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WHAT IS ALL THE FUZZ ABOUT?

A FMCG BRAND PORTFOLIO CASE STUDY OF FORMALISATION IN THE FRONT END OF INNOVATION

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Abstract

Title: What is all the fuzz about? A FMCG brand portfolio case study of formalisation in the Front End of Innovation.

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Keywords: Decision Making, Formalisation, Front End of Innovation, Funnelling, New Product Development, Project Portfolio Management, Project Portfolio Objectives.

Research question-/s: How does formalisation affect the FEI of a large brand portfolio company and how does formalisation in the FEI affect the project portfolio objectives?

Methodology: This paper present a qualitative single case study within the Marketing Department of a large FMCG company in Sweden. Data from eight semi-structured interviews form the foundation of the primary data. The research is conducted with an abductive approach and analysed with the Gioia et al. (2012) method.

Theoretical perspectives: The primary theoretical focus is on formalisation in the front end of innovation as there is no consensus on this topic. However, to contribute to a new theory field, a connection between formalisation in the front end is made regarding the three project portfolio objectives (strategic alignment, portfolio value maximisation and portfolio balance).

Conclusions: Within the case company, we found that the front end of innovation is mostly formalised. This both positively and negatively affects the front end operationally. Moreover, front end formalisation was found to have a positive effect on the strategic alignment and portfolio value maximisation and a negative effect on the portfolio balance. Additionally, we found a conflict between the objectives, rooted in formalisation.

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We are grateful to you all.

Kind regards,

Mink Kempen and My Magnusson

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List of abbreviations

CIT	Creative Innovation Team
FEI	Front End of Innovation
FMCG	Fast Moving Consumer Goods
NPD	New Product Development
PEP	Product Establishment Paper
PM	Portfolio Management
PPM	Project Portfolio Management

Chapter 1: Introduction

1.1 Background

Competition and increasingly more sophisticated and demanding customers with changing preferences have made innovation and new product development (NPD) key factors for corporate success. It is even of higher importance in industries with shorter product life cycles and where demand is shifting quickly, like in the fast moving consumer goods (FMCG) industry. (Mundra, Gulati & Gupta, 2013) Innovation therefore has a crucial role in a firm's success in order to sustain and stay competitive in the future (Henard & Szymanski, 2001). The entire innovation process, in the light of this research is referred to as NPD, and reflects the conversion of a recognised opportunity into an end product that is ready for commercialisation (Krishnan & Ulrich, 2001). The NPD process can be divided into three phases; the front end, formal product development and commercialisation (Koen et al., 2001).

NPD processes, especially in many large companies, are managed in an organized manner, using resource efficient processes, such as the "stage-gate", leading to new products (Cooper et al., 2001). However, a lot of projects still fail along the way due to deficiencies in the first phase of the NPD, the front end of innovation. The front end "is that period between when an opportunity is first considered and when it is judged ready for development" (Kim & Wilemon, 1999:270). In the front end, new ideas are identified and developed into product concepts through different front end activities and processes, ultimately leading to decisions for managers if concepts should have "go" or "no go" to formal product development. The front end can therefore be seen as a decision making process in which ideas continuously are developed, evaluated and screened out. This results in the most promising ideas being developed into product concepts that will be further developed in product definitions, ready for formal product development. (Florén and Frishammar, 2012) This front end process can be seen as a funnelling process, in which ideas are screened out as the development continues with the most promising concepts, if functioning right, leaves the funnel and enters formal product development (Hakkarainen & Talonen, 2014). Even though funnelling and concept building are examples of processes taking place in the front end, opinions differ in how well these actually are, or should be organised and formalised. With this in mind, a lot of research associates the front end of innovation with informality, meaning ad hoc decision making, ambiguity and tacit knowledge (Florén & Frishammar, 2012). These aspects are said to contribute to that the front end is usually managed in an unstructured, experimental way (Kim

and Wilemon, 2002). Additionally, others also argue that the decision making in the front end is mostly based on intuition or "gut-feeling", partly due to lack of clear decision criteria (Eling, Griffin and Langerak.,2016; Magnusson et al., 2014). Informal decision making and screening of ideas is posed to be time efficient and allow for more creativity (Miller & Ireland, 2005). Furthermore, advocates of informality argue that formality creates too much bureaucracy, which comes with negative consequences, strangling the positive informal aspects such as creativity and amount of ideas (Griffin, Price & Vojak, 2012; Martinsuo & Poskela, 2011).

Due to these mentioned informal characteristics, the front end of innovation has been named the "Fuzzy Front End" by Khurana and Rosenthal (1998), and the term has been generally adopted by many scholars ever since. More recently, competing arguments among front end researcher have triggered debates regarding these informal characteristics, and some are stressing that the Fuzzy Front End does not necessarily have to be that fuzzy after all, and that it should be formalised as formalisation decreases uncertainty and brings clarification (Kock et al., 2013; Koen et al., 2001). Formality in the front end means control, structures, processes, guidelines and information. These aspects together with evaluation criteria contribute to calculated decisions even though they might decrease responsiveness and flexibility due to its rigidness. (Kock et al., 2013; Poskela, 2009) Further, Sethi and Iqbal (2008) argue that formality will reduce the chaotic features of the front end and lead to effectiveness, objectivity and efficiency through the discipline and structure that comes with formalisation. Advocates of formalisation have been raising the benefits that formality can bring to the front end. For example, clear and transparent criteria in the funnelling process are examples of formality in the front end, said to increase the identification and selection of the most promising ideas (Hammedi et al., 2010; Kock et al., 2015). This type of efficient identification of ideas with the most potential is said to decrease risks and uncertainty in the front end (Tsai & Chen, 2013). It is although stated to be more time consuming than an informal identification and selection process (Magnusson et al., 2014). Another aspect of having a formalised funnelling process with set criteria is that is enables comparability of ideas. For portfolio companies, the comparability leads to portfolio optimisation. (Kock, Heising & Gemünden, 2015; Martinsuo & Poskela, 2011)

Additionally, some NPD scholars argue that the level of formality in the front end should be dependent on the type of innovation; radical or incremental (Eling et al, 2016). When developing incremental new products the lower level of innovativeness connected to this innovation type and the somewhat lower need for creativity due to its nature, allows for

more standardised procedures, implying that more formalisation is beneficial (Holahan, Sullican & Markham, 2014). In contrast, set criteria and demands to fulfil them could potentially lead to that more risky, radical ideas are screened out (Sethi & Iqbal, 2008).

However, from a project portfolio perspective, formality and transparency in the selection processes, for both innovation types, enables comparability and picking the right ideas in the front end (Eling et al., 2016; Martinsuo & Poskela, 2011). The funnelling process as well as project portfolio management (PPM) can support the operational levels and help identify the ideas that fit the project portfolio best. More broadly, the right ideas, in light of PPM, are the ones that strategically fit the project portfolio, maximize the value, and contribute to diversification. These are the PPM main objectives. (Cooper et al., 2001) The ideas with highest potential are selected based on criteria, ensuring that the ideas are align with the PPM goals. Since PPM is described by Stilling and Eskerod (2008) as a process where ideas in the front end are screened, selected and prioritised with the PPM objectives guiding the process to optimised portfolio, a link between front end formality and PPM objectives can be distinguished. If for example criteria in the front end are place, it could contribute to reach the PPM objectives, potentially through its comparability effects, ensuring a project portfolio balance. Albeit, the fields of the front end and PPM have been rather disconnected in literature. Due to this reason, the thesis at hand will firstly explore formalisation in the front end to contribute to the ongoing debate in the matter and then apply the formality on the PPM objectives to analyse the formality's impact on them. Due to the indecisiveness and continuous debate among front end researchers, the more neutral term "Front End of Innovation" (FEI), in line with Koen et al. (2001) will hereafter be applied.

1.2 Case Company

Within this conducted research, we address an in-depth case study that will provide empirical data and insights of the FMCG industry it operates in. In order to create a greater understanding of the context of this research, this section will provide an introduction to the case company in question.

A merger of three Swedish food companies in the beginning of 2014 laid today's foundation of the case company and made them one of the leading food businesses in Sweden. Operating in the FMCG industry, the case company is responsible for over twenty brands with Swedish heritage that focus on the local Swedish market. Besides focusing on the

local market, the consumer goods are also locally produced. Having various facilities throughout Sweden, the company tries to be close to its ingredients. (Case company, 2017).

The focus of this research will be on the retail business area of the company. As in all retail markets, consumer goods are sold to various customers who serve as a distribution channel to reach the consumers. The FMCG industry in Western Europe has been matured and innovation is highly depended on consumers. Being a large enterprise in combination with a consumer driven industry where demands change quickly, makes the case company a fast follower rather than the first mover. The FMCG industry, in which the case company operates, is in literature described to be low tech, with incremental innovations dominating the industry and the NPD processes. (e.g. Trott & Simms, 2017; Francis, 2006) When there is an incremental dominance as in the context of the case company, many scholars argue that more formalisation could be beneficial as the lower levels of innovativeness connected to incremental innovation allows for more standardisation and procedures (Holahan et al., 2014; Eling et al., 2016). As can be seen in appendix 1, the case company uses the "stage-gate" model for its formal NPD. In the FEI, it is clear that the brands are using a funnel as a way to work with innovation, but if the FEI is formalised is not clear.

Furthermore, Brand Managers are the ones in the company operationally responsible for the development of brands, leading their brands through the NPD process (Case company, 2017). The company's NPD process is characterised by a top down approach, meaning that Brand Managers continuously need to find approval from top management to pursue new innovations. Furthermore, the portfolio nature of the company is reflected in the organisational structure as every brand has its project portfolio. This means that the brands themselves are portfolios of products while the entire company, being a large brand portfolio company, reflects one overall portfolio layer. The focus of this thesis is however on the brand portfolio's operational level in the FEI, as the formalisation in the FEI and its effect on the PPM objectives are to be analysed.

1.3 Problem discussion

The FEI research field boomed during the beginning of the 21st century and has thereafter become an increasingly more researched field. Descriptive research regarding the processes in the FEI has mainly been the centre of focus, resulting in different conceptual frameworks (e.g. Khurana & Rosenthal, 1997; Koen et al. 2001). Building upon this, Florén and Frishammar (2012) more recently presented a framework of how a process of continuous

refinement and screening develop new ideas into product concepts and definitions. Even though the authors bring clarity to the processes and their interaction, there is little guidance whether or not these processes are, or should be formalised.

Khurana and Rosenthal (1997) however, based on an empirical study of eleven companies, were one of there earlier researchers presenting a need for more formal processes in the FEI to increase the success rate of new products. More recent research is supporting this. Eling et al. (2016) used data from 161 firms that took part in the Product Development and Management Association's latest Comparative Performance Assessment Study (2012). Based on their research, the authors found that a firm's success rate of new ideas being launched, were related to the use of formal selection processes for both incremental and radical ideas in the front end. However, what is not emphasised by Eling et al. (2016), is the size of the companies behind the data and the clear context of their industries, which brings unclarity regarding when formalisation is/or should be applied. This indicates that formality should be beneficial independent of the innovation type. Some authors especially stress that incremental innovations could benefit from more standardised procedures in the FEI, hence more formality (Holahan et al., 2014). It is further mentioned in some studies, that large firms might benefit in terms of efficiency if the front end has higher levels of formalisation (Freel, 2000). This implies that the size of the company is interesting in the context of formalisation in the front end, which is not elaborated in Eling et al.'s (2016) report. Building upon that, Kock et al. (2015) contributed with an empirical study of 175 medium sized and large firms. Their findings suggest that formalisation of front end processes is positively linked to the success in the front end, meaning that in general formalisation is positively related. The authors however do not contribute with a deeper understanding to the significance of their findings. This might relate to the quantitative character of their research, which generally implies more surface results rather than in-depth answers. In another empirical quantitative study, Markham (2013) collected data from different departments in 272 companies examining the impact of the front end performance in relation to new products on the market. The results showed a partial support for a positive relation between front end success and formal front end processes, indicating that it might be advantageous to formalise but it might also constrain the amount of ideas leaving the front end.

As FEI processes and FEI models generally focus on the management of single projects, a multiple project view is needed for companies with an extensive project portfolio (Khurana & Rosenthal, 1997; Heising, 2012). This is one of the reasons why project portfolio management is important. The FEI and PPM has although been rather separated in literature,

but some studies can be found. Khurana and Rosenthal (1997) were one of the first researchers emphasising the disconnection between the two fields and contributed with a qualitative multiple case study of eleven companies. They argued that the lack of a project portfolio perspective in the FEI can harm the overall NPD development, but also stressed that no standardised formula to the front end should be applied since companies differ on so many terms. They for example stressed that there is a need to emphasise the size of the company and decision making style, since these are critical influencers of how the front end should be managed. More recently, Kock et al. (20015) presented through a quantitative cross-industrial study of 175 medium and large firms the relation between project portfolio and ideation in the front end with the aim to contribute to the big research gap between project portfolio management and the front end. They although addressed the impact project portfolio has on the front end and not the reverse relation which is the focus of this research. Furthermore, Cooper et al. (2001) contributed to this through a quantitative study, saying that it is hard to point out any clear solution to how to approach Portfolio Management, but some companies were found to achieve better Portfolio Management results than others. They further introduced the PPM objectives; portfolio balance, portfolio value and strategic alignment as important to the overall portfolio results and optimisation. However, the relation between how the FEI is structured and PPM is not clearly presented in their research and how a formal front end ultimately can impact the objectives. Teller et al. (2012) are one of the few addressing how formalisation in the front end impacts the project portfolio success. In a quantitative study, they found evidence that the formality in the front end has a positive effect on the project portfolio, but stressed that the mediating factors between the relationship should be further studied to understand more in depth what impacts project portfolio success.

1.4 Purpose and research gap

Based on the previous discussion, it is possible to identify many different directions of focus in the FEI literature, however there is no consensus whether or not the FEI should be formalised (Eling et al. 2016). Even though there is an ongoing debate on how the FEI should be managed, there is not sufficient support from practitioners in this field (Martinsuo & Poskela, 2011). There is also a lack of qualitative research when it comes to formalisation in the FEI and criticism has been raised that research is too generic in terms of industry and innovation types (Nobelius & Trygg, 2002). Francis (2006) presented that the shelves of retailers in UK mostly are filled with incremental products. In the context of our case

company, a FMCG company in Sweden, there is potential to contribute to the research field by bringing forth a portfolio company in the FMCG industry, assumingly working mostly with incremental innovations. Additionally, it is indicated that companies, especially large companies, working with incremental innovations might benefit from higher standardised procedures and higher levels of formality (Freel, 2000; Holahan et al., 2014). Eling et al. (2016) confirm these findings, however the context of company size is still to be explored. Therefore, researching a large company in a fast industry with a dominance of incremental innovations driven by consumer insights could bring more clarity to the field. Moreover, several quantitative studies had similar results relating to the positive effects of formalisation in the FEI. However, due to the quantitative nature, no in-depth implications were provided. This calls for more case studies on the topic, which could contribute to the existing findings and giving them more in-depth insights.

In relation to PPM, research indicates that there is a general focus on single project management in the FEI instead of a multiple project, portfolio focus. These fields are mostly separated while there is an indicated need to connect both fields. Khurana and Rosenthal (1997) were to first one to identify this disconnection and stressed the need of contribution in regards to company size and decision making styles. As still little research is conducted in relation to both fields, this case study contributes with a large company transparently presenting its decision making process. Additionally, Cooper et al. (2001) mentioned the importance of the three PPM objectives in relation to overall portfolio results. However, there is no clear presentation of how the relation between the FEI structure and PPM, and how FEI structure ultimately impacts the PPM objectives. Consequently, this study would like to address the effects that a formalised, structured FEI has on the PPM objectives as this might have an impact on the overall portfolio results. In addition to that, Teller et al. (2012) found that formalisation has a positive effect on PPM and its success. However as their study is quantitative, a need for in-depth insights is requested regarding possible relations. Therefore, with this qualitative research, we would like to address to possible influence of formalisation on the PPM objectives and provide more in-depth insights.

