of the project*, how did you decide to pursue this idea instead of others?" and "Have there been critical decisions to (not) continue with *name of the project*?". 'Idea' was defined as the initial thoughts for a business opportunity that were not yet developed into a concept or project. For the top management, this was the case when they made a Go/No-Go decision or chose to protect a certain idea, called 'pet projects' by Florén and Frishammar (2012). This was linked to the notion of legitimization, and therefore the following questions were included: "When taking a Go/No-Go decision, how did you

decide to pursue certain ideas/projects instead of others?" and "When taking a Go/No-Go decision, have there been critical decision(s) to (not) continue with a certain project?". This selection could be done using portfolio management (Koen et al., 2001), where alignment with the existing business could be a criterium (Florén & Frishammar, 2012). The decision of the top management closely related to this, is the allocation of resources (Koen et al., 2001; Florén & Frishammar, 2012), where resources are either financials or (employees with) certain competences. This was translated into "How did you decide to allocate resources (financial and human) to projects?" The Development category was derived from Florén and Frishammar (2012) and was linked to the activities described in the Idea Genesis and Opportunity Analysis elements by Koen et al. (2001). Decisions expected to flow out of the activities in this phase, concerned how to modify and shape the concept to improve it. During this process, employees are involved in legitimization activities (Florén & Frishammar, 2012). The questions covering these aspects, were for the employee: "How did you develop *name of the project* from idea to the current project?", "Did you at some point, make significant changes to *name of the project*?". Also, there were decisions made in relation to the planning and process of the project, which determined how the product will evolve (van Oorschot, Langerak & Sengupta, 2011; Verworn, Herstatt & Nagahira, 2008). The employee might have to collaborate daily with other actors, which he or she might be able to choose themselves. Also, employees as well as the top management can make financial decisions. Employees on the operational level are expected to be in charge of decisions in terms of planning and time allocation. Therefore, the questions "(How) Did you choose with whom to work on this project?", "How did you acquire and spend the financials for the project?" and "How did you plan your time for the project?" were included for the employees. For the top management, the first question was modified to suit the context better and was rephrased as: "Did you at some point interfere in a certain project?", which could relate to intervening in planning, process, HR and changes in concept.

As it was found that the top management influences the environment of the front end innovation process (Poskela & Martinsuo, 2009), a separate category was created for the top management, where activities took place that shape the context of the decision-makers. This could be financial ("How did you decide to allocate resources (financial and human) for *name of the innovation department*?"), but it was also found that an activity in the front end was to create an innovative culture, to set goals and to provide a vision (Murphy & Kumar, 1997). Creating an innovative

culture was defined as nurturing the creativity of the employees and helping in looking beyond past patterns (Murphy & Kumar, 1997). Therefore, "How did you take action to create or sustain an innovative culture at *name of the innovation department*?" and was included. Also, "How did you decide on the strategy (goals/vision) to follow at *name of the innovation department*?" was included, where strategy was defined as the overall set goals and vision as formulated by the top management.

The third part of the interview guide for the employees and the top management was linked to the second part. Here, we aimed to identify what information was taken into account when the activities described in Part 2 were executed, and where this information came from. A potential lack of information provision by the middle manager was investigated as well. Finally, in the fourth part, the interviewees were asked to reflect on the role of the middle manager in their decisionsmaking processes in general.

For the middle management, Parts 2, 3 and 4 of the interview guide were different as this position was in this thesis perceived as facilitator for the top management and employees. To gain insights about the middle manager's own perception of his/her information sharing role towards the decision-makers, a distinction was made between information towards the employees (Part 2) and to the top management (Part 3). The middle manager was asked per category as described in the employee's and top management interview guide, to elaborate whether these actors asked for specific information. If this was the case, follow-up questions were asked about which information was asked for and whether the middle manager perceived this information as influencing for the decision-making. This specific information could be strategic, technological or financial, or could be related to market. After this, it was asked whether and which information was provided on the manager's own initiative and whether this was perceived as influencing. Besides this, general questions were asked about whether they did not provide certain information to both actors. Both parts concluded with how the middle managers perceived their role for the employee's and top management's decision-making in general.

3.3.5. Interview Preparation

The interviews were conducted face-to-face in Malmö and in Stockholm, as this was the most convenient for the interviewees. The interviews were conducted in a quiet and private meeting room to provide privacy and to avoid disturbances. The interviews were conducted by both of us, where one person took an active role in asking the questions and the other person took a passive role. The passive interviewer took notes of interesting and noticeable quotes or events, kept an eye on the topics to be covered, and could intervene when it was felt that probing was needed. Bryman and Bell (2011) also stressed that the use of two interviewers contributes to a more informal atmosphere as it seems more as a discussion between three people rather than an exchange between two persons. The use of comprehensible language is important for a successful interview (Bryman & Bell, 2011). The language of the interviews was English to adjust to our language abilities. This was not perceived as hindering the interviewees as they showed a high standard proficiency in English despite their Swedish mother tongue. In the interview preparations, we made sure that we were familiar with the setting in which the interviewees work, which helped to understand the interviewees better (Bryman & Bell, 2011). The interviews were recorded using a smartphone voice recorder and were transcribed later. Transcription ensured that the interviewees' answers were captured in their own terms (Bryman & Bell, 2011) and that the match between the raw data, the data analysis and theory building was optimal.

3.3.6. Ethical Considerations

We acknowledge that integrity and quality is vital for the research that was conducted. Therefore, extensive attention was devoted to the practices in relation to our integrity. This study has not received any funding from external parties which could have led to compromising of the research. According to the ethical principles as outlined by Bryman and Bell (2011), we examined four main categories of ethical concerns.

• Avoid harm to participants: during the process of this thesis, we carefully minimized harm to the participants by taking care of the confidentiality of the participants when requested, using a non-disclosure agreement. When the respondent's identity had to be revealed, the respondents were told beforehand to whom the information would be supplied and the purposes for which it was used. Also, all information collected during this thesis will not be used for any further or non-research purpose.

- Informed consent: before participating in the research, the participants were fully informed about the nature of the research and topic, the purpose and the process. This ensured that the participants were able to make an informed decision about whether or not they wished to participate. The participants were told that they could refuse participation at any time. Also, the participants were informed about the use of recording equipment and their consent about recording was given prior to starting the interviews.
- No invasion of privacy: hand in hand with the informed consent, we gave the participants
 a genuine opportunity to refuse answering questions on whatever grounds they felt was
 justified (Bryman & Bell, 2011). Along with the non-disclosure agreement, we ensured the
 privacy of the participants.
- Avoid deception: before participating in the research, the participants were provided with the exact subject of the study and were informed of the research process and the recording equipment to mitigate chances of deception.

3.4. Data Analysis

The data gathered from the eight semi-structured interviews was analyzed using the Gioia, Corley and Hamilton's method (2013), which is defined as part of the grounded theory by Bryman and Bell (2011). This method was chosen as it provides a systematic approach to bring 'qualitative rigor' to the conduct and presentation of inductive research by integrating the informant's (interviewee's) voice with the researchers' interpretation (Gioia, Corley & Hamilton, 2013).

As Gioia, Corley and Hamilton (2013) argue to use existing literature in formulating a research question and therefore involve this relatively early in the process, this might have increased the chances of a 'confirmation bias'. However, we were fully aware of this phenomenon and aimed at reducing this risk by treating the use of literature very carefully. The methodology recommendations from Gioia, Corley and Hamilton (2013) in terms of research design and data collection were corresponding with our approach as earlier described and our interpretivist approach matches the assumptions lying beneath this method. To increase transparency, our working process is elaborated upon here.

The first step in analyzing was the formulation of 1s-order concepts, which were informant-centric terms and codes. There was little attempt to distill categories in this phase, which led to an overwhelming amount of codes, which is typical in this stage (Gioia, Corley & Hamilton, 2013). The next step was to convert these 1st-order concepts into 2st-order themes, by using researchercentric concepts, themes and dimensions. Here, we started seeking similarities and differences among the categories, and we used a time frame perspective when analyzing the employee's data and a level-perspective when analyzing the top management data. This categorization will be explained in more detail in *Chapter 4*. We ended up with twenty-three 2nd-order themes and eleven aggregate dimensions, which we labeled. In an iterative process, these themes were further distilled into aggregate dimensions, which possessed more abstract characteristics than the 2nd-order themes. This phase was highly iterative, as we attempted to make sense out of our data while cycling between emergent data, themes, concepts, dimensions and literature, having thorough discussions about the interpretations of the data. We aimed to balance the use of literature, to minimize a potential confirmation bias and allow for discovery without reinventing the well-ridden wheels (Gioia, Corley & Hamilton, 2013). This process was graphically shown using a data structure as in Figure 5, which displays how we progressed from raw data to terms and themes (Gioia, Corley & Hamilton, 2013). For our thesis, the aggregate dimensions represented the most dominant roles exerted by the middle manager that affected the decision-making of the top management (per decision-level) and the employees (per phase).

Our last step in finalizing our data analysis, was creating a dynamic picture, called a grounded theory model, which showed the relationships among the concepts that describe the phenomenon of interest and makes clear the data-to-theory connections (Gioia, Corley & Hamilton, 2013). This was done using both our thorough knowledge of the data as well as the literature.

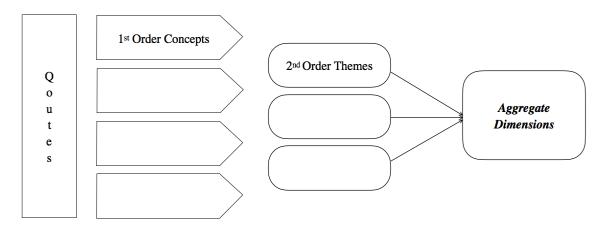


Figure 5. Graphical representation of the Gioia, Corley and Hamilton's method (2013).

3.5. Validity and Reliability

Throughout the thesis, we worked closely together and discussed our observations, findings and thoughts systematically and frequently. In this way, it was ensured that we agreed upon the findings, which is similar to inter-observer consistency and contributes to a high internal reliability (Bryman & Bell, 2011). External reliability, described as the degree to which a study can be replicated (Bryman & Bell, 2011), is difficult to ensure as the social setting and the circumstances of the study will change. However, in order to facilitate possible replication of this thesis, also known as dependability (Bryman & Bell, 2011), all documentation such as the problem formulation, sampling method, interview guides, recordings and transcripts of the interviews, and data analysis, are kept. This way of working contributed towards transparency and a high reliability. Internal validity shows whether or not there is a good match between the researchers' observations and the theoretical ideas that are developed (Bryman & Bell, 2011). As the used qualitative methodology aims for an in-depth understanding as close to the participants' perceptions as possible, this is a strength for the internal validity. Also, we were familiar with the context of the study, which enhanced a valid interpretation of the participants' answers. The internal validity was also ensured as the research question led the methodological approach, and the raw data led iteratively with the literature to the findings. Also, by using a transparent framework for data analysis process, it could be assured that the theory emerged from the data. The external validity or transferability of case study research has faced a great deal of discussion (Bryman & Bell, 2011). Some researchers have argued that the purpose of a case study is not to generalize to other cases or to populations beyond the case, because particularization rather than generalization constitutes the main strength of this research design (Bryman & Bell, 2011). A case study is not a sample of one, however there is a degree of generalizability to be found. As the case company is perceived as a representative or typical case for companies with decentralized departments, it is expected that the case company displays the same patterns for decision-making in the innovation process as other companies within and beyond the industry. Also, the role of the middle manager of the case company as the 'linking pin' for decision-making is perceived as typical for decentralized innovation departments. Therefore, findings from this study contribute to the knowledge for other organizations with decentralized innovation departments and for the role of the middle management in the FEI decision-making. Therefore, the general phenomenon identified in this case study is seen as partly generalizable.

In order to ensure confirmability, which is part of the trustworthiness criteria for qualitative research (Bryman & Bell, 2011), we have been reflective towards personal values and theoretical inclinations. We did deliberately not allow this to influence the conduct of research and the findings deriving from it (Bryman & Bell, 2011).

Chapter 4: Findings

In this chapter, the findings derived from Gioia, Corley and Hamilton's method (2013) will be presented as for the employees and the top management.

In this section, the data structure aims to bring clarity to how the middle manager affects the decision-making process in the FEI, from the employees and top management perspective. The employee decision-making process appeared to match the different decision-making phases and activities as described in *Chapter 2* and operationalized in *Chapter 3*. Therefore, the development of the roles of the middle managers for the decision-making of the employees will be structured according to the early Opportunity Identification phase, the Selection phase and the Development phase. For the top management, it appeared that their decision-making structure did not follow this logic as the decisions were more general and were not related to specific activities or phases in the front end. Therefore, to make better sense of the data, it was decided to structure the data according to the two identified types of decisions: the department-level decisions related to setting a strategy and the project-related decisions related to allocating resources.

The emergent data structure based on Gioia, Corley and Hamilton (2013)'s method with the 1st-order concepts, 2nd-order themes and aggregate dimensions will be presented throughout this chapter, using the data structure of *Figure 5*. In *Appendix 3*, all quotes and related 2nd-order themes can be found.

4.1 Role of the Middle Manager for Top Manager's Decision-Making

Derived from the interviews with the top management and the middle managers, different decisions appeared throughout the FEI process. It was perceived that there were two levels of decision-making for the top management: decisions about setting the strategy for the department (department-level): "He [top manager] is also CEO of [other department of organization], so he needs [...] to weigh that [my proposal] together with the [other department of organization] strategy." (Interviewee 8), and decisions regarding resource allocation for a specific project (project-level): "We [top management] have a case right now, [project] where they [employees]

have requested more budget and more money to scale it up." (Interviewee 6). On these different levels, different roles of the middle managers for decision-making were derived.

4.1.1 Roles of the Middle Manager in Setting the Strategy for the Innovation Department

For setting the strategy for the innovation department, the middle manager appeared to endorse two roles: informing and inspiring.

4.1.1.1 Informing Role (department-level)

On the department level, the top management takes decisions on fostering the generic conditions for an effective FEI. In these decisions, the middle manager has an informing role towards the top management, where he or she is asked to provide updates and information about what is going on and being done in the department. Although the information might concern an individual project, this is not supporting the decision-making related to these projects but rather providing an overall view of the innovation department which helps in setting the strategy.

I [top manager] expect, what I expect is to get some updates on what they are [innovation department] doing, get some information and insights. – Interviewee 6

I [middle manager] think it's important that he [top manager] knows about our progress, but not on every step of the way, but more, okay, we have reached this level, now we have this many customers, now we have sold that many courses, you know, the broader picture of the success.

- Interviewee 8



4.1.1.2 Inspiring Role

Besides informing, it has been found in the data that the middle manager has a general inspiring role, where he or she challenges the current way of thinking and doing. This can be proposing new

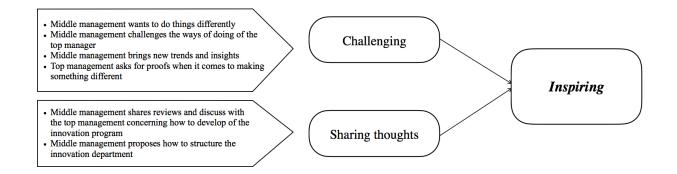
insights or ideas related to the core business, but also introducing change. Furthermore, the middle manager can share his or her thoughts with the top management about how to develop the current strategy of the department, which is done on a regular basis.

But I [middle manager] could also be the one who tries to inspire them [top management] to think differently. Sometimes I bring up trends and insights that we found, or early ideas or concepts of what we could do. – Interviewee 5

Yes, of course, I [middle manager] would say that my biggest challenge is to explain to [top manager] why we should do this or that. Is it something that is a natural part of [innovation department] ecosystem or portfolio, or is it something outside, not at all related [new insights].

- Interviewee 8

[Middle manager] is reporting to me [top manager] so now we have sort of regular reviews and discussion about how to develop that part [innovation department]. – Interviewee 6



4.1.2 Roles of the Middle Manager in Resource Allocation for the Innovation Projects

For the resource allocation decisions, the middle manager appeared to have two roles: championing and informing.

4.1.2.1 Championing Role

On the project-level, the data shows that the decision-making of the top management is firstly supported by a championing role. The middle manager has the ability to promote certain projects at the top level by pushing these forward when he or she strongly believes in their potential. By doing so, the middle manager sets a focus for the top management on the selected projects. If the

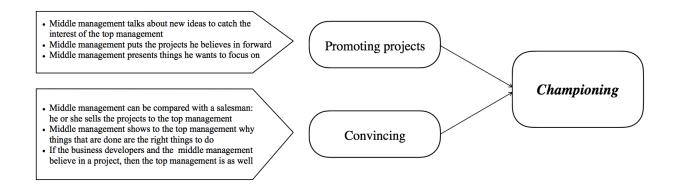
middle manager and his or her team does not believe in a project, then the chances that the top management will buy it are low. Also, the middle manager has a convincing role, where he or she pitches the projects to the top management to persuade them of their potential success, so more resources can be given. In that case, the middle manager finds himself or herself as a sales(wo)man.

I [middle manager] would say, since it is up to me more or less how I present things and what I want to present, and what I want to focus on, I do influence him [top manager]. – Interviewee 8

He [middle manager] is in a way pitching it. Ok, this is what he would like to do. And I [top manager] am always listening to his advice, thoughts about it. But because he got the pitch from his team, he is a bit of a gatekeeper in that sense as well. So, I mean he is putting it forward, if it is not endorsed by him then it would not come to me. – Interviewee 6

Then I'm [middle manager] the agency director or salesman again I would say. I come with a concept and I spent money on it and now I want more money on it. My boss it the client in that case and I'm the one who wants to sell him something. – Interviewee 5

In the end it depends if I [top manager] believe in that project and that it will deliver and that I based on as I said before on how much do I feel like [middle manager] and the team believe in the product, if they believe very strongly, then of course I get influenced by that. – Interviewee 6



4.1.2.2 Informing Role (project-level)

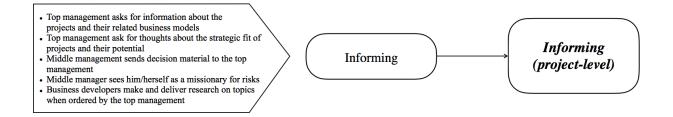
Besides championing, the informing role was also apparent on the individual project-level. The top management is highly interested in the business model part, especially in costs and returns, and receives information prior to decision meetings. Also, it has been found that the top management

can require information from the middle manager about a top management-driven opportunity or idea, so the top management can evaluate the opportunities before choosing to develop it or not.

The questions he [top manager] generally asks are of course management questions in general. He wants to know the stuff we talked before: How do you make money? And what will be the costs? [...] he's interested in what made us choose to go with that project and what insights have we found. – Interviewee 5

I [top manager] have been following the projects a little bit and I got this decision material now, and then we will have a discussion where I can ask questions and get a better feel for where things are. – Interviewee 6

Yes, we had examples in that, where top management sees something that we need to get more information on just to get help for understanding and then I [middle manager] bring back the question to my team, research it, then we deliver insights. – Interviewee 5



4.2 Role of the Middle Manager for Employees' Decision-Making

Derived from the rich interview data from the employees and the middle managers, different dimensions appeared. It was perceived that the middle manager affects the decision-making of the employees in different ways depending where in the FEI phase the projects are. For each phase, different roles of the middle managers for the decision-making are derived. It also appeared that the middle management has a low involvement for operational detailed project decisions.

4.2.1. Roles of the Middle Manager in the Opportunity Identification Phase

For the earliest phase, the middle manager appeared to adopt two roles: setting the focus and bringing new insights.

4.2.1.1 Setting the Focus Role

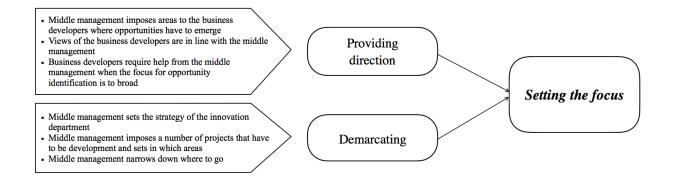
From the data, it appeared that the middle manager provides direction in terms of which way the employees could go when they are looking for new opportunities to pursue. The middle manager can suggest, stimulate and approve potential ways to go, for instance when it comes to business areas or target markets. When performing this role, the middle manager prepares a certain setting for the employees to play in rather than attempting to impose the focus. Besides providing a direction, the middle manager also helps in demarcating the options, for instance by narrowing down the amount and focus of the projects.

Just looking back at the time with [innovation department], 4-5 months, I [middle manager] haven't had that many questions but we had that as a prioritize activity, to find areas we could look in. – Interviewee 5

Well, he [middle manager] and I [employee] met with him very regularly, and it made sense to him as well to focus on this segment, so the most important thing that he contributed in that phase was like giving the go ahead that we should go on doing this. – Interviewee 4

But I [employee] think it's more like he [middle manager] might also see that as a help for us to be able to focus, because I know that a lot of people in [innovation department] that have a hard time focusing, like a hard time seeing the blank paper, like what should I do? – Interviewee 1

He [middle manager] is sort of setting the strategy for like how much projects we're [innovation department] gonna do and maybe which areas we should focus on. – Interviewee 1



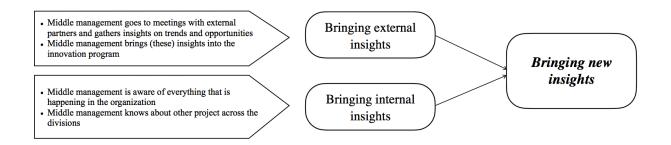
4.2.1.2 Bringing New Insights Role

Derived from the data, the middle manager is also bringing new insights about trends and facts from inside and outside the organization that the employees can use when identifying opportunities. For example, the middle manager attends various meetings with external partners and he or she is also highly aware of what is being done across the organization. These insights are usually one-way from the middle manager to the employees and facilitate them in coming up with new ideas, rather than steering them into a certain direction.

I'm [middle manager] also responsible for the whole company's relations with Google. And of course, there is a lot of opportunities of information coming from that, these meetings, about trends and facts. [...] and I try to bring them back as insights into our process. – Interviewee 5

So, I [employee] don't really know how... but I just think they [middle managers] are aware of everything that is happening [in the organization]. [...] And they obviously thought it was a good start to do it here – Interviewee 3

I [middle manager] tried to inform me first and then them [employees] about the projects that are running of the other part of the organization. – Interviewee 5



4.2.2 Roles of the Middle Manager in the Selection Phase

For the Selection phase, the middle manager appeared to endorse two roles: supporting and discussing.

4.2.2.1 Supporting Role

The middle manager has a supporting role as he or she can directly or indirectly allow employees to spend time working on an idea, if he or she feels that the idea has potential. In addition, the middle manager can actively encourage the employees to continue working on certain ideas by cheering the work in process. Finally, the middle manager can take an even more active role by taking over the decision entirely from the employees, especially when it comes to political issues.