To conclude, the purpose of this thesis therefore is to contribute with an empirical qualitative case study of an incremental, large brand portfolio company that operates in the FMCG industry to contribute to ongoing debate in the front end field whether the FEI should be formalised, or not. Additionally, this research intends to connect the FEI and PPM fields, by providing an example of an assumingly formalised decision making process and analyse the effects these formal implications have on the PPM objectives.

1.5 Research question

Based on the previous discussion, the intention of this research is to further explore formalisation in the FEI and how the formalisation in the FEI affects the PPM objectives; 1) maximisation of portfolio value, 2) strategic alignment and 3) portfolio balance. This chosen research focus is based on the assumption that the FEI of the large case company is formalised, due to the FMCG industry's incremental characteristics, which are said to be connected to more formalisation. Furthermore, recent research shows that formality also can have an impact on the overall project portfolios success, which is why it is relevant to analyse the impact formality has on the portfolio objectives as they are building up to the overall success.

Due to these new indications in research, this paper takes the standpoint that the formalisation in the FEI has implications on the PPM objectives on an operational level. More specifically, the research question in focus is:

How does formalisation affect the FEI of a large brand portfolio company and how does formalisation in the FEI affect the project portfolio objectives?

Chapter 2: Literature review

2.1 Summary

In this following chapter, all topics reflective of the research question and the focus of this thesis will be reviewed and discussed. Initially, formalisation in more broader terms will be introduced, to provide an overall understanding of what it can imply and how it can affect companies. Thereafter, the front end of innovation will be presented and how it connects to formalisation. An analysis of different FEI frameworks will be presented to clarify how the FEI can be structured and viewed. Thereafter, different aspects that can bring formalisation to the FEI will be covered; documents, funnelling and criteria. In the end of the review, project portfolio management and its main objectives are discussed. The chapter ends with how all the concepts relate, mainly in regards to the research question, how formality possible affect the PPM objectives.

2.2 Formalisation in the Front End of Innovation

2.2.1 Introduction to formalisation

Formalisation is generally characterised by a top-down approach, meaning that information, instructions and control flows down from top management to the employees (Simons, 1995). This hierarchical approach usually comes with bureaucracy and tight control systems (Poskela, 2009). Start-ups tend to start with a very informal set up, but tend to become more formalised over time as they grow and more structures are installed. Higher levels of formality therefore come with more organisational levels and structures, which generally negatively affects time as more organisational steps are involved. (Kuratko et al., 2011) Formal control is described by Jaworski (1988) as usually written, and introduced by management while informal control not written and employee driven. This level of control determines “the procedures and tools, such as resource allocation, process formalisation, or rewarding, that management uses to maintain or alter patterns in the front end.” (Poskela, 2009:14). A certain level of control ensures an effective resource usage and allocation while keeping the organisation’s best interest in mind by aligning to strategy and goals (Poskela, 2009; Sethi & Iqbal, 2008). Allocating too many resources too early to ultimately not promising projects will lead to resource waste while too late allocation might lead to “missing the boat” and losing the edge of opportunities. Resources in relation to the FEI are described as financial investments for front end projects. Inflexibility in resource allocation by too

much top management involvement was shown to potentially lead to championing culture for the once receiving less funding. (Koen et al., 2014; Kuratko et al. 2011) Additionally, too much involvement is indicated to not be beneficial either as it might harm to the overall flexibility and success of projects. In practise, many companies need to make strategic decisions as budgets are limited and need to be divided amongst many projects. However, limited availability of resources is said to restrain the entire innovation process. (Trotter, 2011) On the contrary, Woschke, Haase and Kratzer (2017) found that budget constraints positively influences creativity.

Some researchers (e.g. Amabile, 1988; Martinsuo & Poskela, 2011) argue that formalisation comes with rules, processes and rigid organisational structures have a negative effect on creativity. A recent study by Yuan & Woodman (2010) argued the same, however they also found that employees of which innovation is not expected were less motivated to contribute. Other researchers (e.g. Cooper, 2008) indicate that formalisation is important to anchor the innovation. Recent studies have analysed the interplay of these point of views as the systematic use of processes create an environment of trust whilst trust increases creativity (Brattström et al., 2012). Creativity generally comes with a higher degree of flexibility, this is not in line with the formalised front end process which aims to decrease the level of uncertainty. (Kock, Schwenk & Gemünden, 2013) Next to that, companies have a constant flow of ideas and these need to be managed as not all can be developed. Structures, processes and procedures need to handle to that uncertainty can be decreased while constant flow to be systematically be evaluated. (Cooper, 2008) Formalisation is therefore often related to control, processes, structures, guidelines and instructions in order to find information to reduce risks and make calculated decisions. (Kock et al., 2013) However, these structures and processes often decreases flexibility that slows down the organisation's responsiveness (Poskela, 2009). Informality on the other hand, is described characterised by ambiguity, ad hoc decision making and tacit knowledge. (Florén & Frishammar, 2012) Due to these characteristics it is generally said that decisions are made on intuition as there is a lack of clear decision making guidance and management of the FEI is unstructured (Eling et al., 2016; Kim & Wilemon, 2002). This allows flexibility and make the organisation more responsive (Poskela, 2009). Therefore, many researchers describe it as a balancing act "between freedom and constraints, empowerment and accountability, top-down direction and bottom-up creativity, intended and emergent strategy, and experimentation and efficiency" (Poskela, 2009:14).

This section was created with the intention to introduce formalisation more generally. The aim was therefore to provide an overall presentation of what formalisation can imply and how it can affect companies in different ways. In the following section, the FEI will be introduce in the same somewhat broader terms and then connected to formalisation.

2.2.2 The Front End of Innovation

The FEI is the first stage of the overall innovation process and starts when an opportunity is first recognised and ends when the decision is made to either formally move on to the product development stage, or instead to kill a project (Kim & Wilemon, 1999). The FEI process is fundamental to successful innovation as companies decide which projects will be pursued for further development (Cooper & Kleinschmidt, 1987; Koen et al., 2001; Verworn Herstatt & Nagahira, 2008). Organisations that are able to excel in this early stage of innovation are more likely to surpass competition (Cooper, 1998; Dwyer & Mellor, 1991). In this early stage, ideas area developed into concepts and decisions are made to devote resources for further formal product development. This front end process occurs prior to the formal product development (also known as stage-gate). (Koen et al., 2001) The FEI offers great opportunities for the overall NPD process, though it is considered to be a weakness for many companies (Reid & de Brentani, 2004; Kim & Wilemon, 2002). However, the problem does generally not lay with obtaining ideas, but lays with the selection of the right ones (Florén & Frishammar, 2012; Magnusson, Netz & Wästlund, 2014). Decisions made in the FEI, can have big consequences in the later stages of development (Cooper & Kleinschmidt, 1995). Due to this impact, there has been an increasing need to manage the FEI and bring more clarity and structure (Koen et al., 2001). A poor defined idea may lead to delays, and time is a competitive advantage that cannot be compensated once a delay has occurred (Kim & Wilemon, 2002). Insufficient preparation can lead to budget escalations and valuable resources can get wasted in the process (Calantone, Benedetto and Schmidt, 1999; Thomke & Fujimoto, 2000). The FEI process can therefore been seen as a decision making process that impacts resources as well as future product development (Kim & Wilemon, 2002).

Therefore, selecting the right ideas and concepts early can help businesses to save costly and time consuming alterations in further development stages (Gassmann & Schweitzer, 2013). However, picking the right ones early might be challenging. It is indicated that the FEI is characterised by high levels of uncertainty. Due to limited insights and missing information, it is hard to predict whether a concept will be successful or not. (Florén &

Frishammar, 2012; Kim & Wilemon, 2002) The conceptual claim is that formalisation of the FEI decreases that uncertainty and has a positive effect on the success of innovation projects. This conceptual claim (e.g. Khurana & Rosenthal, 1997; Montoya-Weiss & O'Driscoll, 2000) also received support in recent empirical studies (e.g. Kock et al., 2015; Markham, 2013). However, other researchers argue that formalisation has a negative effect on the FEI as it might control creativity and leads to a more top-down approach (Griffin et al., 2012; Martinsuo & Poskela, 2011; Russell & Tippett, 2008). While there is still a discussion about the effects of formalisation in the FEI, recent studies found that formalised idea selection procedures have a positive effect on the success rate of incremental innovations (Eling et al., 2016; Holahan et al., 2014).

By this section, the front end of innovation is broadly introduced. It is also put in the context of formalisation. This serves as a brief introduction to what a formalised FEI implies and what effects formality can have on the FEI. How formalisation more concrete can affect the FEI will be introduced later on in this literature review. However, before going further into that, it is relevant to understand how the FEI can be viewed, which will be presented in the following section.

2.2.3 Analysis of front end models

Even though, many researchers claim that the FEI is characterised by high levels of uncertainty and is hard to manage, many frameworks and theories have been developed to systematically approach and manage the FEI. Conceptualised frameworks have been developed throughout the years to provide an understanding and give structure in the FEI to decrease uncertainty and support the decision making. These models generally provide some sort of funnelling process that, combined with screening, that determines what should be pursued, or not (Hakkarainen & Talonen, 2014).

In this part we discuss several respected front end frameworks in order to understand the FEI processes to guide our understanding throughout this study. The following two FEI frameworks have been selected, because they have been cited consistently (e.g. Scopus) in the FEI literature, which implies that these models are respected within the FEI field: Khurana and Rosenthal's model of the New Product Development Front End (1997) and Koen et al.'s New Concept Development (NCD) model (2001). Additionally, we would like to include Florén and Frishammar's Comprehensive Framework of the Fuzzy Front End of New Product Development (2012) as this recent model is gaining increasingly more respect

in the field and is based on previous mentioned literature and includes more recent findings with regards to the FEI.

Generally, the following three main components in the FEI process have been recognised in literature: (1) opportunity recognition, (2) concept development and (3) project selection. Khurana and Rosenthal (1997) conducted an exploratory research that focuses on the best practise of seven essential front end activities and they developed a process to manage the FEI. The framework is divided in three phases before it enters the formal product development process: pre-phase zero, phase zero and phase one. Pre-phase zero represents activities that deal with opportunity recognition. In phase zero, concepts are developed, and phase one is the stage in which decisions are made to either kill a projects or continue to further develop in the formal product development stage. This stage represents project selection. Even though, all three main components are identified in the given model, the phases are just mentioned in order to display the front end process. However, Khurana and Rosenthal (1997) highly emphasise on the use of Portfolio Management and stress the importance of aligning products with a clear strategy.

Koen et al. (2001) try to provide a common language in the FEI by presenting the NCD model and define the FEI as the early stage of innovation before the projects enter the formal development process of NPD. The developed framework defines five key elements in the FEI that interact iteratively: opportunity recognition, opportunity analysis, idea genesis, idea selection and concept/technology development. These five key elements are driven by management (leadership) and the organisation's culture, which together represent the engine. The factors surrounding the model are influencing the entire innovation process. The frameworks relates to all main components, however it does not go into specific details. Even though, the research present several factors to take into account, explicit details of information or examples are not provided. Portfolio Management is just briefly mentioned and implying that the most valuable concepts should have priority, but is not considered to add additional value to the model.

Florén and Frishammar (2012) argue that past literature does not provide enough clarity and indicate that the challenge for most companies is not to find good ideas, it is rather a functioning early process that needs to support management to pick the right ideas. The FEI is defined as the stage in which ideas are developed into concepts before a decision is made whether or not to continue to the formal product development stage. The authors divide the front end in three parts that interact iteratively: idea/concept development, idea/concept alignment and idea/concept legitimisation. The idea/concept development process is core of

the framework and starts with identification of an opportunity after which continuous refinement and screening processes of the idea take place to decrease risk and uncertainty. As mentioned, the idea/concept development part focuses on opportunity recognition. Due to the iterative refinement and screening processes, the development of ideas into concepts starts early. The idea/concept refinement process ensures that ideas continuously are further conceptualised as the idea/concept screening process considers whether a concept should be further proceeded, or not. The constant refinement, in combination with alignment of internal and external fits, covers the concept development component whereas the continuous screening process in combination with concept legitimisation reflects upon a socio-political dimension and building of organisational commitment, ultimately leading to a project selection. Besides, covering all three main components, the authors also go into detail by providing practical examples and dig deeper into the alignment and legitimisation of concepts. Another valuable aspect of this framework is that the model deeply considers Portfolio Management within their model as part of internal alignment which is why this model, together with its detailedness and incorporation of recent findings, will mostly guide our understanding of the FEI to provide consistency throughout this research, with additional support from the other respected authors. This section was therefore created to bring clarity for how the FEI can be viewed and what view, we decide to guide our further research. In the following section, a discussion of the documentation's contribution to formalisation in the FEI will be presented.

2.2.4 Documentation in the Front End of Innovation

A formalised FEI, is also characterised by documentation, guidelines and instructions with the purpose to reduce risks and contribute to calculated decision making (Jaworksi, 1988; Kock et al.,2013). Building upon this, Florén and Frishammar (2012) introduce product concepts and product definitions, as two descriptions being developed in the front end. The product concept is the first document being build, representing a more general description of an idea with content such as benefits for customers and other overall aspects of it. The product definition on the other hand, is the extended version of the concept, including more detailed aspects such as customer segments and needs, positioning and further specifications of the product. If developed properly, the product definition clarifies and tackles aspects of uncertainty such as market potential, required development time, cost for development, risk and how well it fits the organisation. (Florén & Frishammar, 2012). This type of structure,

working with documents and guidelines when developing new ideas, is not reflected in a more informal FEI (Jaworski,1988)

With this section, documents are distinguished as indicators of formality in the FEI. Especially, the two terms by Florén and Frishammar (2012) brings more clarity to how concepts and definitions are structurally build by the support of documents. If corresponding documents or templates like these are present in the case company, they could therefore indicate a more formalised FEI.

2.2.5 Funnelling in the Front End of Innovation

As indicated in chapter 2.2.3, many front end models work with a funnelling process in which it is decided what ideas to pursue, or not. For most companies the problem is not to generate ideas, it is to select the right ones. (Florén & Frishammar, 2012; Magnusson et al., 2014) Too many ideas entering the funnel might lead to congestion and will delay the overall funneling process. In order to select the right ideas, poor ideas need to be screened out as soon as possible. The process of screening projects while being developed is funneling. (Hakkarainen & Talonen, 2014) In relation to the overall NPD process, funneling generally is the process from a recognised opportunity to the commercialisation of a product, which involves screening and selecting ideas (Cooper et al., 2001; Hakkarainen & Talonen, 2014; Tidd & Bessant, 2014). The FEI is feeding the overall innovation funnel (Cooper & Edgett, 2009). In the FEI , funneling is the screening process from a recognised opportunity to the selection of projects before it enters the formal product development stage (Tsai & Chen, 2013). The funneling process transforms a recognised opportunity into a developed concept while continuously separating the “bad ideas” from the “good ideas. (Florén & Frishammar, 2012) Therefore, this screening process normally is a go or no go decision. However, due to the uncertain nature of the FEI, the decision making in the screening process is not always easy. (Hammedi, van Riel & Sasovova, 2011) Uncertainty is considered to be the gap between the current available knowledge and the knowledge needed to execute a certain task (Galbraith, 1982). Information is missing. Therefore, the level of uncertainty in understanding, assessing and selecting ideas is determined by the amount of knowledge attained in the FEI (Hammedi et al., 2011). Incomplete or poorly developed concepts make it difficult to understand, assess and select the right ideas and therefore can obstruct FEI management and performance (Chang, Chen & Wey, 2007). This highlights the importance of understanding the FEI and reduce its uncertainty. To reduce uncertainty and continuously refine ideas, reliable data as

well as intuition and past experiences should be consulted (Kim & Wilemon, 2002; Florén & Frishammar, 2012). Continuous refinement ensures that the development of ideas advances into a concept that ultimately can be evaluated to be developed in the formal product development stage. Well executed refinement ensures a more productive innovation flow that quickly changes ideas into concepts that can be further developed, filtering out the least promising ideas. (Florén & Frishammar, 2012)

"The screening process is often considered to be a multistage process during which the first screening rather crudely selects the better ideas for further elaboration" (Magnusson et al., 2014:316). This process is generally managed by cross functional senior management teams that use a mix of both formal and informal screening methods to select the most promising projects (Cooper, 1985). The aim of the screening process is to ensure that resources are allocated to projects that are most in line with the company's strategic fit and show the highest potential (Florén & Frishammar, 2012; Griffin & Page, 1996). As this is a process in which ideas and concepts are continuously refined and screened, various authors identified formal selection criteria that assist the funneling process in order to ultimately select front end projects (e.g. Carbonell-Foulquie, Munuera-Aleman & Rodriguez-Escudero, 2004; Cooper & Edgett, 2009).