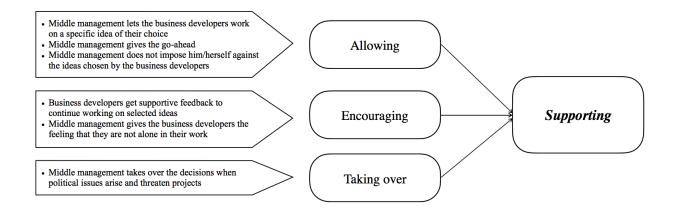
Well, she [middle manager] let us [employees] do it, let us spend our time on it. But it wasn't the only project that we were doing, but she of course supported it in the sense that, yeah, I see that you managed to find a good idea, now try to prove it more. – Interviewee 1

So, the most important thing that he [middle manager] contributed in that phase was like giving the go ahead that we [employee] should go on doing this and also backing it up with the resources so we could get in [name] as a consultant to do all of the back-end work. – Interviewee 4

I [middle manager] would say it's my role is to give them [employees] a feeling that we do this together, we are a team we are doing this together, the feeling of security. – Interviewee 8

Because it was such a political challenging project and it took a lot of our [employee's] energy. So, we wanted to like, okay, are we gonna do this, or are we not gonna do this, because we cannot be in a sort of middle land. So, it was [middle manager] who said that we should pause it.

- Interviewee 1



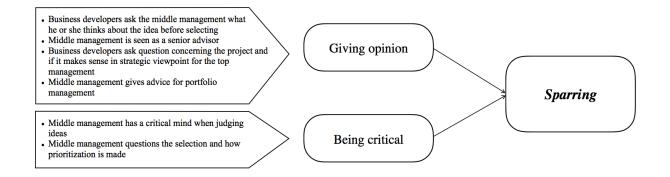
4.2.2.2 Sparring Role

The sparring role implies that the employees use the discussions with the middle manager to come to their own (individual) decisions in the Selection phase. This implies a two-way process where both parties share insights and opinions. Firstly, employees seek for the opinion of the middle manager before making up their minds. They tend to ask for input concerning the likelihood that top management will support their ideas later on, if the idea makes sense on a strategic viewpoint, but also in terms of prioritization. Furthermore, the middle manager is seen as having a critical mind, as he or she is further away from the daily development of the idea.

They [employees] tend to ask me [middle manager] what I think about the ideas of course in general. They don't really ask me for decisions, they haven't... – Interviewee 5

And also, maybe have this critical mind looking at the ideas since I [middle manager] am a bit further always from the actual development and also the strategic role: why is this more important to go for instead of that idea? – Interviewee 8

He [middle manager] can sort of ask me [employee] questions or give me ideas that can help me to sort of sort out my own thoughts. – Interviewee 4



4.2.3 Roles of the Middle Manager in the Development Phase

For the Selection phase, the middle manager appeared to have three roles: clarifying, advising and supporting.

4.2.3.1 Clarifying Role

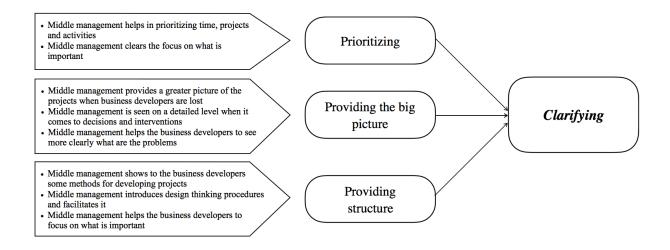
The data collected reveal that the middle manager has a clarifying role. The middle manager is of great help when it comes to sorting the thoughts of the employee when they are feeling lost. He or she is able to provide the employees with the big picture and new perspectives, as the employees tend to focus on the details and therefore can get lost in the things that have to be done or experience trouble in defining the problem. In addition, the middle manager clarifies the structure of the process. Finally, the middle manager supports the prioritization of tasks and time. By having this role, employees can understand better what has to be done in the Development phase and how to approach the work.

He [middle manager] helps us [employees] to prioritize. We said for example that we are going to make a little movie for [innovation department] and do a new movie every third month. So, we had something we can share on social media and show when we do presentations. And I said, well, I said that I wanted to do that, but how important is the movie? Because it will be time-consuming. He said, well, you better do the movie after the meeting with [top manager]. – Interviewee 3

I think he [middle manager], his standpoint is, okay, let me know if you [employee] have trouble allocating your time to different projects, then I can step in and help you with that. If someone is like 'I am so stressed, and I don't know what to do, aaaah.' – Interviewee 1

He [middle manager] often has another perspective on these things than I [employee] have and when you're working in the project, you sort of, it's very easy to like to lose the greater perspective on what you're working on, and you tend to focus on details, so what he often helps me to do, is [...] just sort of help me gain other perspectives. – Interviewee 4

Not sure if it's insights. I [middle manager] would rather say that since there is a proven way of working with design thinking, it is more showing methods and coaching to do more of the hard part of design thinking. – Interviewee 5



4.2.3.2 Advising Role

It has been found that the advising role includes a guiding element, where the middle manager actively provides input on the overall strategic direction of project. This could be advising on what could be done next, how to approach political issues, but also on how the employees should deal with strategic change or a pivot within a specific project. Furthermore, the middle manager can direct the employees to certain people to contact or to work with for developing the project. This role implies actively steering and guiding the activities by active participation of the middle manager. Also, by providing information, the middle manager complements the knowledge that is available on the employees' side for successful development. The middle manager has high internal organizational knowledge in general, such as knowledge about the capabilities, the people and the financials.

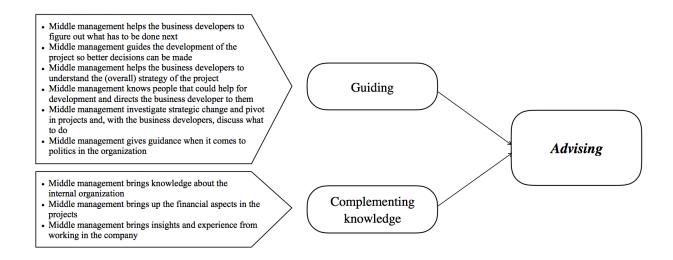
Now, it's more like [middle manager] and I [employee] deciding like, what to do next within the project, like we could do something for [project], which we did, and we tried to involve [project]. And we spoke about maybe doing something for [project]. – Interviewee 3

So, in that sense with the like politics of this corporation, uhm, that's also one aspect that I [employee] asked [middle manager] for guidance a lot. – Interviewee 4

But it could also be like, so, I [employee] am struggling with finding this person, they don't really repeat [respond], or like, would you [middle manager], I don't know, fix it? Haha, or could you give me advice on someone else I could talk to? – Interviewee 1

He [middle manager] let me [employee] do the decisions, but I discussed it with him before [about strategic shift in relation to organizational capabilities], so he is a good chief, manager for me.

- Interviewee 2



4.2.3.3 Supporting Role

The middle manager, in his or her supporting role for the Development phase, is more active than in the Selection phase. In this role, the middle manager allows the employees to do what they are doing by directly or indirectly approving small decisions in the project. When it comes to bigger decisions, such as strategic changes or increases in investment, the middle manager participates in the decisions, as he or she has to sign off on these. In other words, the middle manager is directly involved as decision-maker. Here, the middle manager does not take over the decisions, but he or

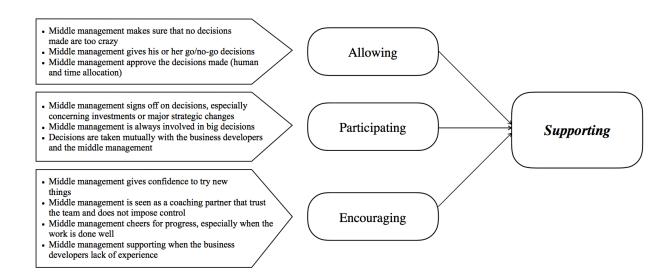
she co-decides with the employee(s) concerned. Also, the middle manager can cheer the employees for their work in developing an idea.

I [employee] wrote some applications and me and [coworker] were responsible for the other one. And [middle manager] of course approved them before we sent them in. – Interviewee 1

If I [employee] need to hire another person within the group, or if I need to increase our overhead expenses, like dramatically, or if I need to make a change in our strategy, then I would need [middle manager] to sign off on that. – Interviewee 4

If they [employees] want to have more money or if it's a pivot for example, they want to change the concept or the core of what we're doing. [...]. When it comes to bigger decisions, I [middle manager] would say [that I am a part of the decision]. – Interviewee 8

People ask for feedback for their work, but don't ask for motivation or cheering. And it's not something that I [middle manager] do instrumentally. I do it because I think they [employees] have done a good job. – Interviewee 5



Chapter 5: Discussion

After having presented the results, this chapter will provide a deeper understanding and interpretation of the findings of how we can understand the relationship between the roles of the middle managers and the decision-making for both the top management and the employees.

Initially, our thesis aimed at investigating the role of the middle management as a information broker in particular. After conducting the interviews and analyzing the data, we found that the specific types of information that we were looking for in the interview guide, were not in particular related to the specific phases. Rather, the data told us that the brokerage role of the middle manager was broader than only encompassing information brokerage: the middle management brokerage role can be perceived as a mediator, facilitating the transfer of information and resources between the top and the employees, among others. In the different decisions throughout the FEI a pattern can be seen in these brokerage roles of the middle manager. Therefore, the brokerage role will be defined in this chapter as not only including certain information, but as the role that mediates different parties, wherever these parties are situated in the organization. Also, other roles of the middle manager for decision-making that did not have a direct link with brokerage, were found.

5.1 How the Middle Manager affects Top Manager's Decision-Making

Several findings confirm that the middle management affects the decisions made by the top management, as reflected by Wooldridge and Floyd (1992). In the case company it was found that the top management does not make decisions without consulting the middle manager: "I [top manager] am always listening to his [middle manager] advice, thoughts about it" (Interviewee 6). Therefore, the middle management can be seen as a key influencer of the top management's decisions, as he or she is highly involved in helping to formulate decisions at the top-level. It was found that the top management is not at all involved in the daily operational decision-making of either the innovation department or projects: "I [top manager] try to [...] intervene in a more strategic level, I mean, that's how I see my role. [...] But I'm probably unlikely to interfere because they [innovation department] are choosing red instead of blue or they are doing that or this. [...] I don't want to limit them." (Interviewee 6). This autonomy of the innovation department shows that the influence of the top management in general is less intrusive, in line with decision-making

in decentralized organizations (Kuratko, Morris & Covin, 2011). The fact that the top management does not impose a lot of decisions, was appreciated by the middle management: "I [middle manager] don't want them [top management] to make the decision on what to do [in the innovation department]." (Interviewee 5). However, the middle management plays a significant role in the top management's decision-making, where they have an informing role for both decision-levels, which are an inspiring role on the department level and a championing role on the project-level.

5.1.1 Informing Role (department-level and project-level)

As the top management requires the middle manager to co-decide on decisions concerning the innovation department, it has been found that the middle manager has an *informing role* towards the top management. Two different aggregate dimensions represent the informing roles on the two different levels. They show how the middle manager provides the top management regularly with information and facts about what is happening in the innovation department in general, what and why ideas are being developed and about the progress. Besides this, the top management is also informed about the projects themselves, such as concerning for example the costs and risks, how much money will they make, and how do they fit the company's strategy. This is in line with Kuratko, Morris and Covin (2011) who state that the middle manager serves as a conduit between the top and the operational level. By doing so, a connection between the top and employees is created, referring to the vertical brokerage role. As one of the middle managers stated: "that's my [middle manager] way of showing what we've done, decreases the lengths, distance, between the top and my team." (Interviewee 5).

Informing the top management is crucial, as it has been found that the top management lacks the detailed information regarding the innovation department and projects as he or she is not involved on a daily basis with the operational part of the business: "I [top manager] mean, of course he [middle manager] is much more involved on a day-to-day level [...] I don't know exactly how they're doing." (Interviewee 6). This can be explained by the decentralized structure at the innovation department where employees take hands-on operational decisions which do not require active participation of the top. The middle manager can bring this operational knowledge to the top due to his unique position (Wooldridge, Schmid & Floyd, 2008), which helps in taking more informed decisions by the top management.

The data showed that the information role does influence both resource allocation and overall strategic decisions. For resource allocation decisions, Hutchison-Krupat and Kavadias (2014) also reflected on the fact that the top management lacks field knowledge and task-specific knowledge to take proper resource allocation decisions. Moreover, the middle manager provides a broad picture of the innovation department when informing the top management, hence facilitates better strategic decision-making: "[Middle manager] is reporting to me [CEO], so now we have sort of regular reviews and discussions about how to develop that part [innovation department]" (Interviewee 5). Also, on the project-level, the middle management supports the decision-making of the top management by informing for Go/No-Go decisions: "We got the decision material sent to us [top management] [...] and we will make a decision I guess to go forward or not" (Interviewee 6). Furthermore, the middle management steers the expectations of the top management: "Expectation management is to put the expectation on the right level to pursue, but also to be able to overdeliver." (Interviewee 5).

All in all, through the informing role, the middle manager decreases the effects of bounded rationality, as described in *Chapter 2.2.4*. Hence, the middle management is a useful link between the operations and the top management and transfers knowledge from the bottom to the top. As a result, top management's decisions are aligned with the operational perspective (Kuratko, Morris & Covin, 2011).

The *informing role* is directly related to the two other aggregate dimensions, which are the *inspiring* role and the *championing* role. Both of these aggregate dimensions can only be performed using information transfer. However, with these roles, the information sharing is not purely based on giving (neutral and value-free) insights but are specifically meant to convince and steer the top management.

5.1.2 Inspiring Role (department-level)

In line with Koen et al. (2001), the elements in the FEI are surrounded and powered by 'The Engine', consisting of top management support. The decisions made by the top management are therefore in particular focused on creating the right conditions for the development of

entrepreneurial initiatives. In order to take those decisions, the middle manager has an *inspiring role*. Firstly, inspiring encompasses challenging the status quo. One of the middle managers expressed it as following: "My team [the innovation department] is about doing things differently and doing things in new ways, and sometimes it's challenging the way we do it today" (Interviewee 5). The goal of the middle manager is to make the top management think in a different way by bringing up new trends, insights or ideas. With this, the middle manager is able to influence the top management in his or her decisions in order to turn the decisions-making in favor of the innovation department in general. This could bias the decision-making process, confirming Gould and Fernandez (1989)'s findings that brokers can manipulate the information to suit their interests: "I [middle manager] do influence his [top manager's] picture of our success in how often I give him updates and feedback about what we're doing and how I present things" (Interviewee 8). By doing so, the middle management is able to ensure top management commitment and shield the employee from unfavorable decisions. This shows parallels with the findings from Kuratko, Morris and Covin (2011), who explain that the middle management's role is to shepherd and to protect entrepreneurial initiatives.

By doing so, the middle manager aims to bring a new perspective to the top management when formulating, setting and implementing strategies concerning the innovation department. From the interviews, it was observed that the middle manager introduces more explorative thinking at the top management: "Of course, I [middle manager] would say that my biggest challenge is to explain to [top manager] why we should do this or that [about explorative idea]." (Interviewee 6). This is in line with Floyd and Wooldridge (1992, 1996), who mention that the middle manager redefines the strategic context by molding the explorative thinking of the top. Therefore, as mentioned by Wooldridge, Schmid and Floyd (2008), the middle management can be seen as a change agent. The top management gets new inspiration when making strategic decisions on what direction the innovation department should take. This inspiration is also sought by the top management on his own initiative: "I [top manager] sort of present a little bit the idea [change in innovation department] to him [middle manager] [...] and then we discussed it and [middle manager] thought about it and came back with his take on [it] and this is how he would like to do it." (Interviewee 6).

5.1.3 Championing Role (project-level)

When it comes to resource allocation decisions, which can be paralleled to Go/No-Go decisions from the top management, the middle management has a *championing role* as he or she promotes certain projects to the top management and tries to convince him or her of their potential, so the top management knows how to adequately allocate the resources: *«I [middle manager] am the agency director or salesman again I would say. [...] My boss [top management] is the client in that case and I'm the one who wants to sell him something."* (Interviewee 5). The *championing role* is not surprising as a lot of literature mention that the middle manager's duty is to shepherd the entrepreneurial initiatives by protecting them, championing them and guiding them (Kuratko, Morris & Covin, 2011). It also confirms the findings of Long, Cunningham and Braithwaite (2013) who view the middle manager as a facilitator of resource flows.

For resource allocation decisions, we found that promoting is a matter of trust and that strong relationships between the top and middle management are essential when championing: "He [middle manager] has value by putting forward things he believes in and that has gone through his scrutiny and he thinks we [top management] should prioritize. I always put him in that role because I trust him, and I think he can deliver." (Interviewee 6). This trust enhances the positive effect of the middle management in influencing the decisions.

When championing, it is crucial that the middle manager convinces the top management of the potential of a project or idea. This relates to the persuasion skills that middle managers need when acquiring resources, as acknowledged by Kuratko, Morris and Covin (2011). Promoting, or just putting forward a project is not enough: "If I [top manager] feel that they [employees and middle manager] are a bit doubtful, then I am less likely to be interested, because obviously if the people doing it and involved in it, if they doubt themselves, then it's quite not figured out yet." (Interviewee 6). This can be understood as the stronger the belief is about a certain project or idea, the higher the chances are that the top management will commit. In return, this will facilitate the access to the resources necessary for successful product development (Kuratko, Morris & Covin, 2011; Florén & Frishammar, 2012; Kim & Wilemon, 2002).

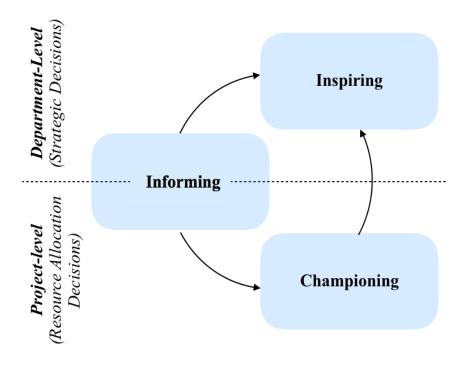


Figure 6. How the Middle Manager affects Top Manager's Decision-Making.

5.2 How the Middle Manager affects Employees' Decision-Making

When examining the roles throughout the phases of the FEI, overall a clear pattern emerges, where the intensity of the involvement within the decision-making increases significantly throughout time. Also, a movement from neutral involvement towards an increasing opinion-sharing involvement is perceived. These patterns will be discussed in the following headings. What can also be derived from our data, is that all roles empower the employees in a certain way to make their own decisions rather than an attempt to coordinate: "He [middle manager] didn't do those control things, so he trusted me [employee], so that's a good thing." (Interviewee 2). The coordinating role as described in the literature (Floyd & Wooldridge, 1992; Rekonen & Björklund 2016) seems to be less salient in the context of decentralized departments. This is in line with the findings of Rekonen and Björklund (2016) who stated that providing autonomy was a common activity of managers in the FEI.

Moreover, Rekonen and Björklund (2016) stress the importance of the management for encouraging team participation. Surprisingly, such a role did not evidently emerge from our data.

On the one hand, it was perceived by the employees that teamwork provides them the opportunity to get insights from team members. This was valuable for their decision-making as they could rely upon more complete information provision: "This team I [employee] had for few days were [was] important. They came up with some ideas that were important." (Interviewee 2). However, in the data, we found that the employees in the case company were used to work very independently and individually instead: "[The] business developers [employees] are working alone in their projects." (Interviewee 5). This lack of encouragement to work in teams by the middle manager may therefore pose a hinder for the employees' decision-making as they do not share knowledge and insights between colleagues.

5.2.1 Opportunity Identification Phase

In the Opportunity Identification phase, the roles *setting the focus* and *bringing new insights* indicate that the middle manager is involved in the employee's decision-making on a low level: he or she is not steering or leading, but rather shaping the right conditions for effective opportunity identification. However, it was found that employees perceived this phase as something that they can handle on their own when it comes to decision-making. Also, the process on how to make decisions regarding opportunity identification was clear for them, and therefore active involvement of the middle manager was not found neither desired: "It [opportunity] was something about my experience. I've been working as a journalist and manager for a long time [...] It was all mine." (Interviewee 2). This independency of the employees in this phase is characteristic for decentralized organizations, where most of the decisions are taken by the employees (Kesting & Ulhøi, 2010; Chindia & Pokhariyal, 2015).

The FEI is seen as fuzzy but manageable (Koen et al., 2001), which became clear from our data, especially in this Opportunity Identification phase and the Development phase and the middle manager roles connect to this 'organizing'. Both of the roles relate to the brokerage concept as described by Gould and Fernandez (1989).

By setting the focus, the middle manager can demark the decisions-making of the employees. A given focus for opportunity identification is mainly coming from the top management's strategic decisions, which implies an active vertical brokerage role connecting the top management views and plans with the operational level. This can be paralleled with the findings of Floyd and

Wooldridge (1992, 1996) who see the middle manager as an implementer of strategy. For instance, the middle manager communicates the strategic direction from the top management to the employees (Shi, Markoczy & Dess, 2009) and can ensure strategic alignment. Also, parallels can be made with Kuratko, Morris and Covin (2011) who mention that the middle manager molds the entrepreneurial initiatives, so it makes sense within the specific organizational context, given the strategy. Furthermore, the setting the focus role is perceived as beneficial for the employee's decision-making in this phase. As "a lot of people in [innovation department] have a hard time focusing" (Interviewee 1), the suggestion of areas to look into can help in narrowing down which ways the employees can go for. This provides direction and helps the employees in making decisions in a more structured way as found in the data: "When he [middle manager] said we should do something within edutainment, then it's easier for a person to narrow it down. I [employee] know a lot of people [in the innovation department], need to be told what to focus on. An initial push into some, or like, more a help to take away everything else" (Interviewee 1). However, this does not imply that the middle manager imposes a strict focus on the employees by limiting their breadth of decision-power. The employees are free in deciding for themselves on which opportunities to focus: "I mean, when it comes to edutainment, and health [...] he [middle manager] really wants us to do something within that. We haven't yet, but yeah." (Interviewee 1). The setting the focus role is therefore facilitating rather than leading the employees in their decisions. A high level of autonomy for decision-making is typical for a decentralized structure, where the degree of independency varies depending on the management style (Chindia & Pkhariyal, 2015). As the middle management expressed the importance of trust within the innovation department: "The best way to get good things out the team is that you get them to work in a way they believe in" (Interviewee 5), this explains why the employees are given much space for their own decisions.