As the case company of this study has indicated the use of a funnelling process as a way to approach innovation in the FEI, the intention of this section was therefore to clarify what funnelling implies. It is relevant to explore funnelling since it could reflect a structured way to address screening of ideas, hence a potential formal influence of the FEI.

2.2.6 Screening and selection criteria

Kim and Wilemon (2002) indicate that screening needs to be properly managed in order to make investment decisions. Comprehensive criteria need to be determined that are in line with the market needs and the organisation's goals and capabilities. However, Cooper (1985) identified that screening is usually done both formally and informally. Formal screening processes allow consistent evaluation with clear and transparent criteria (Kock et al., 2015; Magnusson et al., 2014). Once screening criteria are set, the identification of the most promising ideas should be faster and easier, due to its consistency (Hammedi et al., 2010; Kock et al., 2015). Early and effective screening can help to decrease uncertainty and minimise risk (Tsai & Chen, 2013). Therefore, many studies have provided insights on knowledge that should be attained in order to make decisions and select the right projects

(e.g. Carbonell-Foulquie et al., 2004; Cooper et al, 2001; Cooper & Edgett, 2006; Moenaert et al., 2010). Generally, there is a consensus relating to the most critical formal criteria as recent studies (e.g. Oliveira et al., 2015; Tsai & Chen, 2013) have combined many studies relating to screening and selection criteria, providing an overview of the most vital ones.

Criteria	**Description**	**Sources**
Strategic alignment	Strategic alignment considers the alignment with the overall company strategy, objectives and interests.	Carbonell-Foulquie et al. (2004), Cooper & Edgett (2006), Cooper et al. (2001), Huynh & Nakamori (2009), Smith et al. (1999), Moenaert et al. (2010)
Financial return	Financial criteria consider the financial return and potential. Examples of measurements are return on investment, growth, internal rate of return or net present value.	Calantone et al. (1999), Carbonell-Foulquie et al. (2004), Chin et al. (2008), Cooper & Edgett (2006), Cooper et al. (2001), Smith et al. (1999)
Competitive advantage	Competitive advantage considers the potential to compete with possible competitors and differentiate from them.	Calantone et al. (1999), Carbonell-Foulquie et al. (2004), Cooper & Edgett (2006), Cooper et al. (2001), Huynh & Nakamori (2009), Moenaert et al. (2010), Verworn et al. (2008)
Technical feasibility	Technical feasibility considers the accessibility to a technology solution to produce and deliver a product.	Calantone et al. (1999), Carbonell-Foulquie et al. (2004), Chin et al. (2008), Cooper & Edgett (2006), Cooper et al. (2001), Huynh & Nakamori (2009), Kim & Wilemon (2002), Moenaert et al. (2010), Smith et al. (1999)
Market feasibility	Market feasibility considers the alignment with the market's needs and potential..	Calantone et al. (1999), Carbonell-Foulquie et al. (2004), Chin et al. (2008), Cooper & Edgett (2006), Cooper et al. (2001), Huynh & Nakamori (2009), Smith et al. (1999)
Resource requirements	Resource requirements considers all resources and competencies needed to develop, produce and deliver a product.	Carbonell-Foulquie et al. (2004), Cooper & Edgett (2006), Huynh & Nakamori (2009), Kim & Wilemon (2002), Moenaert et al.

		(2010), Verworn et al. (2008)
Time to market	Time to market considers the time necessary to commercialise a product.	Carbonell-Foulquie et al. (2004), Cooper et al. (2001), Kim & Wilemon (2002), Smith et al. (1999), Verworn et al. (2008)
Risk assessment	Risk assessment considers market and technological uncertainties that could possibly affect the company and the ability to handle those uncertainties.	Calantone et al. (1999), Chin et al. (2008), Cooper et al. (2001), Cooper & Edgett (2006), Huynh & Nakamori (2009), Smith et al. (1999)

Table 1: Overview of screening and selection criteria

As mentioned by Cooper (1985), formal screening is generally combined with informal screening. Magnusson et al. (2014) describe this informal screening as "gut feeling". In the idea screening process, time is to be considered essential in order to keep a first mover advantage. Formal screening is more time consuming than informal screening. (Magnusson et al., 2014). This decision making based on feeling, intuitive screening, is generally seen as a solution to save time and quickly proceed (Miller & Ireland, 2005). However, the reliability of intuitive screening has been questioned as intuitive decisions are referred to as expert or tacit decisions, meaning that it is subjective and based on prior knowledge and experience. It therefore takes time to develop so called tacit knowledge. (Magnusson et al., 2014) As this expert, tacit knowledge is very specialised knowledge it is hard to transfer from one person to another (Borghini, 2005). Additionally, these types of decisions come with high levels of uncertainty and complexity. Simon (1991) used the term "bounded rationality" indicating that the rationality is bounded to the level of information at hand. Therefore, people fall back on their intuition and try to recognise patterns when time or information is limited and situations are complex. Therefore many authors (e.g. Sadler-Smith & Sparrow, 2008; Salas et al.,2010) indicate that formal rational screening and informal intuitive screen should not be used separately, but complementary. Such an approach can to include aspects that formal criteria would not consider. However, while formal criteria will align the company's set success indicators, intuitive screening can complement creativity. (Magnusson et al., 2014)

As presented, screening can be either formal or informal. If it is more formal, proper criteria usually support the screening process as a way to evaluate the potential of ideas. With this section, the intention therefore was to make a nuanced presentation of different criteria that potentially could support and control the FEI screening process. If existing in the case

company, the criteria and the formal screening could represent additional aspects of how formality affect the FEI.

2.3 Project Portfolio Management in the Front End of Innovation

2.3.1 Project Portfolio Management

The overall NPD process is continuously shaped by decisions made in the funnelling process (Oliveira et al., 2015; Hakkarainen & Talonen, 2014). Decisions made in the FEI are recognised to have the biggest impact on the overall NPD success (Verworn et al., 2008). However, most front end models typically consider single project development. Khurana and Rosenthal (1997) already suggested that there is a disconnection between the FEI and Portfolio Management.

PPM is defined by Stilling and Eskerod (2008) as the process in which projects are screened, selected and continuously (re-)prioritised in light of the overall portfolio, and resources are (re-)allocated based on the priority. This is determined through prioritisation and selection while the project portfolio objectives (strategic alignment, maximization of portfolio value and portfolio balance) should be the guidance to optimise the portfolio (Cooper & Edgett, 2014). "Project Portfolio Management is a decision-making process that steers the right projects from idea to successful implementation" (Teller, Unger, Kock & Gemünden, 2012:598). Portfolio steering is regularly needed to continuously manage the overall portfolio and prioritise the best fits by continuously assessing what type of project is needed based on the portfolio objectives (Müller, Martinsuo & Blomquist, 2008). PPM together with FEI processes, are therefore key in the allocation and control of resources for projects while, due to often limited available resources and the potential waste of resources, the selection of the right projects are crucial to meet a firm's objectives. (Jugend & da Silva, 2014) Hence, portfolios should be consistently evaluated with set measures based on new and relevant information in order to reflect if decisions made are still the most suitable ones. "For decisions about options in a portfolio, there are three possible choices: exercise (decision to invest in a project), defer (let the option stay in the portfolio for future consideration), or abandon (an option has expired or the circumstances have changed so that it has become obsolete)" (Hakkarainnen & Talonen, 2014:69).

Even though, there are frameworks that do take a company's project portfolios into consideration in the early stages of NPD (e.g. Khurana & Rosenthal, 1997; Florén & Frishammar, 2012), the effects FEI has on PPM on an operational level, has not received

much attention by academic research and literature (Eling et al., 2016). Even though there is not much research available on the influence of formalisation on Project Portfolio Management, some researchers (e.g. Teller et al., 2012) tried to analyse this relation. Cooper (2008) highlighted the positive effects of NPD formalisation in Project Portfolio Management. The selection of best ideas in the front end needs to be based on set criteria that align what is best for the organisation while various tools could assist this selection. These formal selection criteria contribute to the formalisation of PPM and objectives. (Cooper et al., 2001; Jugend & da Silva, 2014) Consistent selection criteria makes decision making transparent and comparable which allows portfolio optimisation in terms of project balance and (re-)prioritisation (Kock et al., 2015; Martinsuo & Poskela, 2011). This will become a strategic advantage if the same people continuously are responsible for selection decisions. This allows an overall portfolio perspective with decisions best for the portfolio. (McGrath, 2011) Therefore, the contribution of PPM will only be optimised of formal structures and procedures are in place (Teller et al., 2012). Moreover, Patanakul (2015) stresses out the importance of transparency in decision making in PPM. Transparency in decision making relates to stakeholders' understanding of why specific decisions are made (Patanakul, 2015). The decisions made and reasoning behind them needs to be clear and transparent to stakeholders (Eling et al., 2016; Patanakul, 2015). Hence, PPM formalisation enhances the quality of information, coordination and collaboration between various projects in and outside the portfolio while it also contributes to organisational learning (Prencipe and Tell, 2001). However, Teller et al. (2012) indicated that PPM formalisation should be supported by formalised processes. Without, formalised PPM is evasive to the quality of the portfolio.

With this section, the fairly unexplored research field connecting the front end of innovation and project portfolio management is presented, reflecting the second part of the research question of this thesis. It is possible to distinguish some effects formalisation has on PPM, but due to the newness of their connection, literature is not very concrete. The chosen focus of this research is to apply and analyse the FEI on the PPM objectives (the goals of PPM), in order to more clearly contribute with examples of how formality impacts them. The following section will therefore present more details regarding the meaning of the objectives separately.

2.3.2 Project Portfolio Management objectives

PPM's "ultimate goal is to maximize the contribution of projects to corporate success" (Heising, 2012:584). In order to achieve that and optimise the overall portfolio, Cooper et al., (2014) identified three main objectives that are generally recognised in literature (e.g. Elonen & Artto, 2003; Martinsuo & Lethonen, 2007). PPM's overall purpose is to maximise value, meaning that projects with the highest potential should be selected. In order to guide that selection; balance projects within the portfolio, aiming to create a balance in diversity of projects; create strategic alignment, to ensure that a company's strategy is also reflected in the choice of projects (Cooper & Edgett, 2014). In order to manage these objectives formal management practices are required as PPM ensure that scarce resources are allocated to the right projects (Cooper et al, 2001; Mathews, 2010). The allocation of resources has become increasingly more important as the world around us is changing rapidly (Cooper et al., 2001; Mundra, Gulati & Gupta, 2013).The three main project portfolio objectives are described as follows:

1. Strategic alignment

Strategic alignment is needed to ensure that a company's business strategy is also reflected in the choice of projects (Cooper et al., 2001; Meskendahl, 2010). In order to ensure this alignment, PPM in the evaluation, prioritisation and selection of projects need reflect the overall strategy (Meskendahl, 2010). Strategic implications of those decisions are influenced by both internal and external factors (Archer & Ghasemzadeh, 1999; Patanakul, 2015). The strategic fit reflects how resources and objectives are aligned with the business strategy as well as to what extend the project portfolio is in line with that strategy (Cooper et al., 1998; Dietrich & Lehtonen, 2005). Cooper et al. (1998) indicate that the strategic alignment becomes apparent in "where the money is spent". Knowing your strategic direction and objectives also have direct implications on the portfolio balance and portfolio value as for instance the effect of selected project on the portfolio value should be reflected in the strategic objectives. Strategic alignment in PPM is therefore essential as it indicates what purpose projects should fulfil within the portfolio to optimise the overall performance. (Aritua, Smith & Bower, 2009) The projects that are selected today determine tomorrow's products and those products determine the company's position on the market (Cooper et al., 1998). Hence, strategic alignment ensures that projects are developed in line with the

company's view on tomorrow and "the winners" will be selected to reach the set strategic objectives (Verbano & Nosella, 2010).

2. Maximisation of portfolio value

By maximising the value of a portfolio, projects that show the highest potential should be considered, maximising the economic value (Cooper et al., 2001). Product development is an investment in the future. Money that will be invested in projects today, will provide returns whenever products are commercialised and sold. (Cooper et al., 1998) By selecting a collection of projects based on a mix of various criteria set by the organisation (e.g. risk assessment, financial returns), PPM focuses on maximising the potential return on investment as well as it considers the effects of cannibalisation (Cooper et al., 1998; Srinivasan et al. 2005). Besides economical value, Jonas (2010) indicates that the portfolio value can be determined into average single project success as well as synergy amongst projects in the portfolio. The average single project success is indicated to be determined by customer satisfaction levels, staying within provided budgets, meeting deadlines and product qualifications. Synergy amongst products relates to both the technical and market interaction of projects that allows a portfolio to achieve a higher value compared to the value of the individual projects. Moreover, when investment synergies are taken into account, portfolios are likely to receive the same return with lower risks than without (De Reyck et al., 2005).

3. Portfolio balance

A well balanced portfolio generally decreases risks (Archer & Ghasemzadeh, 1999). Portfolio balance aims to create a balance in diversity of projects and supports a company to meet its objectives without engaging in unnecessary risks (Cooper et al., 2001; Meskendahl, 2010). Finding the right balance indicates that a promising project in light of the entire portfolio might not always be the best fit. Cooper et al. (2001) analyse that the portfolio balance is depended on a company's direction. Therefore, companies might consider a balance in incremental and radical innovation, low and high risk projects, and/or short and long term projects. Hence, the portfolio balance is linked to modifying the portfolio between various types of projects. (Jonas, 2010) Furthermore, picking the right number of projects also needs to be considered as resources need to be divided (Cooper & Edgett, 2014). Inefficient project portfolio management can have undesirable consequences as it can occur that projects are not in line with strategy which can result in the wrong selection, resources are allocated to low

value projects and a lack of focus might select too many projects and divide budgets thinly (Cooper et al., 2001).