The *bringing insights role* is also contributing to shaping the decision-making environment in this phase. The middle manager can be seen as broker as he or she actively brings insights from the outside environment as well as from the different parts of the organization. By constantly taking in and sharing insights, the middle manager is facilitating the process of opportunity identification and decision-making on the background, rather than intruding: "It could be discussions about concepts that they [external parties] have with us and I try to bring them back as insights into our

process." (Interviewee 5). The employees can use these insights as an initial basis or starting point: "The opportunity came from within, because a lot of people were talking about it." (Interviewee 1). Furthermore, the middle manager provides the employee with insights about what is happening in the whole organization. The role of the middle manager in channeling the strategic information throughout the organization and in aligning the organization with the environment was also found in the research of Floyd and Wooldridge (1992, 1996).

5.2.2 Selection Phase

During the Selection phase, the middle manager becomes more present in the employee's decision-making. Instead of only providing 'neutral', generally value-free insights, in this phase the middle manager is asked to reflect and to give the employees their critical opinion and explicit support for their decisions.

In the *supporting role*, the middle manager encourages, cheers and motivates employees for their selection decisions. By doing so, employees are given a feeling a security in a trustful environment, as they know that the middle manager indirectly approves their decisions to select or to continue working on an idea: "I [middle manager] give them [employees] a feeling that we do this together, we are a team, we are doing this together, the feeling of security." (Interviewee 8). Bringing psychological support can be related to the people-oriented activities mentioned by Rekonen and Björklund (2016). It is linked to providing a suitable context and providing support within the team.

The supporting role includes not only mental support, but also (in)formal signing-off on the choices that are being made. In other words, the middle manager approves the employee's decisions and allows them to continue working on an idea, by giving them a (in)formal Go/No-Go. By doing so, the middle manager lends them (political) support (Kuratko, Morris & Covin, 2011). Allowing can also be seen from a resource perspective: "Well, she [middle manager] let us [employees] do it, let us spend our time on it. But it wasn't the only project that we were doing, but she of course supported it in that sense." (Interviewee 1). As the employees are given the freedom to select projects on their own, the middle manager indirectly allows them to spend their resources in terms of time on the specific project. In this sense, the middle manager is rather facilitating in the supporting role.

The last aspect within the *supporting role* is the active participation or 'taking-over' of the middle manager. The middle manager has the ability to unburden the employee's decision-making, especially when it comes to political issues: "It was such a political challenging project and it took a lot of our energy. So, we [employees] wanted to like, okay, are we gonna do this or are we not gonna do this?" and "If he [middle manager] feels like it's easier to not do something that's political challenging, then he should be the one that makes the decision." (Interviewee 1). Rekonen and Björklund (2016) also touched upon the fact that the management may take the responsibility for final decisions. In this sense, the middle manager supports the employees in their decision-making by shielding the project from for instance political challenging decisions. Also, Kuratko, Morris and Covin (2011) highlighted that the middle manager shepherds entrepreneurial initiatives by protecting them. The other way around, a lack of participation of the middle management or by not taking over the decisions, the employees perceive hinder in this phase, which makes them feel less supported: "Some projects [are] just like flying around in a vacuum in some sense, like 'oh we have great ideas', and then, because we [employees] don't get a Go or a No-Go decision, they sort of just like, fly around" (Interviewee 1).

In this phase, the middle manager also plays a *sparring role*, where he or she provides input which helps in collecting a broad picture of the situation and in making proper selection decisions. This is in line with Kuratko, Morris and Covin (2011) who state that the middle management has the responsibility to evaluate entrepreneurial initiatives of the employees. The *sparring role* provides the employees with opinions and critical thoughts, which was appreciated by the employees in their decision-making, as it makes them reflect on their decisions: "You have to discuss this, otherwise [...] you will be like your mother, 'oh you are so good! And [...] everything is so good!', that's a little bit dangerous too." (Interviewee 2). However, it was also found that this role could influence the selection decisions towards the opinion of the middle manager, which could potentially cause a bias. One of the middle managers acknowledged this: "I think they see me as a senior person and therefore maybe tend to listen a bit more to me. [...] my opinion on things, tends to mean, weight heavier." (Interviewee 8). It has to be noted that providing critical input was not explicitly mentioned by previous research, however it can be found implicitly in the people-oriented roles of the management as mentioned by Rekonen and Björklund (2016). This thesis found explicitly that the employees put a strong emphasis on getting critical thoughts from the

middle manager when making selection decisions. This aspect within the sparring role is therefore an addition to the current literature and shines new light upon the interactions between the middle management and the employees.

5.2.3 Development Phase

In the Development phase, the role of the middle manager is most apparent compared to the other phases. Here, the employees are actively searching for his or her involvement, opinion and advice. In this phase, the middle manager and the employees are both active to enhance the decision-making of the employees.

Firstly, the *clarifying role* helps the employees in sorting out their own thoughts. It has been found that the employees sometimes lack a clear understanding concerning time and project activity prioritization. The middle manager can clarify their minds by providing them with a broader overview. Also, sometimes employees feel lost in their project and are not able to take a step back. The middle manager, as external actor, has the ability to unfuzz their thoughts: "He [middle manager] often has another perspective on these things than I [employee] have and when you're working in the project, you sort of, it's very easy to like lose the greater perspective on what you're working on, and you tend to focus on details" (Interviewee 4). This role was touched upon by Rekonen and Björklund (2016) as part of the task-oriented roles, who also called this clarifying. It was found that, especially during the Development phase, this role appeared to be of significant importance for the employees: "He [middle manager] often helps me [employee] to [...] gain other perspectives on what I can do, and [...] can help me to see more clearly, what choices I should make." (Interviewee 4). The middle management also perceived this role: "When they [employees] have set up the bigger picture of why we should do it, then I [middle manager] am a part of that discussion." (Interviewee 8). The middle manager also clarifies processes in the Development phase in terms of ways of working and activities to undertake. The aspect of providing structure was also found by Rekonen and Björklund (2016), who mentioned that the management pursues task-oriented activities such as establishing ways of working. In this way, by clarifying, the middle manager is not taking the decision or providing new input but supports the decision-making by clarifying the broader picture. This creates a clearer environment for decision-making which empowers the employee to make better choices.

The *advising role* demands a more active role of the middle manager as she or he will provide the employees with input they can use when making decisions. Firstly, the middle manager complements the knowledge of the employees regarding the internal organization, such as the organizational capabilities, the strategy or political powers. This helps the employees in taking more informed decisions, where they can feel more confident about: "He [middle manager] let me [employee] do the decisions, but I discussed it with him before [about strategic shift in relation to organizational capabilities], so he is a good chief, manager for me." (Interviewee 2). As they become better informed, employees overcome the challenge of bounded rationality, as presented in *Chapter 2.2.4*. Therefore, it is acknowledged again that the middle management should be perceived as key organizational brokerage individuals (Wooldridge, Schmid & Floyd, 2008).

This advising role is also guiding the employees on what can be done next and what has to be done next with a project on a strategic level when they are feeling lost. By doing so, the employees can properly integrate the advice of the middle manager to make adequate decisions on how to further advance with the project or idea: "I mean, he has been [...] helping us along the way and making sure we don't do anything too crazy" (Interviewee 4). As the middle manager guides the development of ideas, it can be paralleled with Kuratko, Morris and Covin (2011), who mention that the middle manager shapes the entrepreneurial initiative, so it suits the organizational context. From our data, it has been found that the middle manager also directs the employees to the right people that can help the development of the project and that he or she provides political guidance. Again, Kuratko, Morris and Covin (2011) elaborated on this shepherding role of the manager that guides and protects the entrepreneurial initiatives.

The data showed that, for the middle manager, guiding is also ensuring that the employees' decision-making is in line with the strategy. As an employee stated: "I need to, like, make sure I still work towards the same goals as, that are set for [innovation department]. So, I don't, cling on to old goals or old strategies." (Interviewee 7). This stresses the vertical brokerage role of the middle manager, where he or she has a downward influence as he or she implements the strategy formulated by the top management (Floyd & Wooldridge, 1992, 1996; Shi, Markoczy & Dess, 2009). As a result, the organizational actors are strategically aligned. By doing so, the middle

manager also facilitates the decision-making of the employees: "It does [help me in my decision-making], to know which strategy we have forward. It's easier then to like, look at [...] the proposals I [employee] get for the projects and be like, 'okay, this is something that aligns with our strategy, or this is something that maybe doesn't." (Interviewee 7).

Overall, the *supporting role* mainly provides the employees with a feeling of security, as they know that the middle manager will take the end responsibility for their decisions by being informed and sometimes even by participating in big strategic decisions, such as an increase of investment or a strategic change within a project. This creates an environment of trust where the employees can feel secure to take decisions: "He [middle manager] has been [...] signing off on what we [employees] do, [...] he doesn't go into a lot of details, unless I ask him to. He generally trusts his staff to make the right decisions and come to him when they need help." (Interviewee 4) and "If I [middle manager] am on board, I'm backing them up in the decision-making, I believe in their road map and if I don't, I tell them, and we can talk about it." (Interviewee 8). The allowing aspect clearly shows the link with the decentralized department, as the employees are free to take their own decisions. This allowing and participating aspects can be linked to the responsibility and ownership roles as described by Rekonen and Björklund (2016), who also stress the feeling of security.

Trust is also explicitly perceived in the encouraging aspect, where the middle manager more actively provides support: "He [middle manager] is like a coaching partner. He trusts you and I [employee] can feel that's good. You need to have a person that trusts you in that position." (Interviewee 2). Also, encouragement helps the employees in feeling more secure in making decisions when they lack certain experience: "I [employee] haven't do[ne] any startup before so I had a lot of coaching from [middle manager] [...] they supported me a lot, I was really a rookie." (Interviewee 2). It was pointed out by a middle manager that encouraging or cheering is perceived as crucial in supporting the decision-making of the employees as a lack of it hinders the employees in going further. "Since projects are in such an early stage and you know that in terms of the odds you could fail. If no-one says that you're doing a good job and help you see the progress, it could be hard" (Interviewee 5).

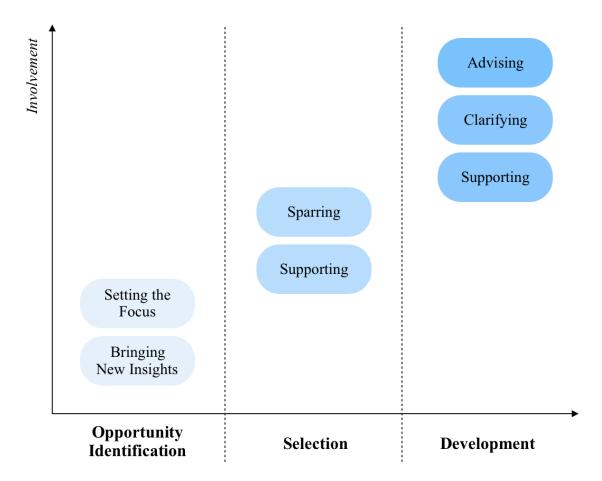


Figure 7. How the Middle Manager affects Employees' Decision-Making.

Chapter 6: Conclusion

In this final chapter, the conclusion and managerial implications are provided. Also, some limitations are highlighted. This thesis closes by providing recommendations for further research.

6.1 Conclusion

This thesis has investigated how the middle manager affects the decisions-making of the top management and employees throughout the FEI of a decentralized innovation department. It has been found that the middle manager has the ability to affect the decisions made by the top management and the employees to improve the quality of the decisions made, as mentioned by Wooldridge and Floyd (1992). Several roles of the middle management were derived.