2.4 Conceptual relations

Formalisation in FEI relates to control, processes, structures, guidelines and instructions in order to find information to reduce risks and make calculated decisions. (Kock et al., 2013) Florén and Frishammar (2012) illustrate how product concepts and definitions are descriptions being built through a process of continuous screening and refinement in the front end. This could also translate into a funnelling process, transforming a recognised opportunity into a developed concept while continuously separating the "bad ideas" from the "good ideas" as the selection of bad ideas might have big consequences in later stages of the NPD process. (Florén & Frishammar, 2012) In order to screen out and select ideas, screening and selection criteria are commonly used. Informal screening is more intuitive screening that comes with uncertainty while formal screening processes use formal criteria (e.g. strategic alignment and financial returns) to decrease that level of uncertainty and minimise risks in order to make decisions in line with the organisation's goals. (Kim & Wilemon, 2002; Tsai & Chen, 2013) As FEI processes and FEI models generally focuses on the management of single projects, a multiple project view is needed for companies with an extensive project portfolio (Khurana & Rosenthal, 1997; Heising, 2012). PPM is the process in which projects are screened, selected and continuously (re-)prioritised in light of the overall project portfolio, and resources are (re-)allocated based on the priorities and interest of the company (Stilling and Eskerod, 2008). PPM's main objectives is to balance projects the portfolio, maximize portfolio value and ensure strategic alignment between the projects and the portfolio (Cooper et al., 2001). It was more recently indicated by researchers that the PPM objectives could benefit from formalised processes and a close link between the fields can be identified (Teller et al., 2012). Therefore, due to the close link between the FEI and PPM, the way that the FEI is formalised and decisions are made might have various implications on the PPM objectives. However, little research has been done on the effects of formalisation on PPM. Research so far determines positive effects on PPM performance (Cooper, 2008) and the portfolio quality (Teller et al., 2012). Formalisation makes projects comparable which increases portfolio optimisation in terms of project balance and (re-)prioritisation of projects (Kock et al., 2015; Martinsuo & Poskela, 2011).

By exploring how formalisation impacts the FEI in different ways, it is thereafter possible to analyse its effects on project portfolio management, and more specifically the PPM objectives. In this sense, this thesis will contribute to the existing research gap between the two fields.

Chapter 3: Methodology

3.1 Summary

In this qualitative single case study, an abductive approach is selected that will provide inductive empirical data that together with deductive influences will build theory. As this research is focusing on social constructs, an interpretivist and constructionist position was taken in order to stay close to the reality of data. The Gioia et al. (2012) method was used to provide in-depth insights by transforming raw data into aggregated data. In order to select the interviewees of these unstructured interviews, a maximum variation purposive selection method was used in order to keep a broad and variation of perspectives in the case company. In this orientation, observations and unstructured interviews determined that the research focus was anchored in formalisation of the FEI, with formalisation also having a potential impact on the project portfolio objectives. Based on the thesis topics in focus and literature review in mind, the semi-structured interview guide was constructed to allow flexibility and go in-depth. Moreover, the interview guide was pilot tested before being used to diminish any misunderstandings. The interviewees for the conducted semi-structured interviews were selected based the non-probability purposive selection based as the research question should reflect the interviewee selection. Interviews were conducted until theoretical saturation was reached.

3.2 Nature of the research

3.2.1 Epistemology and Ontology

Epistemology is the philosophy of knowledge, what knowledge is accepted and how social objects should be studied. Based on the aim of the thesis to reach an in depth understanding of a specific case, this study applies an interpretivist point of view. Interpretivism implies that a social scientist is needed in order to reach understanding of the subjective social world. In such a social construct, one cannot solely be objective and some subjective adjustment is required. (Bryman & Bell, 2015) In relation to our research this means the case company is the social construct which in turn is formed by the organisation's social actor, its employees. Therefore, we, as social scientist, cannot be fully objective as we need to analyse and interpret information collected from an operational standpoint as this is the research focus. Information should be put in context of the organisational construct. The aim is to stay as close to reality by trying to interpret and understand the social actor's views by analysing

their use of words and terminology, and make them come forth. By taking this position, knowledge will not be objective as the social actor's views are analysed and interpreted subjectively.

In regards to ontology, an interpretivist position relates to a constructionist point of view. This position indicates that the reality of individuals is continuously influenced by social interactions and that the social phenomena in this study is formed by subjective views (Bryman & Bell, 2015). In line with constructionism, we view the case company, as depended on its social actors, the employees in it, and the company as culture rather than an objective.

By understanding both position, we are aware that the data in this research are not entirely objective. Subjectivity views and knowledge in this case will be understood as a social phenomenon and used to bring forth reality of the social construct.

3.2.2 Research approach and strategy

Based on our initial orientation at the case company and a number of unstructured interviews, an overall sense of challenges was gained, indicating towards formalisation in the FEI. These meetings in combination with our personal interest laid the ground for the chosen field of the FEI.

Bryman and Bell (2015) argue that an inductive approach is preferred when qualitative data drives theory building. Since the collected data from the case company create the basis of theory building and due the qualitative nature of our research, the research has an inductive character. Although, the initial anchoring and review of existing literature give the thesis some deductive influences (Bryman & Bell, 2015). Though, a complete deductive process implies the construction and testing of hypothesis often in a quantitative study, and this is something that is not reflected in this case. Bryman and Bell (2015) also present an abductive approach as a mix of both previous mentioned. This is suggested as a way to decrease the limitations of both approaches, such as the subjectivity related to inductive research where it is stressed that empirical data is never sufficient enough for theory building. Or, as for deductive research following a more strict logic that is really reliant upon theory and testing. (Bryman & Bell, 2015) Based on the insights from the first unstructured interviews, the anchoring in theory and on what Bryman and Bell (2015) present as "puzzling" the interest, an abductive approach reflects the thesis best. It also reduces the limitations of the two discussed approaches. In line with qualitative research, the working

process started with the formulation of a somewhat broad research question reflecting the identified fields of interest and core concepts. Continuous research in literature and collection of data increased our knowledge in the fields and the case company, which later on allowed for a more precise formulation of the research question. The process was therefore characterised by iteration and specification.

3.2.3 Research design

According to Bryman and Bell (2015), a research design contributes with a framework in regards to the collection and analysis of data. To reach an in-depth understanding, as the aim of this thesis is to contribute to research with an empirical example of a specific company type and industry, a case study design is chosen. The case study design is appropriate to grasp the complexity a single case can entail (Bryman and Bell, 2015). Furthermore, Yin (2003) classified and distinguished case studies into five categories based on characteristics; the critical case, the unique case, the revelatory case, the representative case and the longitudinal case. The representative case implies the exemplification of a specific form of organisation. Since the case company in focus represent a large brand portfolio company, it clearly represent a certain category of firms while the FMCG industry represents a specific industry. Being a large brand portfolio company, the case company has multiple brands, which represent the overall company portfolio. However, the brands in the overall company portfolio work with own project portfolios operationally. In order to manage all the different brand project portfolios and the brands' NPD processes, the case company assumingly has supportive structures, processes and documentation in place, potentially making it a formalised example. Further, the combined factors of the case company being a large company with many brand portfolios, in a FMCG industry, surrounded by incremental innovation also contribute to uniqueness. This implies some features of what Yin (2003) mentions as "the unique case". But, as expressed by Lee, Collier and Cullen (2007), Yin's categorisation is rather narrow in its division, which also reflects why it is difficult to place the organisation in solely one type.

3.3 Data collection

Given the case study design of the thesis and the qualitative strategy, a non-probability purposive selection method was chosen. In line with Bryman and Bell (2015) this method is appropriate when the research question guides the interviewees that need to be in focus of

attention. Further, since the selection of the participants was not made on a random basis and the decisions were purposively made, this method is also suitable (Bryman and Bell, 2015).

3.3.1 Unstructured interviewee selection

The data collection process started with an initial orientation and unstructured interviews to get a grasp of the challenges in the company. The selection ground for the unstructured interviews followed a maximum variation purposive selection method in order to ensure a broad overview and a variation of perspectives (Bryman and Bell, 2015). With this aim in mind, we conducted unstructured interviews with employees on different hierarchical levels and in different departments of the case company. These meetings eventually met an initial empirical saturation point, when the answers surrounded the same challenges and pointed in the same direction of formalisation related aspects in the FEI, together with project portfolio management somehow seemingly being influenced by the FEI formality.

During the unstructured interviews, it was clear from different points of views that Brand Managers were the ones central to innovation in turning new ideas into concepts, turning the concepts into projects and eventually also products ready for launch. The interviewees indicated that Brand Managers work independently and operationally with the processes of turning new ideas into concepts. This gave a hint of that structures potentially were in place in the FEI supporting the independent NPD development of Brand Managers. Additionally, “funnelling” and “stage gate” were buzzwords frequently mentioned as established processes integrated in the company’s NPD. Moreover, it was also stressed that the portfolio aspect of the company came with implications such as budget and resource allocation decisions from top management. This in turn, created a sense among the Brand Managers that they sometimes felt constrained in their abilities to innovate but sometimes also pressured to innovate due to expectations from top management. Based on these unstructured interviews, the research focus was anchored in formalisation in the FEI, with formalisation also potentially having an impact on project portfolio management, and more specifically the different project portfolio objectives.

Position of interviewee	Departments
New Business Development Manager	New Business / Marketing Department
Traded Goods Category Manager	Purchasing Department Group Level
Innovation Director	Innovation Department
Key Account Manager	Sales Department
Consumer Service Advisor	Marketing Department
Consumer Insight Manager	Marketing Department
Brand Manager	Marketing Department
Brand Manager	Marketing Department
Category Manager	Sales Department

Table 2: Overview of unstructured interviews

3.3.2 Selection within case company

The introduction of the case company, in chapter 1.2, provided a quick glance of the case company and why it is interesting in relation to our research. Eisenhardt (1989) indicates that the selection of a case company should be done carefully as the company should be representative to duplicate or further explore established theory. As the case company is a large brand portfolio company in the FMCG industry, there is the awareness that the case company, besides certain research fields, also could represent a certain firm type or industry.

After selecting the case company, the next relevant selection was within the company; more specifically what department that was of interest. Based on the initially conducted unstructured interviews and a tentative research question, we found that the FEI was characterised by a top-down approach and that the Marketing Department was key in the operational innovation process, hence relevant in relation to our research. Although, while the Brand Managers within the Marketing Department are the initiators of innovation and operationally responsible, the top-down approach in the company involves various processes that are characterised by many levels of involvement and top management approval. This, amongst others, such as inflexibility, indicated some sort of formality in the FEI. Top management works with Portfolio Management in regards to resource allocation to all brands. However, all brands operating in the Marketing Department, have their own brand

project portfolios and are responsible for the NPD processes of the company and are therefore influenced by decisions made on top management level. We therefore saw possible top management influence on formalisation in the FEI and the operational processes, and the way it affects brand project portfolios. Hence, as the FEI processes and brand project portfolios fall under the Marketing Department, we decided to take an operational standpoint.

3.3.3 Formal interviewee selection

After the guiding unstructured interviews, a more a semi-structured data collection process started. Bryman and Bell (2015) stress that the research question should indicate the selection of interviewees required for the research. The research question guiding this research consists of two parts, which also implies a need to target participants corresponding to both parts;

"How does formalisation affect the FEI of a large brand portfolio company and how does formalisation in the FEI affect the project portfolio objectives?"

Firstly, the research question focus on how formalisation affects the FEI. This is reflecting the first criterion of the selection. Therefore, the interviewee selection was based on the criterion that the interviewee had to have a central role in the FEI in order to reach reflective findings in regards to FEI and the formality potentially taking place there. Brand Managers are the ones especially central to innovation in the FEI, having the overall responsibility of turning new ideas into concepts. Therefore, they represent the first mentioned criterion as relevant selection target.

Since the Brand Managers manage a portfolio of products and related projects within each brand, they also reflect the selection required for the second part of the research question. Since the chosen focus of Portfolio Management is Project Portfolio Management, the Brand Managers and their portfolio represent the required selection . Although, there might be a potential company influence on the portfolio of the different brands and the aim is to find this reflection through targeting Brand Managers.

3.3.4 Interview preparations and considerations

As recommended by Bryman and Bell (2015) aspects such as location, recording, interviewer's influence and ethical issues were taken into consideration. Since the aim of interviews was to create a comfortable setting where the interviewees could speak freely,

small conference rooms were scheduled for the meetings. These rooms excluded the possibility that other colleagues would over hear and potentially influence the respondents answers. This could have been an influence if the interviews were held in the other parts of the office, where the planning mostly was open without any separate office rooms. The meetings were often scheduled during lunch hours to avoid interruptions, such as phone calls, that could have disturbed the flow if the meetings were held during busy hours. The interviewees gave their approval of recording before the interviews started. We in return promised their anonymity. This aspect was especially important for the sake of our transcription possibilities and the ability to capture the respondents answers truthfully with their unique wordings. Additionally, the recording was suitable due to the semi-structured nature of the interviews, aiming to find interesting, in-depth answers related to our different topics, which required attention from the interviewer. To optimize the results from the interviews, a pilot interview was conducted and evaluated and the guide was therefore adapted.

Furthermore, in compliances Bechhofer, Elliott and McCrone (1984), our interviews benefited from having two interviewers present at the meetings. This allowed for one interviewer (in an observant role) to be passive, observing and making sure that the desired topics were covered while the other interviewer was leading the conversation but with support from the more passive one. At some point, it was also possible for all three persons present to discuss some aspects together. A final consideration was made in regards to "going native" (Bryman and Bell, 2015). By being aware of the risk of being caught up by the company culture, we hoped that our awareness of the problem would reduce the risk. This also is in line with Gioia and Thomas (1996), who found that some theoretical terminology might not be understood on more practical levels as in this study. The pilot interview allowed for adjustments of unclear or too academic questions, this initial testing lead to avoidance in regards to further misunderstandings among the interviewees. On the other hand, as this is an ethnographic research, Gioia et al. (2012) point out the risk of "going native", meaning that there is a risk to be too close to the interviewees view that it might be adopted. The purpose is to be close to the interviewee's views, however a general perspective is also needed to theorise the findings. Therefore, the interviews were always attended by two people with one of the team members having the task to take an "outsider perspective" and have a critical view on the perceptions that might seem too close to the interviewee's perspectives.

3.3.5 Interview guide

The semi-structured interviews were supported by a pre-constructed interview guide that can be found in appendix 2. The semi-structured setup was chosen due to the flexibility and freedom it contributes with during the interview situations (Bryman & Bell, 2015). Especially, it allows the interviewer to follow up on interesting turnouts and ask question about these even though the questions might be absent in the guide. Although, the questions are constructed based on relevance for the thesis, which is why the majority of them are covered. As suggested by Bryman and Bell (2015) the questions were formulated with an understandable language with no leading questions. When constructing the questions, different topics were considered that corresponded to the research question.

The first topic reflects the interviewee's position at the case company and its previous experience. The aim of this topic was to get an understanding of how potentially previous experience could have affected the interviewee's way of working with new ideas and concept development in the front end. An entrepreneurial background could for example possibly have implications on future ways of working. Furthermore, asking about the time period at the company could give an indication of how shaped the interviewee has become or not become by the processes in the company. A potential newness at the company could also indicate to what extent formalisation has shaped the interviewee.

Topic 2 targets the first part of the FEI process, namely the stage where opportunities are recognized. The questions in this section was drawn from FEI literature such as Florén and Frishammar (2012) and Koen et al. (2001). In line with the authors and based on informal meetings, we assume that there is a lot of ideas in the company. This is why the questions are more explorative regarding *how* the ideas are recognized and more specifically *what* is firstly considered when recognizing them and *how* they consider them. This was based on Magnusson et al. (2014) how distinguishes between formal and informal screening. These questions can potentially reveal (in)formalised strategies for finding new ideas and ways of initially evaluating them.

Topic 3 is based on the funnelling process in the FEI as mentioned by e.g. Florén and Frishammar (2012) and Hakkarainen and Talonen (2014). This part of the front end, reflects the process where ideas are fed into a funnel and continuously refined and screened in an iterative process, building a product concept. These questions are drawn from the literature with the aim to understand the processes in the case company. Secondly, the topic is also

including questions regarding different criteria related to the screening process as indicated by e.g. Kim and Wilemon (2002). This is also to determine the use of formal or informal criteria and processes. These questions are formulated based on a literature review of the most common criteria companies screen on (e.g. strategic alignment and financial returns). The aim of this topic it therefore to explore if the screening and refinement processes are done more intuitively or based on a lot of structured criteria and documents controlling the processes (Kock et al., 2015). Moreover, this topic is also meant to determine the influences of processes and tools in the company as they influence formalisation (Poskela, 2009) while the maturity of the brands could have implications of ways of innovation (Kuratko et al., 2011).

Topic 4 is based on Florén and Frishammar's (2012) last stage of the front end, the process where a product definition is created. The product definition is according to the authors including more detailed information than the concept that is initially built. Jaworski (1988) and Kock et al. (2013) describes formality as written (e.g. documentation and guidelines) and introduced by management while informal control not written. Therefore, this topic is established to analyse if documentation is in place in the FEI and if it is consulted. During the informal interviews, a product definition corresponding to Florén and Frishammar's (2012) description was mentioned, in the company named "Project Establishment Paper", also called PEP. This is why the intention of topic 4 is to explore this further in the company and what is required in terms of information when building the definition. Moreover, the aim is to see how the requirement of building a product definition potentially is influencing the concept development process in the front end.

Topic 5 is targeting portfolio management and is reflecting the last part of the research question of "how formalisation in the FEI affect the PPM objectives". The questions in this topic are formulated mainly based on the different PPM objectives; maximisation of portfolio value, strategic alignment and portfolio balance. These objectives reflect PPM's main goal "to maximize the contribution of projects to corporate success" (Heising, 2012). There is coherence in the literature regarding the importance of these objectives, for example stressed by Cooper et al. (2001) and Eling et al. (2016). Based on Stilling and Eskerod (2008), questions related to resource allocation and prioritisation were developed as the authors stress the importance of having the most optimised portfolio with resources allocated to the right projects by consistently (re-)prioritising projects. Based on the relevance of the objectives for corporate success, the interest was raised on how FEI formality could potentially impact the PPM objectives, hence the success.

3.3.6 Semi-structured interview overview

Due to the limited time frame in which this research needed to be conducted, we did not have the possibilities to perform a large study. However, due to the smaller size of this study, theoretical saturation was achieved relatively quickly, in line with (Fuchs & Ness, 2015). It is important to reach theoretical saturation since failing to do so indicates that no full consensus in the data is reached. This decreases the quality and validity of a study. (Bowen, 2008) The collection of data continues until "theoretical saturation" is achieved, meaning that the collected information has formed the foundation for the study as the data generally point in the same directions. When reaching theoretical saturation, the data collection does not have to be continued as the foundation is formed (Bryman & Bell, 2015). In this study, theoretical saturation was reached around the 7th interview. Even though, the data pointed to the same, we still had an 8th interview planned. We used this opportunity to confirm that saturation was reached. Below a table is presented with information related to all conducted semi-structured interviews.

Date	**Position**	**Location**	**Recorded**	**Transcribed**
23/03/2017	Senior Brand Manager	Meeting room (HQ)	Yes	Yes
29/03/2017	Brand Manager	Meeting room (HQ)	Yes	Yes
30/03/2017	Junior Brand Manager	Meeting room (HQ)	Yes	Yes
05/04/2017	Brand Manager	Meeting room (HQ)	Yes	Yes
11/04/2017	Senior Brand Manager	Meeting room (HQ)	Yes	Yes
12/04/2017	Junior Brand Manager	Meeting room (HQ)	Yes	Yes
20/04/2017	Senior Brand Manager	Meeting room (HQ)	Yes	Yes
21/04/2017	Junior Brand Manager	Meeting room (HQ)	Yes	Yes

Table 3: Overview of semi-structured interviews

3.4 Data analysis

3.4.1 Data analysis method

Mainly two recognised frameworks, one by Gioia et al. (2012) and one by Eisenhardt (1989), were compared and considered in order to make a decision regarding which framework that was most suitable to guide the data analysis. A decision to let Gioia et al. (2012) recommendations guide the data analysis was due to several reasons. Firstly, our intention with the research was to explore and discover new concepts and relations in line with Gioia et al. (2012), rather than testing hypotheses on predefined assumptions based on theory as Eisenhardt's (1989) method. Instead, our aim was to let the informants experiences speak and not our own assumptions based on theory. Moreover, the initially held unstructured interviews also contributed to the choice of Gioia et al. (2012) and theory due to indications of structured, generic ways of working with innovation in the case company. The interviews indicated that formal processes were in place and that all brands seemed to have similar ways of developing new ideas in the FEI. Therefore, there was no need to emphasise on the uniqueness of each case, or as in the company, each brand, as Eisenhardt's framework highlights. Further, the relatively unexplored and researched connection between the FEI and the project portfolio objectives was also a reason to let the collected data drive theory instead and take on an explorative approach in line with Gioia et al. (2012).

Based on the previous comparison between Eisenhardt (1989) and Gioia et al. (2012), the method of Gioia et al. (2012) will be applied. Based on their recommendations, our process of data analysis is presented in the next section.

3.4.2 Data analysis process

In line with Gioia et al. (2012) the collected data consisted of multiple sources (unstructured interviews, company templates, semi-structured interviews) to ensure a more solid research. Although, the semi-structured interviews and the data generated from them was the main focus of this research. As interviews were held, each interview was transcribed based on recordings. Thereafter, relevant statements in relation to the research question in the transcriptions were highlighted and extracted into an excel sheet. The statements reflected the interviewees personal experiences in regards to our research focus. After the collection of all the statements, the construction of 1st order concepts started. At this stage we kept in mind the importance of staying close to the informants own terms, to avoid impact as researchers and decrease the risk of subjectiveness of this chosen method. We found an overwhelming

amount of 1st orders and a feeling of being lost in the data as also stressed by Gioia et al. (2012) was present. When having all the 1st order concepts in place, the process continued by looking for similarities and differences among the concepts. When building the 2nd order themes, we adopted a more theoretical mindset as this part of the analysis can give a possible indication of potential explanations of our research question. Although, as the aim is to stay true to the informants answers, the 2nd order themes were developed with a combination of theory and practical anchoring in the terms of the information. The slight incorporation of theory might help to interpret and describe the phenomena that is being researched. Thereafter, the 2nd orders themes were developed into aggregate dimensions. Once this was done, data structures were created in line with Gioia et al. (2012). This structure provide the reader with an overview over the multi-step analysis, but it also allowed us to think in terms of potential relations between the dimensions. When searching for these relations, we tried to not let theory affect us too much as new concepts, hence unique findings could have arised from the data. It was therefore important to keep a balance between involving literature when looking for relations and allowing new concepts to come forth.

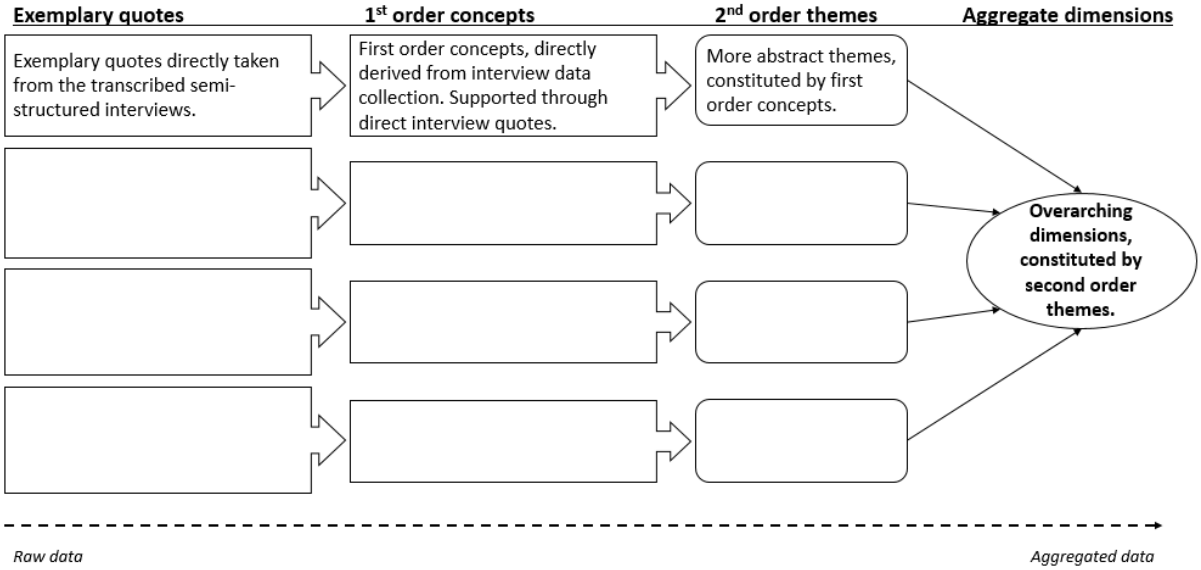

Figure 1: Adjusted data structure model from Gioia et al. (2012:21)

To increase transparency and the reader's understanding of our data, we extended the original Gioia (2012) model and added “exemplary quotes” to the data structure. In this way, the originality of the interviewees’ own terms could come forth. This way of working with the data structure will also decrease our own impact on the data since it is possible to return to the quotes and stay as close to the original terms as possible. Thereafter, based on the

relations found between the aggregate dimensions and by consulting literature, a model was developed, displaying the most prominent discovered links. When constructing the model, the theoretical research gap that we intend to contribute to is kept in mind, since the aim is to fill that by answering the research question with the data at hand. Although, still allow unique findings shine which could potentially be implications for future research.

3.5 Reliability, replicability and validity

In a qualitative study it is considered to be hard to measure the reliability and validity compared to quantitative research as the measurement of data is not the essence of qualitative research. However, by taking several precautions, both are still needed to be accounted for as it is important for the quality and integrity of the study as well as they increase the replicability. (Bryman & Bell, 2015) Therefore, the following precautions have been taken to ensure the quality of this research.

As this chosen design reflects a small qualitative single case study, it essential to acknowledge the limitations regarding the external validation, or generalisability, due to the social and subjective nature (Bryman & Bell, 2015). However, the use of the Gioia method (2012) increases the generalisability as they highlight that findings can be exemplified and be relevant to other domains. In our case, possible domains could be other in the context of industry and company type/size. With regards to reliability, not only the interviewee's direct quotes were consulted as data. Contributing to the internal reliability, observations of the observer present at the interviews were documented and analysed in order to discuss and verify what was both heard and observed. Moreover, as literature is the basis of qualitative research, literature was used to prepare the interview guide, while literature was also continuously (after the 1st order) consulted to confirm if data were in line or contributing to current research. This contributed to the internal validity. Additionally, pilot testing of the interview guide took internal measurement validity into account, as we were able to adjust misunderstandings and prevent the use of too theoretical terms.

Even though it is hard to pause a social setting of a qualitative study and various environmental circumstances cannot be fully duplicated, precautions were made. Bryman and Bell (2015) indicate that to ensure replicability, all steps in the process need to be closely documented. This allows for openness, consistency and transparency which in turn contribute to the external reliability of the study. In our process, all interviews were recorded, both unstructured and semi-structured, providing the possibility to prove all data. Notes were

taken, the semi-structured were transcribed and the interview guide was documented, which is presented in appendix 2.

Chapter 4: Presentation of findings

4.1 Introduction

Based on Gioia et al. (2012) recommendation of data analysis explained in chapter 3.4.1, raw data have been developed into aggregated data through a multi-steps data analysis process. This process is systematically and transparently presented in the data structure models at the end of the each dimension sub-chapter. In these sub-chapters, the aggregate dimensions are fully presented with the connected second order themes. The collected data resulted in the following six aggregate dimensions; 1) Managerial impact, 2) Scattered focus, 3) Initial intuitive decision making, 4) Formal decision making process, 5) Project portfolio management and 6) Consequences of formality.

The data presented below is a presentation of multiple sources. Generally, the data are extracted from the semi-structured interviews, however the second order themes "documentation and standardisation" and "formal funnelling criteria" criteria have been complemented by a company document, presented in appendix 3.

Additionally, as described in chapter 3.4.2, literature should be utilised to keep the research in focus when forming the second order themes. This opportunity is utilised to distinguish between "brand fit" being part of the second order theme "formal funnelling criteria" and the second order themes "innovation within brand frame" and "strategic alignment". As they all indicate some sort of strategic fit, these are closely related, but different in contexts. Therefore, there was a theoretical and analytical reason to differentiate as "innovation within brand frame" is reflected in the first intuitive thoughts of reflecting an idea in light of the brand association that comes with a brand, "brand fit" is anchored in literature as a formal screening criteria (as strategic alignment) as well as it is part of the formal screening process within the case company while "strategic alignment" is integrated in the company's PPM and is theoretically part of the three PPM objectives.

4.2 Presentation of aggregate dimensions

4.2.1 Managerial impact

The first aggregate dimension "managerial impact" consists of four second order themes; being a champion, priority-based resource allocation, management (in)flexibility and expectations to deliver. The findings showed that top management puts pressure on especially high priority brands as they receive financial resources to innovate. This in turn has an effect

on the prioritised brands, in the sense that they sometimes overestimate the potential of the ideas they are working on. Simultaneously, managerial expectations on innovation are lower on the low prioritised brands leads to champions, fighting for budgets and management approval.

Being a champion: This second order relates to the Brand Managers, acting as champions in the company, pushing for approval and trying to convince management of the potential of their projects. *"We need to pick our fights. It was really challenging to get this commitment from management."* This fight for management commitment especially applies to Brand Managers of low prioritised brands, whose markets are somewhat stagnated and are not expected to meet much growth. One of the Brand Managers indicated this as follows; *"[brand] was more like low priority, you need to sell in your ideas and earn buy in for them."* Additionally, it is stated that approval needs to be found on different higher hierarchical levels in the company, meaning that the Brand Managers needs to champion themselves up in the structures, playing the political game. "*We have to have a green light from our marketing manager first. He has to agree, maybe he have to talk to the marketing director, just to have her on board, because we don't want to go up to the board if the marketing manager a presentation and he doesn't have support from our marketing director."*

Priority-based resource allocation reflects the allocation of financial resources for innovation by top management. "*We have the.. board accept our resources."* Top management annually allocates financial resources to brands for innovation based on the financial potential. This is based on yearly prepared brand priority matrix. High prioritised brands get more resources to innovate than brands who are categorised as low. "*[Brand X] is placed lower than [Brand Y], my experience is that you tend to prioritize [Brand Y] before because this gives more money."* This resource allocation affects the brands' possibilities to innovate, both positively and negatively. This was also indicated by Brand Managers; *"[brand] was still high priority, so we got money to do things"* and *"there were not any resources allowed for [product], so I could not innovate at all."* The budget allocated to a brand is fixed and challenging as one of the Brand Managers indicated; *"if we don't have the money for it, then it's difficult, it's a really hard argument for anyone else using a budget on our.. for our part."* That Brand Managers just need to work with the financial resources they

receive to innovate also becomes clear in the following quote; *"Because it is hard to get money outside launches. Everything is related to the launches."*

Management (in)flexibility: This order is reflected through the Brand Managers' experience that management is not very flexible when it comes to change. One Brand Manager pointed this out as *"but sometimes things change during the way, and I think we are not always very good at seeing that things are changing."* It was stated that *"following through the vision and the project"* is more important than realising the changes and adapting to them. One Brand Manager explained this by *"I think it's rooted in the culture of the company as well. It's not fast mover people working here that much"* and that *"it's difficult to break a pattern like that."*

Expectations to deliver: This is based on the Brand Managers experienced pressure to deliver, or not to deliver, innovations. This is reflected in a priority matrix in the company (as mentioned in the second order theme "priority-based resource allocation"), where brands are divided into different categories based on their financial potential. Prioritised brands are expected to meet growth and financial returns. The managers of these brands therefore feel a pressure from top management to innovate more than others. This pressure to deliver innovations is also said to lead to overestimations of potential. *"It will be difficult for us to innovate the product because usually we set a pretty high .. like .. goal for selling and we still have pretty high prognoses for the.. customers buying from us. It puts a lot more pressure to do good innovations and that we calculate a little bit more extra."* Simultaneously, it is also said that *"We can also see that our goals are very very hard"* meaning that there is not only pressure to deliver, but it is expected to reach high goals. On the contrary, low prioritised brands are less pressured as the expectations to innovate is less. *"Some brands work extremely a lot with some goal."* This is also reflected in the annual financial resource allocation by top management. Low priority brands receive a small budget while high priority brands receive many resources.