Two decisions have been found for the top management, which are setting the strategy for the overall innovation department and allocating resources for the specific projects. We discovered that the middle manager has different roles in affecting these decisions-levels. Firstly, when it comes to defining the strategy, the middle manager influences the decisions made by informing (department-level) and *inspiring*. With this, the middle manager serves as a conduit between the top management and the operational level (Kuratko, Morris & Covin, 2011), which helps the top management to overcome the challenge of bounded rationality and more informed strategic decisions can be made. Furthermore, the middle manager can inspire the top management by providing new perspectives and by directing him or her towards a more explorative thinking when setting the strategy at the innovation department. Here, the middle manager can be seen as agent of change (Wooldridge, Schmid & Floyd, 1997). Secondly, the top is influenced for resource allocation decisions as the middle manager performs an *informing role* (project-level) and a championing role to mediate the relationship between the top management and the employees (Gould & Fernandez, 1989). As information broker he or she provides the adequate projectknowledge, so the top management is fully informed regarding the operational level. Moreover, as a champion (Floyd & Wooldridge, 1992, 1996; Kuratko, Morris & Covin, 2011), the middle manager promotes ideas or projects being developed at the innovation department to the top management and tries to convince him or her of their potential to obtain resources.

Regarding the decisions made by the employees, it has been observed that the roles of the middle manager vary throughout the phases Opportunity Identification, Selection and Development, and that the involvement of the middle manager increases throughout the process. In the Opportunity Identification phase, the middle manager sets the focus and brings new insights which shape the right conditions for effective opportunity identification, without steering or leading. When setting the focus, the middle manager connects the top management views and plans with the operational level to ensure strategic alignment (Shi, Markoczy & Dess, 2009). As he or she brings new insights, the employees can incorporate these into their decisions. For the Selection phase, two roles emerged: supporting and sparring. The middle manager can choose to support the selection decisions by encouraging, allowing and taking-over. This provides a feeling of security when employees are taking decisions. Also, the middle manager is perceived as a sparring partner, where he or she evaluates the entrepreneurial initiatives (Kuratko, Morris & Covin, 2011) and gives his or her opinion and critical thoughts so that the employees can reflect better on their decisions. Finally, the middle manager *clarifies*, *advices* and *supports* in the Development phase, and these roles encompass a higher involvement. When he or she clarifies minds or ways of working (Rekonen & Björklund, 2016), the middle manager provides a broader perspective on the project and creates an environment where better choices can be made. Also, as an advisor, the middle manager has the ability to provide input and to guide the development of the idea, which supports employees in making informed and strategically-aligned decisions. Also, in this phase, the middle manager can support the decisions by providing a feeling of security.

All in all, the middle manager is certainly not a passive actor in the decision-making processes in the FEI. Instead, he or she can act to enhance the performance of the decision-makers, and with that contribute to successful product development decisions.

6.2 Managerial Implications

This thesis has provided insights in the decision-making processes of the employees and the top management in the FEI. The findings presented a thorough overview of how the middle management affects the decisions in either the different time phases for the employees as well as on the different decision-levels as identified for the top management. It has shed light upon the different roles performed by the middle management in doing so. This leads to a better

understanding of the interactions between the actors involved in the earliest phase of the innovation process.

We identified that the decision-making of the employees and top management can be affected by the actions of the middle manager, who is performing different roles. Furthermore, we observed that the employees require a higher involvement of the middle manager in the later stages of the FEI and that the top management always involves the middle manager in his or her decisions. Hence, ensuring that the middle management effectively performs the right roles with the adequate level of involvement is necessary for more successful decision outcomes. Moreover, it is important to highlight that the intensity of the roles is dependent on the individual characteristics of the middle manager as well as on the individual decision-makers themselves and the organizational environment. Differences in the degree of reliance on the middle management vary and therefore, the roles as described may not be beneficial for all individuals in all contexts.

For the top management and the employees, these outcomes enable reflections upon their own limitations in the decision-making process. Also, we provided a better understanding of the roles of the middle manager, which can spark discussions about individual strengths and weaknesses of the middle manager. Consequently, it is possible to increase his or her performance using adequate HR support tools, so strengths can be nurtured and developed further, and weaknesses can be tackled. By using the findings of this thesis, managers and practitioners increase their knowledge of the decision-making process and can better support the middle manager in his or her role. This will lead to a more efficient decision-making process of the company.

An important implication is that the middle manager should be perceived according to his or her function instead of his or her place in the organizational chart. This implies that the roles as described should be interpreted as broad (brokerage) roles which could be performed by other individuals than the 'formal' middle management. Therefore, it is crucial to properly identify who performs such roles in the organization.

6.3 Limitations

A key limitation which is inherent to the nature of case study research, is the limited generalization of the findings as our thesis is based on a single case study, where particularization of the findings is stressed instead of generalization (Bryman & Bell, 2011). Our thesis is a single case study of a company operating in the media industry in Sweden. Therefore, our findings should be interpreted cautiously when applying them within a different organizational context, such as in a different industry, country or culture.

Also, as the roles of the middle manager are examined especially in the context of decentralized departments, the findings might not bring the same value for centralized department, as the organizational decision-making structure differs. In addition, as the findings are based on the middle managers from our sample, they are most likely affected by the middle manager's individual characteristics and their personal strengths and weaknesses. Therefore, when examining the roles of the middle management, it should be evident that the performance and outcomes of the roles are affected by the qualities of the individuals and might vary across individuals holding the middle management position.

Moreover, due to the unfortunate cancellation of one of the sampled top managers, the results concerning the top management decision-making are restrained by a smaller sample size. This implies that these results should be interpreted with more caution, as the top management's view is slighter represented.

6.4 Future Research

This thesis focused upon the decision-making processes and the roles of the middle manager especially in the context of the front end innovation, which contributes to the existing literature using a time-frame perspective for the employee's decision-making and a decision-level perspective for the top management. The identification of the manifested roles provides new insights on which future research can build upon, for example by focusing on how the organization can support the middle manager to better carry out these roles in the different decision-stages and levels. Also, research can examine how individual characteristics and traits of the decision-makers

influence the enactment and outcomes of the roles of the middle manager and how the middle manager can respond to these influences. Furthermore, as our thesis focused on the decision-making in a decentralized organizational structure, future research could provide clarity for companies with alternative (combinations of) decision-making structures. This could lead to the identification of new roles or shines light on potential differences for the described phases and levels.

References

Akgün, A. E., G. S. Lynn, and R. Reilley. (2002). Multi-dimensionality of learning in new product development teams. *European Journal of Innovation Management*, *3*(2): 57–72.

Antonelli, C. (1997). The economics of path-dependence in industrial organization. *International Journal of Industrial Organization*, *15*: 643–75.

Argyres, N. S., & Silverman, B. S. (2004). R&D, organization structure, and the development of corporate technological knowledge. *Strategic Management Journal*, 25(8-9), 929-958.

Balogun, J. (2003). From blaming the middle to harnessing its potential: Creating change intermediaries. *British Journal of Management*, 14(1), 69-83.

Bartlett, C. A., & Ghoshal, S. (1993). Beyond the M-form: Toward a managerial theory of the firm. *Strategic Management Journal*, *14*: 23-46.

Boeddrich, H. J. (2004). Ideas in the workplace: a new approach towards organizing the fuzzy front end of the innovation process. *Creativity and Innovation Management*, 13(4), 274-285.

Bonner, J. M., Ruekert, R. W., & Walker Jr, O. C. (2002). Upper management control of new product development projects and project performance. *Journal of Product Innovation Management*, 19(3), 233-245.

Bryman, A & Bell, E. (2011). Business Research Methods (3ed.). Oxford: Oxford University Press.

Büyüközkan, G., & Feyzıoğlu, O. (2004). A fuzzy-logic-based decision-making approach for new product development. *International Journal of Production Economics*, *90*(1), 27-45.

Chindia, E. W., & Pokhariyal, G. P. (2015). Organizational Structure and Accuracy of Performance Forecasting in Large Manufacturing Firms in Kenya. *International Journal of Managerial Studies and Research*, *3*, 1-6.

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

Cooper, R. G. (2008). Perspective: The Stage-Gate® Idea-to-Launch Process—Update, What's New, and NexGen Systems. *Journal of Product Innovation Management*, 25(3), 213-232.

Cooper, R., Edgett, S., & Kleinschmidt, E. (2001). Portfolio management for new product development: Results of an industry practices study. *R&D Management*, *31*: 361-380.

Dutton, J. E., Ashford, S. J., O'neill, R. M., Hayes, E., & Wierba, E. E. (1997). Reading the wind: How middle managers assess the context for selling issues to top managers. *Strategic Management Journal*, 407-423.

Ebner, W., Leimeister, J. M., & Krcmar, H. (2009). Community engineering for innovations: the ideas competition as a method to nurture a virtual community for innovations. *R&D Management*, *39*(4), 342-356.

Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, 8(1), pp. 1–20.

Elkins, T., & Keller, R. T. (2003). Leadership in research and development organizations: A literature review and conceptual framework. *The Leadership Quarterly*, *14*(4-5), 587-606.

Florén, H., & Frishammar, J. (2012). From preliminary ideas to corroborated product definitions: Managing the front end of new product development. *California Management Review*, *54*(4), 20-43.

Floyd, S. W., & Wooldridge, B. (1992). Middle management involvement in strategy and its association with strategic type: A research note. *Strategic Management Journal*, 13(S1), 153-167.

Floyd, S. W., & Wooldridge, B. (1996). *The strategic middle manager: How to create and sustain competitive advantage*. Jossey-Bass Publishers.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15-31.

Gould, R., & Fernandez, R. (1989). Structures of mediation: A formal approach to brokerage in transaction networks. Sociological Methodology, 19: 89-126.

Covin, J.G., and Slevin, D.P. (2002). The Entrepreneurial Imperatives of Strategic Leadership, in Hitt, M.A., Ireland, R.D., Camp, S.M, and Sexton, D.L. (eds.), *Strategic Entrepreneurship: Creating a New Mindset* (Oxford, U.K.: Blackwell Publishers): 309-327.

Hutchison-Krupat, J., & Kavadias, S. (2014). Strategic resource allocation: Top-down, bottom-up, and the value of strategic buckets. *Management Science*, 61(2), 391-412.

Kesting, P., & Parm Ulhøi, J. (2010). Employee-driven innovation: extending the license to foster innovation. *Management Decision*, 48(1), 65-84.

Khurana, A., & Rosenthal, S. R. (1997). Integrating the fuzzy front end of new product development. *IEEE Engineering Management Review*, 25(4), 35-49.

Kim, J., & Wilemon, D. (2002). Strategic issues in managing innovation's fuzzy front-end. *European Journal of Innovation Management*, 5(1), 27-39.

Koen, P., Ajamian, G., Burkart, R., Clamen, A., Davidson, J., D'Amore, R., ... & Karol, R. (2001). Providing clarity and a common language to the "fuzzy front end". *Research-Technology Management*, 44(2), 46-55.

Kornish, L. J., & Hutchison-Krupat, J. (2017). Research on Idea Generation and Selection: Implications for Management of Technology. *Production & Operations Management*, 26(4), 633-651.

Krishnan, V., & Ulrich, K. T. (2001). Product development decisions: A review of the literature. *Management Science*, 47(1), 1-21.

Kuratko, D.F., Morris, M.H. & Covin, J.G. (2011). *Corporate Innovation & Entrepreneurship*. International 3rd edition. South Western Cengage Learning.

Li, P. Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review*, 27(1), 125-138.

Liew, A. (2015). The use of technology-structured management controls: changes in senior management's decision-making behaviors. *International Journal of Accounting Information Systems*, 17, 37-64.

Likert, R. (1961). New Patterns of Management. New York: McGraw-Hill.

Ling, Y., Floyd, S. W., & Baldridge, D. C. (2005). Toward a model of issue-selling by subsidiary managers in multinational organizations. *Journal of International Business Studies*, *36*(6), 637-654.

Long, J. C., Cunningham, F. C., & Braithwaite, J. (2013). Bridges, brokers and boundary spanners in collaborative networks: a systematic review. *BMC Health Services Research*, *13*(1), 158.

Lurdes Calisto, M. de (2017). Senior-level Managers' Traits and the Assessment of Intrapreneurial Behavior – Exploring the Relevance of Bounded Rationality. *Proceedings of The International Conference on Intellectual Capital, Knowledge Management & Organizational Learning*, 42-49.

Mangaliso, M. P. (1995). The strategic usefulness of management information as perceived by middle managers. *Journal of Management*, 21(2), 231-250.

Marginson, D. E. (2002). Management control systems and their effects on strategy formation at middle-management levels: evidence from a UK organization. *Strategic Management Journal*, 23(11), 1019-1031.

Martinsuo, M., & Poskela, J. (2011). Use of evaluation criteria and innovation performance in the front end of innovation. *Journal of Product Innovation Management*, 28(6), 896-914.

Mintzberg, H. (1979). An emerging strategy of direct research. *Administrative Science Quarterly*, 24(4), 582-589.

Moenaert, R. K., De Meyer, A., Souder, W. E., & Deschoolmeester, D. (1995). R&D/marketing communication during the fuzzy front-end. *IEEE Transactions on Engineering Management*, 42(3), 243-258.

Murphy, S. A., & Kumar, V. (1997). The front end of new product development: a Canadian survey. *R&D Management*, 27(1), 5-15.

O'Reilly, C. A. (1989). Corporations, culture and commitment: Motivation and social control in organizations. *Ca. Manag. Rev.* 31:9–25.

Oorschot, K. E. van, Langerak, F., & Sengupta, K. (2011). Escalation, De-escalation, or Reformulation: Effective Interventions in Delayed NPD Projects. *Journal of Product Innovation Management*, 28(6), 848-867.

Poskela, J., & Martinsuo, M. (2009). Management Control and Strategic Renewal in the Front End of Innovation. *Journal of Product Innovation Management*, 26(6), 671-684.

Quinn, J.B. (1985) Managing innovation: controlled chaos. *Harvard Business Review*, 63, 73–84.

Rekonen, S., & Björklund, T. A. (2016). Perceived managerial functions in the front-end phase of innovation. *International Journal of Managing Projects in Business*, *9*(2), 414-432.

Rochford, L., (1991). Generating and Screening New Product Ideas. *Industrial Marketing Management*, 20(4), pp.287-296.

Shi, W., Markoczy, L., & Dess, G. G. (2009). The role of middle management in the strategy process: Group affiliation, structural holes, and tertius iungens. *Journal of Management*, *35*(6), 1453-1480.

Simon, H. A. (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society*, *I*(1), 25-39.

Smith, J. E., & Winkler, R. L. (2006). The optimizer's curse: Skepticism and post-decision surprise in decision analysis. *Management Science*, *52*(3), 311-322.

Stake, R.E. (1995). The Art of Case Study Research. Sage.

Sundbo, J. (1999). Empowerment of employees in small and medium-sized service firms. *Employee Relations*, 21(2), 105-127.

Verworn, B., Herstatt, C., & Nagahira, A. (2008). The fuzzy front end of Japanese new product development projects: impact on success and differences between incremental and radical projects. *R&D Management*, *38*(1), 1-19.

Winston T. H., K. (2005). The optimal design of fallible organizations: invariance of optimal decision criterion and uniqueness of hierarchy and polyarchy structures. *Social Choice And Welfare*, (1), 207.

Wooldridge, B., Schmid, T., & Floyd, S. W. (2008). The middle management perspective on strategy process: Contributions, synthesis, and future research. *Journal of Management*, 34(6), 1190-1221.

Appendices

Appendix 1: Interviewee Participants for the Unstructured Interviews

Participant	Position in company	Date of interview	Involvement within innovation department
1	News division middle manager	07-02-2018 19-01-2018 23-01-2018 + several informal discussions	08-2014 – present
2	News division business developer 1	06-02-2018	09-2013 – present
3	News division business developer 2	23-01-2018	2015 – present
4	News division business developer 3	19-01-2018 23-01-2018 + several informal discussions	10-2016 – present
5	News division business developer 4	22-01-2018 31-01-2018	12-2016 – present
6	News division business developer 5	23-01-2018	01-2017 – present
7	News division business Developer 6	17-01-2018	03-2017 – present

8	News division business developer 7	22-01-2018	05-2017 – present
9	Software developer	18-01-2018	07-2017 – present
10	News division former business developer	20-02-2018	2014 – 11-2016
11	Books division middle manager	12-02-2018 (group interview)	04-2014 – present
12	Books division business developer 1	12-02-2018 (group interview)	07-2014 – present
13	Books division business developer 2	12-02-2018 (group interview)	01-2015 – present

Appendix 2: Interview Guides

Interview Guide for the Top Management

Part 1: General information

- What is your age?
- What is your educational background?
- Do you have any prior knowledge or experiences in terms of business development?
- When did you start working with *name of the innovation department*?
 - o With which project were/are you involved
- Since when have you worked with *name of middle manager* as being his/her boss?
- Can you shortly explain your role in relation *name of the innovation department*?

Part 2: Decision-making related to *name of innovation department*

- Shaping the Environment at *name of the innovation department* (department level)
 - o How did you decide to allocate resources (financial and human) for *name of the innovation department*?
 - o How did you take action to create or sustain an innovative culture at *name of the innovation department*?
 - o How did you decide on the strategy (goals/vision) to follow at *name of the innovation department*?
- Opportunity Identification (projects-level)
 - o Have you yet identified a specific opportunity for *name of the innovation department* to be worked on/ to be carried out/explore by the company?
- Selection (project-level)
 - When taking a Go/No-Go decision, how did you decide to pursue certain ideas/projects instead of others?
 - related to protecting and portfolio management
 - When taking a Go/No-Go decision, have there been critical decision(s) to (not) continue with a certain project?
 - If yes, when and how?

- How did/should you decide to allocate resources (financial and human) to projects?
- Development (projects-level)
 - o Did you at some point interfere in a certain project?
 - Planning, process (how it should be done), HR, change in concept

Part 3: Information flow

For every identified decision in part 2:

- Why: On what information did you base this (decision)?
- Where did you get the information from?
 - o If not from own knowledge/experience: who gave you the information?
- What was the role of *name of middle manager* in this process?
 - o How did *name of the middle manager* influence this process?
- Do you perceive that the *name of middle manager* did not provide you with the necessary information?

Part 4: Final questions

- Where do you feel that *name of middle manager* can add the most value you are making decisions for a project and *name of the innovation department*?
 - What kind of information do you feel you need from *name of middle manager* to take decisions?
- When do you feel that you are the best at making decisions for a project and *name of innovation department* (without *name of middle manager*)
 - o For what kind of information do you feel that you are the best positioned to have it and take decisions?
- Do you perceive that the *name of middle manager* lacked in providing necessary information?

Interview Guide for the Middle Management

Part 1: General information

- What is your age?
- What is your educational background?
- In terms of business development, what is, in short, your previous experience or knowledge before joining this innovation department?
- When did you start working as a middle manager for *name of the innovation department*?
- Can you shortly explain your role in relation to the innovation department?
 - o Can you shortly explain your role in the project?

Part 2: Information to employees

Some questions will refer to the identified employee-activities: (1) Opportunity Identification, (2) (Idea) Selection, (3) Development

- For all 3: Do the employees ask you for specific information regarding *activity category*? (strategic, market, technological, financial)
 - o If yes: which?
 - Do you perceive that this information influences the employees in their decisionmaking?
- For all 3: Do you provide the employees information on your own initiative for *activity category*?
 - o If yes: which?
 - Do you perceive that this information influences the employees in their decisionmaking?
- Is there any information you do not provide to the employees, which may limit them in their decision-making?
 - o If yes: why?
- For all 3: How do you perceive your role (influence) in the decision-making of the employees?

Part 3: Information to top management

Some questions will refer to the identified top management activities: (1) Shaping the Environment, (2) Opportunity Identification, (3) Selection, (4) Development.

- For all 4: Does *name of the top management* ask you for specific information regarding *activity category*?
 - o *If yes:* which?
 - o Do you perceive that this information influences *name of the top management* in this/her decision-making?
- For all 4: Do you provide *name of the top management* information on your own initiative for *activity category*?
 - o *If yes:* which?
 - Do you perceive that this information influences *name of the top management*
 in his/her decision-making?
- Is there any information you do not provide *name of the top management*, which may limit him/her in his/her decision-making?
 - o *If yes:* why?
- For all 4: How do you perceive your role in the decision-making of *name of the top management?

Interview Guide for the Employees

Part 1: General information

- What is your age?
- What is your educational background?
- In terms of business development, what is, in short, your previous experience or knowledge before joining this innovation department?
- When did you join the innovation department?
- Since when have you worked with *name of the middle manager* as supervisor?
- On what project are you working?
 - o Can you shortly explain your role in the project?

Part 2: Decision-making related to *name of the employee's project*

- Opportunity Identification
 - o How did you identify the opportunity leading to *name of the project*?
- Selection
 - When you started working on *name of the project*, how did you decide to pursue this idea instead of others?
 - Have there been critical decision(s) to (not) continue with *name of the project*?
 - If yes, when and how?

Development

- o How did you develop *name of the project* from idea to the current concept/project?
- o Did you, at some point, make significant changes to the *name of the project*?
 - If yes: why did you undertake and how?
- o (How) Did you choose with whom to work on this project?
- o How did you acquire and spend the financials for the project?
- o How did you plan your time for the project?

Part 3: Information flow

For every identified decision in part 2:

- Why: On what information did you look for/base this (decision)?
- Where did you get the information from?
 - o If not from own knowledge/experience: who gave you the information?
- What was the role of *name of the middle manager* in this process?
 - How did *name of the middle manager* influence this process?

Part 4: Final questions

- Where do you feel that *name of the middle manager* can add the most value when making decisions for *name of the project*?
 - What kind of information do you feel you need from *name of the middle manager*?
- When do you feel that you are the best at making decisions for *name of the project*
 (without *name of the middle manager*)
 - What kind of information do you feel you need from *name of the middle manager*?
- Do you perceive that the *name of the middle manager* lacked in providing necessary information?