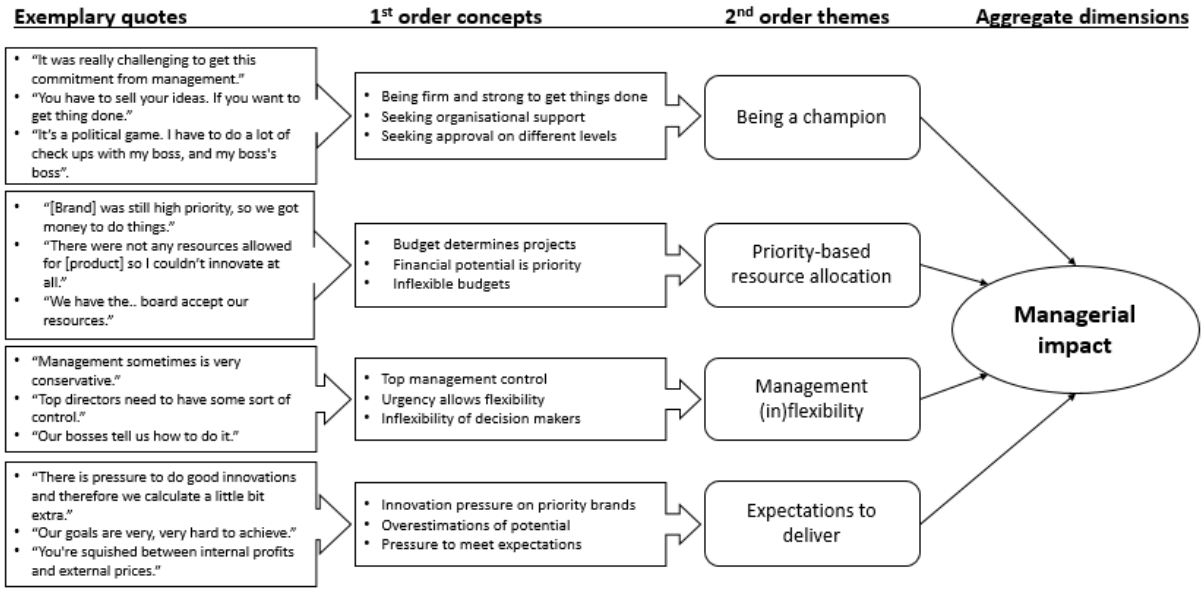

Figure 2: data structure model of aggregate dimension "managerial impact"

4.2.2 Scattered focus

The second aggregate dimension "scattered focus" is based on two second order themes; task (in)efficiency and integration of new employees. Brand Managers have a wide variety of not innovation-related tasks next to all innovation-related tasks that are demanding and time consuming. Therefore, their focus is very divided and this is also shown in the integration process of new employees.

Integration of new employees reflects the introduction process of employees starting at the company. Even though, there is a standardised training and education module called "Brand Academy", this formal training usually comes late. *"I think that my introduction was really poor. Four stages about a week long. They were spread out over one, two years."* However, once received, these trainings are indicated to be useful. *"I know how to do a concept, but there are certain procedures that they teach you about Brand Academy".* As part of the introduction, the company also works with a "buddy system", but this is not always effective as the mentors often are too busy. *"People having too much to do here and no time to take care of our new ones."* This results in a lot of on the job training through various documents that are in place, *"she sent me a lot of documents, had to fill in and all the parts of the process"*, and learning by doing, *"a lot of talking to people actually and learn by doing."*

Task (in)efficiency indicates the tasks that come with the Brand Manager position. Brand Managers have a wide variety of tasks. *"We kind of are the spider in the web. That is the*

usual explanation of our role." A Brand Manager with previous experience at another company in the FMCG industry stated that *"in this company you're both Product and a Brand Manager"* indicating that at the tasks in the case company are more demanding and focus is more scattered. Due to this broad job description, many feel that there is no room to really focus on innovation. *"So much administration and maybe you have one or two projects running the same time." "They try 1000 things at the same time, without real focus."* However, once allowed to focus purely on innovation and work around the formal structures; *"you also experience when you really focus on one projects you can really proceed quickly in a couple of weeks"* indicating that the innovation time decreases tremendously as the normal innovation time is around one and a half year.

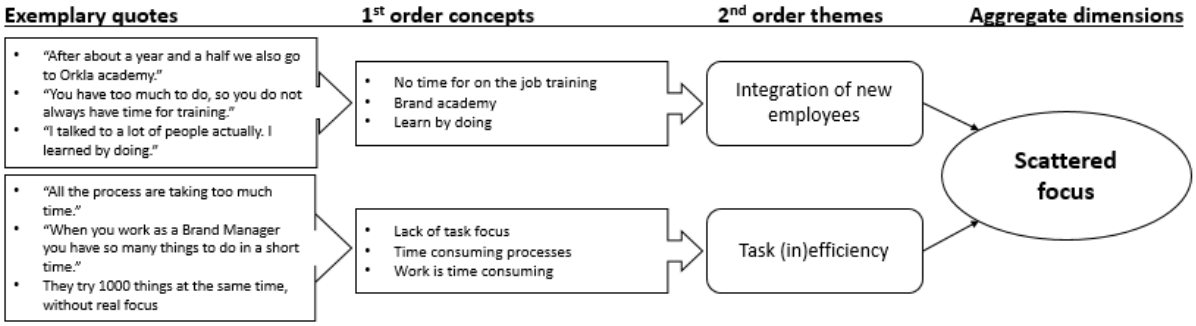

Figure 3: data structure model of aggregate dimension "scattered focus"

4.2.3 Initial intuitive decision making

The third aggregate dimension "initial intuitive decision making" was based on the three second order themes; tacit knowledges as first screen, idea generation and innovation within brand frame. The findings showed that the initial evaluation and decision Brand Managers make when they have a new idea is mostly intuitive, meaning that they evaluate the idea based on previous experience and tacit knowledge, before they are evaluated formally - if experience with the brand is in place.

Tacit knowledge as first screen: the interviews showed that the very first evaluation and screen of an idea was based on tacit, intuitive processes that come with the Brand Manager's experience and familiarity of their brands. Judging the potential of an idea that they found on the street for example, was reflected as *"I don't know what I think, a lot of instinct ... gut feeling".* It was usually expressed as a feeling that they immediately felt for it *"usually you have some kind of feeling for it. I immediately understand that it is not for me".* It was explained by their knowledge in the field and familiarity of their brand. Brand Managers

know what would strategically would fit their brand. *"I already know many brand so well, so I don't have to do like a huge analysis".* However, it was stated that the feeling decreased when they moved to a new brand, something that is common in the company *"Yeah, but it is harder when you switch, when you like.. new position. It is much harder to have that gut feeling".*

Idea generation: Ideas are generated in different ways. The company offers Creative Innovation Team (CIT) meetings which is a cross-functional group with the Brand Manager in centre, discussing the potential of different ideas. The efficiency of these meetings are two folded; either the Brand Managers feel that they stimulate idea generation *"we think outside the box, get out of your own comfort zone, sort of being totally crazy and there's also exercises within that process, where you are, or in in which you are you challenge a lot of things"* or they feel that the cross-functional character of it, with a lot of expertise in one room strangles the creativity too much; *"These meetings isn't always that creative because often you have people from other functions"*. Besides these cross-functional meetings, various other structured ways of idea generations, such as product and trend spotting, databases, trend-trips and help from agencies, are utilised. *"We are still a sort of brainstorming, but we got some help from the agency."* However, it was also indicated that ideas are found in unstructured manners as ideas tend to come from everywhere. *"I mean many ideas just pop up when you are on a vacation or when you are in the stores."*

Innovation within brand frame: Findings indicated that brand associations, in regards to different perceived characteristics unique to the brands, sets some kind of frame in which innovation is done. Even though one Brand Manager perceived it as limiting; *"we have to stay true to the brand, but still we want to move the brand in a new modern direction. So yeah it's a bit limiting"*. Others argued that there was still room for creativity within the frame; *"I think of ideas and I think creatively within that brand's position, our target position is, everything we do is to come to that target and position"* and *"a very strong brand recognition. But it does not set the tone for innovation. We can still do a new sort of fish if we want to."* One example of trying to think outside the boundaries was although presented: *"Yeah of course it narrows down your mindset, to pizza products and products very relative to the category. But we actually now just launched quesadillas."*

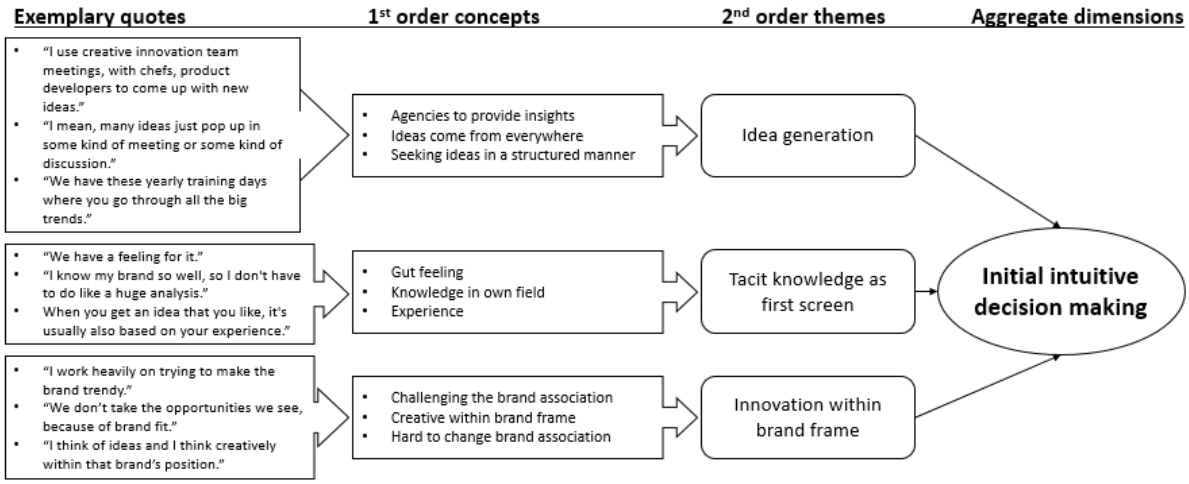

Figure 4: data structure model of aggregate dimension "initial intuitive decision making"

4.2.4 Formal decision making process

The fourth aggregate dimension "formal decision making process" is based on the second orders themes; documentation and standardisation, processes and tools and formal funnelling criteria. Except from the "initial intuitive decision making" discussed in chapter 4.2.3, findings indicate that documents are standardised, the same processes and tools are used around the company in NPD and that formal criteria are controlling the funnelling processes of the Brand Managers.

Documentation and standardisation: this second order consists of different documents supporting and controlling the innovation processes in the company. A concept template, a project establishment paper (PEP, presented in appendix 3) and innovation guidelines are three documents that are standardised and that came back throughout the interviews. It is very clear what the templates contains: *"Yes we have a template for a concept, what's the potential, what's the consumer insight.. What's the unique selling point."* It is also said that *"All launches we have, all concepts we do, have this one pager."* It was also reflected *"this is a lot of work before we can hand in the first document and the first presentation"* and that *"But yeah is very time consuming to write".* Both product concept and PEP need to be presented and approved by top management. The approval is said to have implications on the resources they get; *"Yeah you don't get any resources if you don't do a PEP"*. Additionally, it was stated that the standardisation of concept templates had a positive effect on the comparability of concepts in the portfolio; *"it is easy to compare the different concepts you have, because they all have the same format."* It was also argued that this standardised way

of working with building concepts and product definitions was probably generic in the FMCG industry.

Tools and processes: A funnelling process is taking place in the FEI in the company, this is reflected by Brand Managers *"I am working in the funnel. Let's say I have all these ideas, 20, that go down to 6. And I pick a winner."* Further, structured cross-functional meetings support the testing of different ideas. They also support the improvement of suggested ideas and is also said to stimulate more ideas. Different tools such as research functions and scoring methods are mentioned and are a part of the funnelling process of ideas. Concept testing was especially highlighted as a standard procedure; *"There are times people miss a launching window because they did not go through the tests. This is very [case company] ... a taste test. Talk and talk about taste test."* It is further argued that *"you have all these fancy tools we learn. It takes a lot to actually use them in your daily job. It is time consuming".*

Formal funnelling criteria: findings showed that ideas and concepts are developed in a funnelling process, with different criteria as the basis for the evaluation and screening of different ideas. Technical feasibility, market potential, financial potential, brand fit and consumer insights, amongst others, were the criteria coming back throughout all the interviews. These criteria are reflected in the PEP document (presented in appendix 3). It was stated that *"you need to look at the potential, potential is always financial"* and *"can we actually produce it? The technical aspects can also be important and a deal breaker"* but also *"Always have to have an insight. Consumer insight".* However, brand fit seemed to be the criteria that initially mattered the most *"than it is not so interesting, even if it is a big launch, it should have a good fit with the brand or category"* and *"you can't compromise with the brand to make it fit the idea, the idea needs to fit the brand."*

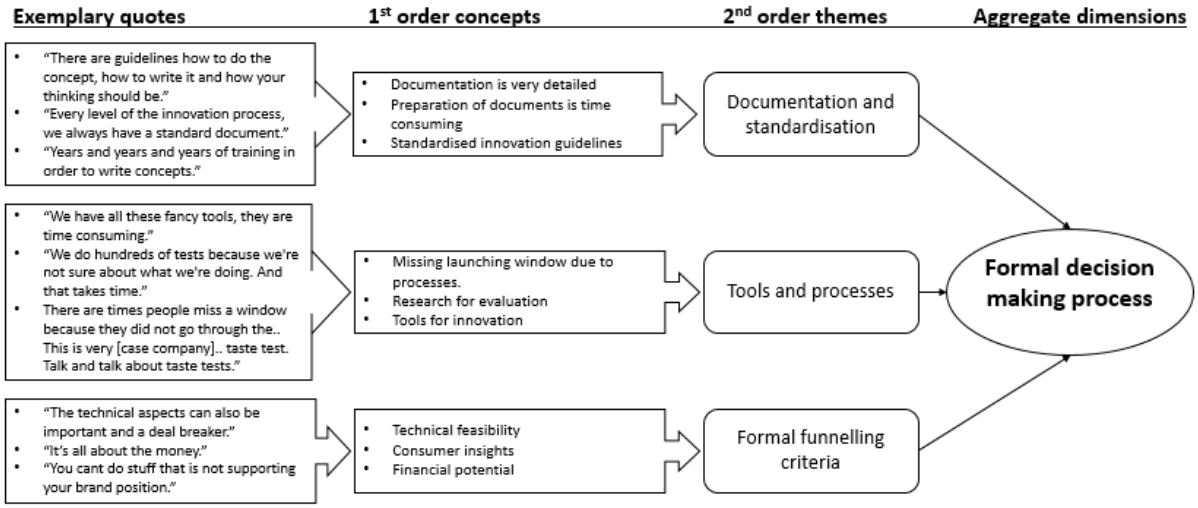

Figure 5: data structure model of aggregate dimension "formal decision making process"

4.2.5 Project portfolio management

The fifth aggregate dimensions "project portfolio management" is based on the four second order themes; concept prioritisation criteria, brand portfolio value, brand portfolio balance and strategic alignment. We found that these influence how the company works with project portfolio management and its portfolio outcomes.