Appendix 3: Quotes and 2nd Order Themes

1. Setting the Strategy for the Innovation Department

Quotes	2 nd Order Themes
Actually, the first really test is on Monday when we'll do out quarterly review with him [top manager]. That's something I [middle manager] have been inviting him to and the CFO, that's nothing he has been asking for. And that's my way of showing that what we've done, decreasing the lengths, distance, between the top and my team	Informing
I expect, what I expect is to get some updates on what they are doing, get some information and insights	
I [middle manager] think it's important that he knows about our progress, but not on every step of the way, but more, okay, we have reached this level, now we have this many customers, now we have sold that many courses, you know, the broader picture of the success	
So, I [middle manager] do influence his picture of our success in how often I give him updates and feedback about what we're doing and how I present things	
My [middle manager] team is about doing things differently and doing things in new ways and sometimes it's challenging the way we do it today	Inspiring
But I [middle manager] could also be the one who tries to inspire then to think differently. Sometimes I bring up trends and insights that we found or early ideas or concepts of what we could do	
Yeah, of course, I [middle manager] would say that my biggest challenge is to explain to [top manager] why we should do this or that [about explorative project]. Is it something that is a natural part of [innovation department] ecosystem or portfolio, or is it something outside, not at all related (new insights)	
[Middle manager] is reporting to me so now we have sort of regular reviews and discussion about how to develop that part [innovation department in general]	
He came up with this model you've seen with the different stages, that was [middle manager]. He proposed that model to me and said it was fine	

2. Allocating Resources for Specific Projects

Quotes	2 nd Order Themes
I [middle manager] can also talk about new ideas, new products, and try to get them hooked on that	Championing
He has value by putting forward things he believes in and that has gone through his scrutiny and he things we should prioritize. I always put him in that role because I trust him, and I think he can deliver	
I [middle manager] would say, since it is up to me more or less how I present things and what I want to present, and what I want to focus on, I do influence him	

He is in a way pitching it. Ok this is what he would like to do. And he's, I am always listening to his advice, thoughts about it. But because he got the pitch form his team, he is a bit of a gatekeeper in that sense as well. So, I mean he is putting it forward if it is not endorsed by him then it would not come to me	
Then I'm [middle manager] the agency director or salesman again I would say. I come with a concept and I spend money on it and now I want more money on it. My boss it the client in that case and I'm the one who wants to sell him something	
You need to show her/him. Why you're doing the right thing like the thing you're doing and the way you're doing it why is it right? And it always has to come with a vision on where you will end up by doing it the way you're doing it	
In the end it depends if I believe in that project and that it will deliver and that I based on as I said before on how much do I feel like [middle manager] and the team believe in the product, if they believe very strongly then of course I get influenced by that	
The questions he generally asks are of course management questions in general. He wants to know the stuff we talked before: How do you make money? And what will be the costs? [] he's interested in what made us choose to go with that project and what insights have we found	Informing (projects)
Thoughts [from middle manager] in terms how it fit in our strategy, how we would integrate this long term to the business, how the potential of this project	
I've been following the projects a little bit and I got this decision material now and then we will have a discussion where I can ask questions and get a better feel for where things are.	
I [middle manager] do but I would say at this point I would say it was more about risks that opportunities. Because there's a lot of things that happen that they or we (since I'm a part of the team as well) handle it not the way we should and perhaps not understand it the way we should. And sometimes I'm really subjective and something I really know that we have to do it differently or think about it differently. Then I'm more like a missionary sometime or maybe, that's the word to use	
Yes, we had examples in that, where top management sees something that we need to get more information on just to get help on understanding and then I [middle manager] bring back the question to my team, research it then we deliver insights	

3. Opportunity Identification

Quotes	2 nd Order Themes
Just looking back at the time with [innovation department], 4-5 months, I haven't that many questions, but we had that as a prioritize activity to find areas we could look in	Providing direction
Well, he and I met with him very regularly, and it made sense to him as well to focus on this segment, so the most important thing that he contributed in that phase was like giving the go ahead that we should go on doing this	

But I think it's more like he might also see that as a help for us to be able to focus, because I know that a lot of people in [innovation department] that have a hard time focusing, like a hard time seeing the blank paper, like what should I do?	
He is sort of setting the strategy for like how much projects we're gonna do and maybe which area's we should focus on	Demarcating
[] Like in the beginning when it comes to narrowing down what we need to go for	
She [middle manager] sets our strategy and with the steering group as well. But like which, what should we be to the publishing houses and what should we contribute within [company name]	
I'm also responsible for the whole company's relations with Google. And of course, there is a lot of opportunities of information coming from that, these meetings, about trends and facts	Bringing external insights
So, I don't really know how but I just think they [middle managers] are aware of everything that is happening [in the organization]	Bringing internal insights
I tried to inform me first and then them about the projects that are running of the other part of the organization	

4. Selection

Quotes	2 nd Order Themes
She was involved in the sense that she knew that we were developing something. But she was not really uh, involved in that sense. She was more like, do make sure you have plan forward and that you have a business model	Allowing
Well, she let us do it, let us spend our time on it. But it wasn't the only project that we were doing, but she of course supported it in the sense that, yeah, I see that you managed to find a good idea, now try to prove it more	
So, the most important thing that he contributed in that phase was like giving the go ahead that we should go on doing this and also backing it up with the resources, so we could get in [name] as a consultant to do all of the back-end work.	
From the initial ideas into, well concept more like, okay 'go, for this concept', I think he could be more like, harsher there, instead of some projects just like flying around in a vacuum in some sense, like 'oh we have great ideas, and then, because we don't get a go or a no-go decision, they sort of just like, fly around.	
I think they pushed me a lot because they [middle manager] trust me that I have the feeling for the product and business case	Encouraging
I would say it's my [middle manager] role is to give them a feeling that we do this together, we are a team we are doing this together, the feeling of security.	
So, I started gradually focusing more and more on that and each time I did that, as I remember it today, I got pretty positive feedback from [middle manager] and others	

Because it was such a political challenging project and it took a lot of our energy. So, we wanted to like, okay, are we gonna do this, or are we not gonna do this, because we cannot be in a sort of middle land. So, it was [middle manager] who said that we should pause it, because we sort of wanted him to kill it	Taking over
Because we can only do to an extent, we can only do what we can when it comes to trying to influence the political issues in this company and then [middle manager] needs to take the ball. And if he feels like it's easier to not do something that's political challenging, then he should be the one that makes the decision.	
They tend to ask me what I think about the ideas of course in general. They don't really ask me for decisions, they haven't	Giving opinion
I think they see me as a senior person and therefore maybe tend to listen a bit more to me. They also know that I'm responsible for the budget, and therefore my voice tends to mean, my option on thing tend to mean, weigh heavier.	
But I would say it is more related to if it makes sense to the strategic point of view. If the CEO would appreciate. Questions in that direction	
I am depending on him to see more the strategic view and maybe yeah as we talked about, like portfolio, we should do something more within this and this and this and maybe not only projects in that. That way he should focus on this project	
And also, maybe have this critical mind looking at the ideas since I'm a bit further always from the actual development and also the strategic role: why is this more important to go instead of that idea?	Being critical
They will present a roadmap saying, 'this is our priority within this next phase' or 'this is the short term roadmap and the long term roadmap on what we want to achieve' and then I can question their prioritization	

5. Development

Quotes	2 nd Order Themes
He told me to do those list [about what is important and not] but didn't make any control at all about that	Prioritizing
He helps us to prioritize. We said for example that we are going to make a little movie for [innovation department] and do a new movie every third month. So, we had something we can share on social media and show when we do presentations. And I said, well, I said that I wanted to do that, but how important is the movie? Cause it will be time-consuming. He said, well you better do the movie after the meeting with [top management]	
Then he can of course then prioritize, like these are the most important projects now and I know he's done it for [coworker], but I haven't really reached the level that I feel like I can't prioritize my own time	

I think he [middle manager], his standpoint is, okay, let me know if you have trouble allocating your time to different projects, then I can step in and help you with that. If someone is like 'I am so stressed, and I don't know what to do, aaaah.'	
I [middle manager] have a general boss role. I'm the manager of this, so I decide what's more important. But more of and of course the business developers themselves have quite good idea and understanding of what's most important. Then it becomes my role to help them think and focus and help them to clearly schedule to be able to actually go ahead with the things which are more important	
He often has another perspective on these things than I have and when you're working in the project, you sort of, it's very easy to like lose the greater perspective on what you're working on, and you tend to focus on details, so what he often helps me to do, is[] just sort of help me gain other perspectives on what I can do [] And he, with his other perspective, can help me, to see more clearly, what choices I should make)	Providing the big picture
So, he was also helpful in helping me see more clearly what is the problems here, why isn't this working, and what should we do about it?	
I could describe it as a facilitator. [] I think today that's my role in this phase. We work a lot with design thinking in this part of the process and I have experience form that but that much, [] But as long as I can bring more insights into the process, I can at least make it better	Providing structure
Others have things laid out on their desk and a system that I maybe can't understand and then they need some help structuring that.	
Not sure it's insights. I would rather say that since there is a proven way of working with design thinking, it is more showing methods and coaching to do more of the hard part of design thinking.	
Now, it's more like [middle manager] and I deciding like what to do next within the project, like we could do something for [project], which we did, and we tried to involve [project]. And we spoke about maybe doing something for [project]	Guiding
[Middle manager] is just there to make sure that it's a decision that's gonna make the product better. Like, make sure it's not strange, too far from like the original idea or concept but also that it's an opportunity to grow, which I think she's seen, and that's why it's also approved	
I think for the strategy overall, where to go with the whole project. []	
But it could also be like, so, I am struggling with finding this person, they don't really repeat [respond], or like, would you, I don't know, fix it? Haha, or could you give me advice on someone else I could talk to?	
I can go to him for advice on the same level, but I can also go with different. Like more, the strategic questions	
Then I'm huge part on that decision but it's part of the product manager to identify why we should make a pivot [] and also define, identify and define the possibilities of making a pivot. And when they have set up the framework maybe or the bigger picture of why we should do it, then I'm a part of that discussion	

So, in that sense with the like politics of this corporation, uhm, that's also one aspect that I asked [middle manager] for guidance a lot	
[middle manager] told me to do that [contacting the consultancy firm] because we had no tech developer in the organization to do this	
He let me do the decisions, but I discussed it with him before [about strategic shift], so he is a good chief, manager for me	
I think I can acquire a lot of information myself. But I don't always know how it works within the organization, like, who [middle manager] has to speak to, where he has to check within the organization, like, what are the politics or the powers	Complementing knowledge
But when it comes to financial [], I need [middle manager] help. So, I think really most for the process with the strategies within, or the strategies for [project] maybe It's good to have a good discussion with [middle manager].	
But [middle manager] also knows like who's the product owner for this project, talk with that person. He is also the insights in the organizational capabilities, of course also very valuable	
Does he also bring insights from his experience working at [company]? What he can gain from [organization], like the organization? Yes absolutely	
I mean he has been, uhm, sort of uhm helping us along the way and making sure we don't do anything too crazy and like uhm, signing off on what we do, I can't really recall any specifics. [Middle manager] generally doesn't, I mean, he doesn't, the way he manages his staff, he doesn't go into a lot of details, unless I ask him to	Allowing
I wrote some applications and me and [co-worker] were responsible for the other one. And [middle manager] of course approved them before we sent them in	
I was like 'I have some time' and we have been talking like I had done some branding, but on a smaller scale. And then she [middle manager] said okay, this is what we have decided	
Uhm, but if I need to hire another person within the group, or if I need to increase our overhead expenses, like dramatically, or if I need to make a change in our strategy, then I would need [middle manager] to sign off on that	Participating
You know, if they [employees] want to have more money or if it's a pivot for example, they want to change the concept or the core of what we're doing. If they see we can add this if we take another turn and if we can have a better business if we go off that target group instead of that target group. When it comes to bigger decisions, I would say [that I am a part of the decision]	
Both from like strategically and financially, that's where I need [middle manager] to say yes or no	
I think it was a mutual decision to like, with [middle manager] and the steering group, that we should see if there's another way to do it [pivot].	
I hadn't done any start-up before, so I had a lot of coaching from [middle manager], [co-worker], and [co-worker]. I had a really strong idea. And they supported me a lot, so I was really a rookie	Encouraging