Concept prioritisation criteria: The findings indicated that after the funnelling process, concepts are prioritised based on different criteria and this determines what concept continues to formal product development. The Brand Managers use a "roadmap" as a tool to map out selected concepts that could be developed in PEPs in the future. The roadmap is strategy tool for each brand, designed based on timing, meaning that if a concept is placed first, it will go into formal development first. The higher up the ladder, the later in time the concept will start its development. Criteria controlling the prioritisation of the concepts are; timing, if the market is ready, but mostly financial and market potential. All these aspects also reflect reasons for re-prioritisation. If any criterion changes, for example the time for launching, this is reflected in the roadmap as the position of that concept will be changed. This then indicates that a concepts will be developed sooner or later.

Brand portfolio balance: Interviews indicated difficulties in keeping a balanced portfolio. This related to balancing between developing completely new products and entering new categories, with doing incremental improvements of existing products. It was sometimes presented that the Brand Managers felt pressure from top management to bring forth new

product innovations. A wish to focus more internally on optimising existing product ranges was stressed; *"we are very focused on launches, and new trends and new big launches"* and *"we are not very good at managing products"*. A change in this regard and a more balanced way of working with the portfolio was stressed *"I hope it is shifting .. will be more towards brand focused rather than innovation focused here".* Findings although indicated that the Brand Managers somewhat tried to go slightly against the innovation focus by looking more on how they can improve their current brand portfolio; *"we look at the portfolio and what can we do the revitalise our portfolio".* Additionally, it was mentioned that sometimes they needed to find third party production plants when products could not be produced in their own plants. It was although emphasised that this was related to less control and more risk, and those innovations were therefore mostly screened out, hence avoided.

Brand portfolio value: Findings also related to how Brand Managers have growth and profits in mind when innovating and managing current products. They argued for example that *"best sellers stay forever"* implying the importance of certain well-established existing products and how they bring profits to the brands. These products were also stressed as *"the base"* and that it is crucial that you do not lose the base when innovating; *"you should take care of the existing products and locate resources to them".* Further, having a high portfolio value was also presented as *"trying to make a better innovations with less money".* Especially, growth was mentioned as a way to make sure that the portfolio value is high *"we are always trying to reach growth, growth is good and means money"*. Growth was related to the fact that the Brand Managers were looking for openings, and white spots to innovate.

Strategic alignment reflects that strategies need to be followed on different levels. Brands follow the company master strategy, but mostly need live up to the determined brand strategy. It was indicated that *"strategy is most important"* and *"when you work with a brand, it is important that you keep a red line".* The strategy surrounds the entire brand and affects decisions made regarding innovations. "*I would turn down a good idea when it is not on strategy".* As the strategy is essential to follow, innovations need to be strategically aligned as it determines the direction of the brand. The brand strategy reflects the brand stamp of each brand, what each brand stands for and how it is associated by the consumers. This is therefore *"basically a guideline for the whole brand"* when it comes to decision making in regards to new innovations.

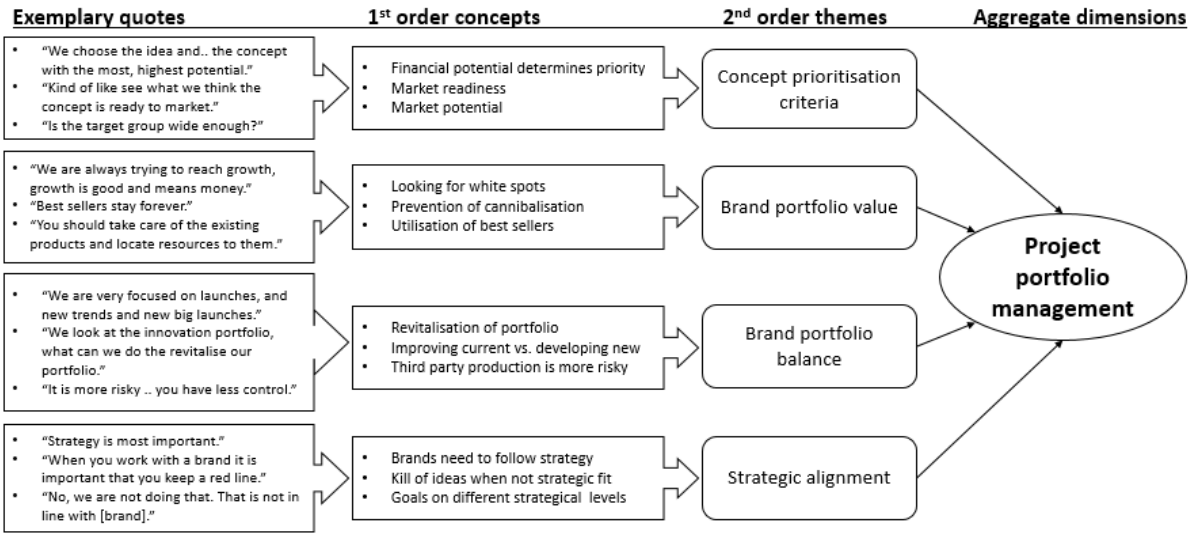

Figure 6: data structure model of aggregate dimension "project portfolio management"

4.2.6 Consequences of formality

The last aggregate dimension "consequences of formality" consist of two second order themes: effects on creativity and effects on innovation. Findings show that different aspect of formalisation have different consequences for the creativity and innovation of Brand Managers. Even though creativity and innovation are closely related, in the context of this research they are separated as creativity is seen as an enabler, stimulating innovation.

Effects on creativity: This relates to findings that indicted that formality related aspects have an impact on creativity. The effects are shown in both positive and negative directions as result of the different structures that are in place at the case company. Talking about creativity in idea generation during cross-functional creative team meetings, a challenge related to different training when being new at the company, constrained creativity in the meetings. This was explained by unconcise education in creative brainstorming tools which had an impact on the effectiveness of the tools. However, findings also indicated that the meetings sometimes could stimulate creativity and be an efficient constellation due to the cross-functional character of the participants. It was also stated that Brand Managers of low prioritised, stagnating brands needed to be more creative with *"keeping the brand awake"* within their budget lines.

Effects on innovation: This final second order reflects how different internal aspects affect innovation. Findings indicated that internal demands from management in regards to set profitability requirements on new ideas and projects constrained innovations; *"You have to*

score a certain number and everything and they wouldn't dream something that's under it". It was also stated that the involvement with the Category Managers (Sales Department) in a too early stage constrains innovations *"I understand the sales point of view but it's also very very like when you include them very early and they are like .. you can't do that". "It constraints a lot".* Findings also showed that the long innovation time of the company affected innovations *"If I want to do something and I want to launch this in a couple of months, I can't do that. I have to wait 1,5 year."* and that *"this market it's like moving really fast and we're like huge and slow.. This is [case company]'s way".* It was although stated that if Brand Managers clearly presented a strong case as in an urgent opportunity, exceptions could be made and the innovation time could be shortened; *"I have had one of those projects now, it is now really innovative, but it was an opportunity we needed to grasp and we are going to launch three new..?? We did it in 2 months, it is possible.."*

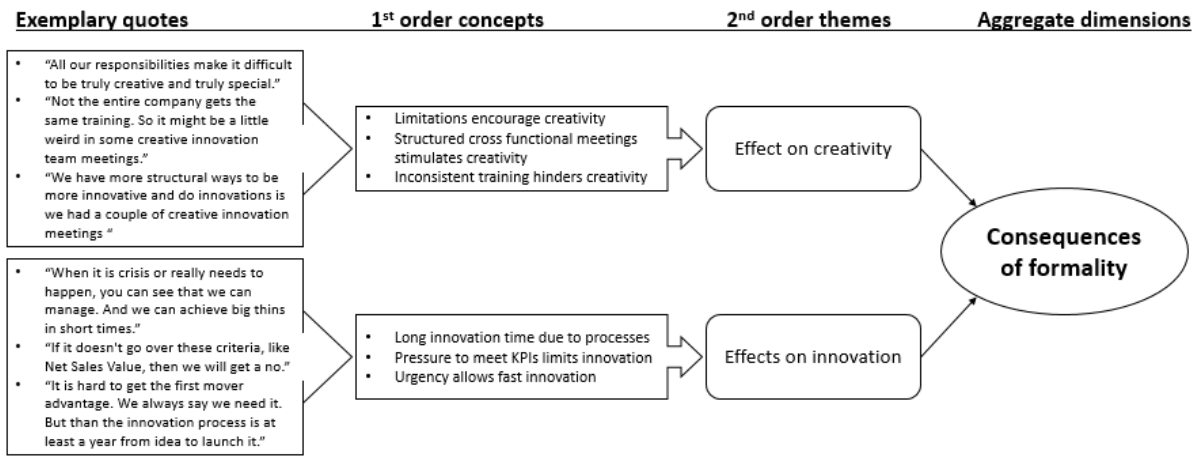

Figure 7: data structure model of aggregate dimension "consequences of formality"

Chapter 5: Analysis and discussion

5.1 Formalisation in the Front End of Innovation

Several findings reflect the presence of formalisation in the FEI, corresponding with Kock et al. (2013), indicating that formalisation often relates to control, processes, structures, guidelines and instructions in place to decrease uncertainty and make thought-through decisions. The aggregate dimension "formal decision making process" shows how various standardised documents are in place in the organisation to direct and support the funnelling processes of the Brand Managers. The funnelling process is controlled by different set criteria, being the basis for the evaluation of the potential of the ideas in the funnel. These criteria are also reflected and standardised in a mandatory document (PEP, presented in appendix 3), that requires approval and is controlled by top management. These criteria are also mostly reflected in the criteria presented in chapter 2.2.6. This level of control mainly regards to financial criteria as each idea and concept needs to reach certain financial KPIs to be approved. Therefore, there is a clear relation between the aggregate dimensions "formal decision making process" and "managerial impact". When developing an idea into a documented concept a first approval by top management is required, then the concept is further developed into a PEP, requiring additional approval before entering formal product development. Therefore, two layers of approval can be distinguished throughout the FEI. Both the terms that the company uses, concept and PEP, are also recognised by Florén and Frishammar's (2012) more academic terms "project concept", being the concept, and "product definition", being the PEP. If either the product concept or the product definition is not approved in the process, the project will be stopped and no resources will be allocated for further development. Top management therefore brings structure to the FEI through the mandatory documents involving set criteria. Brand Managers are expected to complete these in order to get resources for formal product development. This kind of formalisation is described by Jaworski (1988) and Kock et al. (2013) who indicate that formal control is written and directed by top management.

Top management, in the dimension "managerial impact", does not only have implications in terms of demands on ideas and development such as meeting criteria and filling out certain standardised templates (in the dimension "formal decision making process"), they also place brands in a priority matrix. This matrix is a resource allocation tool dividing financial resources between the brands depending on their financial potential. This

division ensures that the limited resources available for innovation are divided amongst the brands in order to reach the highest financial potential (Jugend & da Silva, 2014). However, the prioritisation of different brands based on their financial potential has shown to affect the way Brand Managers' work with innovation. The resource allocation has shown to create high expectations on the Brand Managers of the prioritised brands to deliver innovations. The experienced expectations, as a consequence of the resource allocation, has led to pressure to bring forth new big launches and innovations. Due to the expectations and pressure that come with being highly prioritised, Brand Managers of these brands sometimes overestimate financial figures in the FEI. In this sense, the aggregate dimension "managerial impact" has implications on the dimension "formal decision making process" as it affects the development process and the quality of the concepts being developed. The reason for overestimating financial figures is to reach or exceed the set financial thresholds of set selection criteria in the funnelling process in order to get the product concepts and product definitions approved to receive resources and continue to formal product development. The set financial levels by top management reflected in the "formal funnelling criteria" bring high expectations to innovate and deliver, since Brand Managers of high priority brands sometimes feel the need to manipulate the potential of ideas. One Brand Manager describe this as:

"It will be difficult for us to innovate the product because usually we set a pretty high .. like .. goal for selling and we still have pretty high prognoses for the.. customers buying from us. It puts a lot more pressure to do good innovations and then we calculate a little bit more extra.".

This might indicate a contradiction to the conceptual and empirical claim that formalisation has a positive effect the success of innovation projects as it decreases risks (Kock et al., 2015; Montoya-Weiss & O'Driscoll, 2000). By manipulating the expected results by overestimating the potential in favour of the ideas, the expected results of concepts might decrease in trustworthiness which can ultimately can decrease the overall success of the ideas. Instead of decreasing the risks, this type of formal control increases the risk as calculations are not accurate and the real potential is unknown. Moreover, the manipulation of estimations in a certain way also confirms that formalisation has a negative effect on the FEI (Martinsuo & Poskela, 2011). The level of control and the set levels in the "formal funnelling criteria" set a frame around the innovation possibilities. Brand Managers feel constrained and quickly disregard ideas if they do not feel that they will reach a certain potential. This relates to the

aggregate dimension “consequences of formality” due to its effects on innovation, where findings reflected an overall impression that set financial levels in the FEI funnelling process constrains innovations. The constraint is rooted in the Brand Managers awareness that top management expects results; *“You have to score a certain number and everything and they wouldn’t dream something that's under it”*, meaning ideas under the demanded numbers will not be approved. Therefore, a relation between the dimensions “formal decision making process” with formal development of ideas based on criteria, together with “managerial impact” with management setting criteria with expectations, have an impact on the dimension “consequences of formality” as they affect innovations negatively. This adds to the discussion whether or not formalisation has a positive or negative effect on innovation the FEI. This confirms literature presenting that demands to meet set criteria create boundaries to innovate (Sethi & Iqbal, 2008).

Furthermore, findings indicate that “priority-based resource allocation” (in the dimension “managerial impact”) have implications on Brand Managers of the lower prioritised brands. These Brand Managers stressed how they had to sell in their ideas more compared to higher prioritised brands and fight more for approval and resources. This was explained by the priority matrix incorporated by top management. The contrasting low expectations on innovation in these brands, lead to Brand Managers championing (second order theme “being a champion”) playing the political game and using convincing arguments to get their ideas approved. This is in line with Koen et al. (2014) who reflect that inflexible resource allocation could lead to a championing culture in order to find resources and seek management approval. However, in contrast with Yuan and Woodman (2010), who show that employees who are not expected to innovate will be less motivated to innovate. The low expectations in relation to the dimension “managerial impact” therefore has implications on the dimension “consequences of formality” as it spurs creativity within their budget boundaries. Budget constraints are therefore found to positively affect creativity. This confirms Woschke et al. (2017), who recently found similar results as their research shows that budgets constraints have a positive impact on creativity. On the contrary, it is said that limited resources restrain the overall innovation process (Trotter, 2011). This is shown by the lower prioritised brands as they need to be selective to choose innovations and regularly need to champion to try to push through innovations that are of strategic importance to the brand; *“we need to pick our fights. It was really challenging to get this commitment from management.”*

It is not only the budget boundaries shaped by "managerial impact" that affects creativity and innovation, it is also found that the strategy of brands (second order theme "strategic alignment") sets the frame of innovation. During the idea generation phase, the very first evaluation regarding the potential of the idea is found to be intuitive. Brand Managers stated that the familiarity and the experience of working with their specific brand guide them to make the first decision of an early idea's potential based on the strategic alignment within the brand frame. Tacit knowledge steers this process, and is the basis for both giving the idea a green light or screening it out depending on its alignment with strategy. In contrast with the dimension "formal decision making process" where the evaluation and decisions are based on calculated risks and set criteria, the "initial intuitive decision making" dimension's very first initial assessment is found to be informal and intuitive. Simon (1991) reflected that when uncertainty levels are high, people fall back on their intuition. Additionally, intuitive screening is seen as a time saving solution to quickly proceed (Miller & Ireland, 2005). This can explain why the initial first screen of an idea is done intuitively as Brand Manager are familiar with their brands and do not want to spend time on unnecessary tasks; *"I already know my brands so well, so I don't have to do like a huge analysis".*

Furthermore, the second order theme "idea generation" indicate that new ideas are sought for and found in structured ways (e.g. trend trips, cross-functional meetings), with some exceptions, the very first assessment still remains tacit. This was indicated by one of the Brand Managers; *"Usually you have some kind of feeling for it. I immediately understand that it is not for me"*. Findings although indicate that tacit knowledge is highly dependent on the experience with the brand. When moving to a new brand, the intuitive feeling decreases as there is no brand knowledge and experience in place regarding the new brand and its strategic boundaries. Hence, the informal "initial intuitive decision making" passes on to a more formal one until knowledge with the new brand is sufficient. This knowledge comes with experience and therefore it takes time to get tacit knowledge related to a specific brand. Meanwhile, findings show that the evaluation criteria "brand fit" as part of the second order theme "innovation within brand frame" supports the idea generation stage. Brand fit was presented as an early evaluation criteria in the case company, meaning that it is essential that ideas must be in line with the brand to continue to further front end development. When lacking the experience, formal documents and structures (e.g. brand fit criteria) are found to support the innovation process, which therefore indicates a strong link between the dimensions "initial intuitive decision making" and "formal decision making process". This is fully in line with Magnusson et al. (2014) who indicate that tacit decision making is intuitive

and takes time to develop as it is based on previous knowledge and experience. This was also reflected by Brand Managers that changed brands within the company. Even though they had tacit knowledge with a previous brand, this knowledge did not apply to another. Due to this change of brand, more reliance is put on the formal processes until their knowledge and feeling for the brand is developed sufficiently, meaning that this familiarity comes over time. However, in line with the findings of the dimension "formal decision making process", formality is influencing the overall FEI with criteria, standardised documents and ways of evaluating - after the very first intuitive, informal evaluation to ensure brand fit.

Another connection could also be traced to the dimension "consequences of formality" in regards to "intuitive decision making" and especially idea generation. It is found that inconsistent training programs for new employees at the company affects creativity. This especially relates to the training in different creativity tools. When some employees lacked this training, the entire effectiveness of the tools were negatively affected during the cross functional team meetings. In this sense, when some of the employees lacked tacit knowledge in these tools, the creativity was negatively affected since employees did not understand each other and were differently engaged to participate. This is complying Borghini (2005), who reflects that tacit knowledge as it is said to be hard to express, but also transfer to others. Moreover, it is therefore possible to see how formality in training needs to be consistent in order to support creativity and not, as in the case company, sometimes constrain it. The dimension "scattered focus" therefore also has a link to both "initial intuitive decision making", "consequences of formality" and "formal decision making process". These relations can be explained by the lack of time ("scattered focus") affecting consistent integration of new employees in tools and processes ("formal decision making process"). The unconcise training affects the experience with tools for idea generation ("initial intuitive decision making") which is turn has overall negative impact on creativity ("consequences of formality") This is in line with Eling et al. (2016) who found that consistency is crucial in order to benefit from the formality.

5.2 Front end formalisation and project portfolio objectives

Based on the previous discussion, formality influences the overall FEI with some exceptions in the idea generation phase, where ideas sometimes are found in an unstructured manner and where informal tacit processes are taking over, but only when brand experience is sufficient. In regards to the second part of the research question of this thesis, the impact formality in the FEI has on the project portfolio objectives will be analysed.

5.2.1 Formalisation and portfolio balance

Findings showed that resource allocation came with managerial expectations on Brand Managers of high prioritised brands to innovate and constantly bring forth new big launches. At the same time, Brand Managers are stressing an overwhelming amount of administrational work next to their innovation related tasks, as part of the dimension "scattered focus". A conflict between a pressure to innovate and too much administrational work can therefore be distinguished and this was also found to have dimension "consequences of formality". Innovation time of 1,5 year (from idea to launch) is experienced as frustrating for Brand Managers; *"If I want to do something and I want to launch this in a couple of months, I can't do that. I have to wait 1,5 year."* and that *"this market it's like moving really fast and we're like huge and slow.. This is [case company]'s way".* This is in line with Kuratko et al. (2011) who indicated that formalisation generally negatively affects time as many steps are involved. The dimensions therefore relate in the sense that the long innovation time due to many processes affect innovation negatively. The innovation time could additionally be linked to the dimension "formal decision making process" as it brings a lot of templates with set criteria that needs to be developed and approved, all adding time to the FEI and overall NPD. Findings showed how the pressure to come up with new launches and new products ("managerial impact"), being bound by time ("consequences of formality"), meeting the set criteria ("formal decision making process") affects the portfolio balance in the sense that there is mainly focus on delivering new big launches. This has a direct negative effect on the project portfolio balance as its objective is to bring diversity to the overall portfolio (Cooper et al., 2001). It is therefore possible to distinguish a lack of diversity in the case company, as there is little focus on small launches with short innovation times.

However, it is said that the FMCG industry, in which the case company operates, is surrounded by a clear majority (97%) of incremental innovations (Francis, 2006). A reasoning among the Brand Managers was reflected in the findings in regards to the industry being generic in terms of formal processes and structures; e.g. building concepts in a certain ways with certain information. This is although an aspect that is not fully reflected in project portfolio literature. Instead, it is stated that in order to reach a balanced project portfolio, a mix of incremental and radical innovations should be present (Jonas, 2010). Additionally, Eling et al. (2016) stress that formal selection processes in the FEI should be used for selecting both incremental and radical innovations to ensure the best project portfolio balance to optimise the entire portfolio. Their research is based on a consistent formal selection

process of both innovation types and this is said to increase the total success rate of ideas going through the entire NPD process. Due to the industry's incremental characteristics, different levels of innovativeness within incremental innovations (e.g. high and low) should be considered in the context of the case company. This is reflected in the company, as they differ between "new big launches" and "improvements of existing products". It is however stated that there is a clear focus, and pressure on Brand Managers to deliver new big launches ("managerial impact"). Eling et al. (2016) indicate that consistency in formal selection has a positive impact on the overall NPD success. In relation to that, Kock et al. (2015) indicate that consistency in formal selection criteria enables comparability increasing the project portfolio balance. However, our findings indicate the opposite, that the formal selection due to criteria lead to a misbalance, steering selection of ideas towards big launches. The second order themes "documentation and standardisation" and "formal funnelling criteria" in the dimension "formal decision making process" confirm comparability amongst projects; *"it is easy to compare the different concepts you have, because they all have the same format"*. Even though findings show that comparability is in place due to consistent formal selection, it does not lead to a balanced portfolio in the case company in this sense.

Additional negative influences of formalisation in the FEI on the portfolio balance can be found. The second order theme "formal funnelling criteria" (In "formal decision making process") also have a negative influence on the portfolio balance as they set boundaries for innovation. Due to the set criteria, many opportunities are quickly disregarded. The set levels of KPIs direct innovations towards a certain expectancy level. It was mentioned that Brand Managers do not even consider "crazy ideas", because they would not fit within the boundaries of the selection criteria or fit the brand; implying that the higher risk projects are screened out. Rejecting "crazy ideas" also contributes to the misbalance of the portfolio as project portfolio should be a mix of high and low risk ideas (Jonas, 2010).

5.2.2 Formalisation and portfolio value

Findings show that the resource allocation and the pressure from management in the dimensions "managerial impact" affected the dimension "formal decision making process" in different ways.

"Managerial impact" was found to affect accuracy of numbers, as Brand Managers stated that they felt a need to overestimate sometimes to meet the targets of the set criteria's. Implications on portfolio value could therefore be distinguished, as too formal, or too tightly set selection criteria encourage number-manipulation leading to figures not being fully

accurate. Hence, the value of projects in the portfolio are presented to reach a certain level while in reality these levels will not be reached. This implies that the portfolio value will be negatively affected as projects are less valuable than accounted for. This directly affects the transparency as it intends to gain support from relevant stakeholders by transparently showing why certain choices are made (Patanakul, 2015). Support is sometimes gained through false numbers. Moreover, it also means that the entire funnelling process, a structure determined by top management, is functioning inefficiently when Brand Managers in the end are not able to separate the most promising ideas from less promising ideas, for which it is intended to (Florén & Frishammar, 2012). Ultimately, it implies the overall project portfolio is not optimised as it cannot fully maximise its contribution to the organisation's success (Heising, 2012). On the other hand, criteria could have a positive impact on the portfolio value when being used as an accurate evaluation tool for brands that are not pressured and do not feel the need to overestimate potential. In the dimension "formal decision making process", criteria, such as market and financial potential, were indicated to be the most important in the company. Those two combined generally represent growth in the company and could simultaneously be found as standing point when trying to optimize the brand portfolio to reach the highest value. These criteria are also grounds for prioritization of "product concepts" in the roadmap. The criteria market potential and financial potential in this case support the assessment and the selection process of the Brand Managers to 'pick the winners", as the ideas with the most growth potential are selected to ensure a high value. In this sense, formalisation has a positive effect on portfolio value. This is in line with Cooper et al. (2001) saying that maximisation of value should be reached with projects expected to have the highest potential and therefore increasing the economic value.

Finding openings and white spots in the market was also stressed as a way to reach growth within the company. However, the dimension "consequences of formality" showed that the long NPD innovation time of 1,5 year of the company, affected their possibilities to grasp opportunities. It was said that *"this market it's like moving really fast and we're like huge and slow.. This is [case company]'s way".* The formality's downside of being slow (Kuratko et al., 2011), could therefore affect the portfolio value as the company misses opportunities on the market. As financial and market potential indicate growth in the company, missing opportunities due to long innovation time, negatively affects the portfolio value. Ironically, it might be harder to grasp market opportunities and build portfolio value when being big and slow in the fast moving consumer goods industry compared to other industries. However, when a unique opportunity or a crisis presents itself, top management

has shown to sometimes make exceptions. Urgency allows flexibility. This requires a champion to fight for the chance and convince top management to make an exception to grasp an opportunity. *"I have had one of those projects now, it is now really innovative, but it was an opportunity we needed to grasp and we are going to launch three new..?? We did it in 2 months, it is possible.."*. Management flexibility ("managerial impact") therefore has a positive effect on the portfolio value as it allows Brand Managers to grasp market opportunities quickly.

5.2.3 Formalisation and strategic alignment

Strategic alignment was extra apparent in the findings, being stressed to be one of the most important factors with a central role in both the FEI and PPM. Strategic alignment is the first consideration when screening an idea and is usually done intuitively. As discussed previously, intuition and tacit knowledge ("initial intuitive decision making") plays a role in relation to strategic alignment, as previous experience is used to ensure that new ideas are in line with the brand strategy. When being new at a brand, "brand fit" as a part of formal funnelling criteria takes over the intuitive and tacit screening as there is no previous experience to fully rely on in regards to the boundaries of the innovation frame of the brand. The set brand criteria therefore supports the selection and screening process of new ideas instead of intuitive processes. Furthermore, the relevance of strategic alignment is to the extent that even if Brand Managers can see a big launch in relation to the idea, it has to be a good fit with the brand. Strategic alignment is something that is not compromisable and therefore a key selection criteria in the FEI and the key objective in PPM. If an idea is not in line with strategy, it will be screened out, even though the value of the screened out idea potentially could be higher than the one in line with strategy. This highlights the importance of following the set strategic direction as the projects that are selected today determine tomorrow's products and those products determine the company's position on the market (Cooper et al., 1998). This importance is also reflected in the company as the formal processes in the FEI strengthens the strategic alignment and puts it more in focus, as strategy is highly emphasised in the company. Initial front end decision making (both formal and informal) is surrounded by strategic alignment as it is the first consideration to determine whether an idea gets a "go" or "no go". It is although striking that the criteria of highest relevance in the company and in regards to project portfolio management, strategic alignment, seems to be assessed mostly informal and made on intuitive premises unless the

lack of tacit knowledge steers Brand Managers to assess it formally. Moreover, the "brand association" as part of the dimension "initial intuitive decision making" seems to have an unique impact on the strategic alignment. This is because of strong associations of consumers towards the well-established brands of the company, are making the alignment extra important in order to not lose market share and keep the trust with their consumer-base. It was highlighted that *"we have to stay true to the brand, but still we want to move the brand in a new modern direction. So yeah it's a bit limiting"*. Therefore, the brand association sets the strategic direction of the brands, which often limits brands to only innovate within the set brand frame ("consequences of formality"). By finding the brand association's impact on strategic alignment, we confirm literature stressing that strategic decisions are influenced by a mix of internal and external factors (Archer & Ghasemzadeh, 1999; Patanakul, 2015). Internally, because it sets boundaries, and externally because it is rooted in consumers perceptions of the brands.

To conclude, our findings indicate that formalisation in the FEI in regards to brand fit and brand association, strongly put strategic alignment in focus. Interestingly, the strategic alignment seems to have implications on the other two objectives; portfolio balance and value. Findings show that the strategic alignment controls the portfolio balance, by leading to that ideas outside the brand association and brand fit are screened out, hence affecting the diversity of the portfolio. Further, it was found that the strategic alignment also impacts the value, as ideas with high market/financial potential are screened out because lack of alignment with strategy. Ideas with lower financial potential are chosen instead. By this case study, a conflict between the project portfolio objectives can therefore be distinguished, rooted in formalisation.

5.3 Grounded theory model

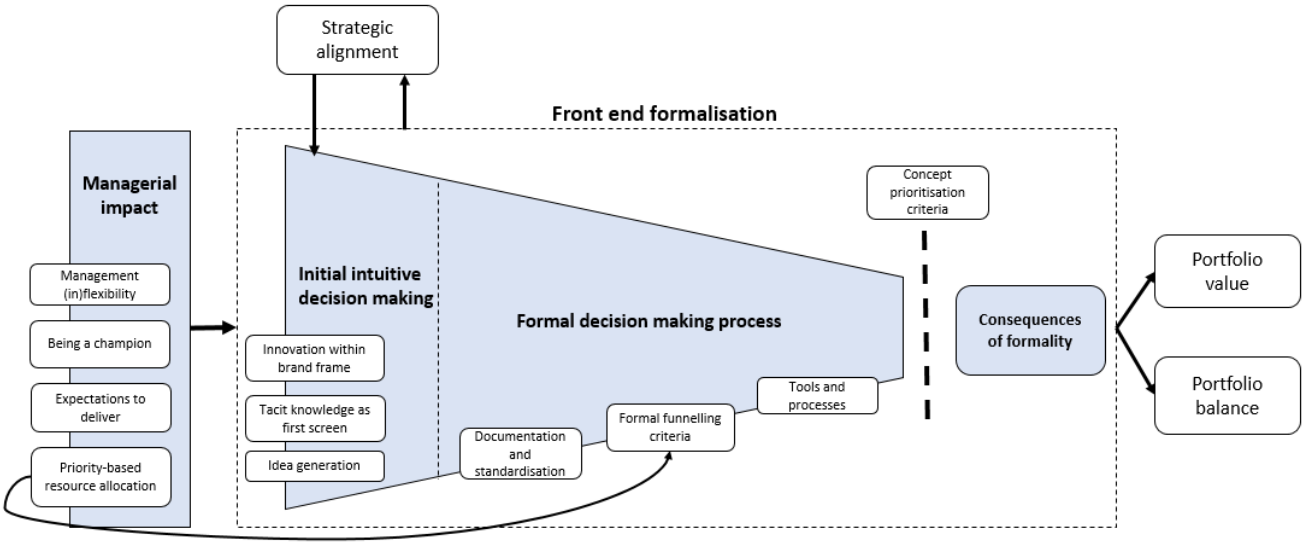

Figure 8: Operational brand portfolio decision making process

Chapter 6: Conclusion and implications

6.1 Conclusion

The aim of this thesis was to contribute to the front end literature research field and especially contribute to the relatively new connection between the front end and the project portfolio objectives. More specifically, we saw a need to bring some more clarity to the ongoing debate regarding formalisation in the front end as it lacks consistency in terms of how the front end is structured and recommendations on how it should be handled. We found a case company, large to size with a brand portfolio structure, operating in the fast moving consumer goods industry. It was therefore interesting in the context of our research since it assumingly involved portfolio management but also because we saw a slight contradiction between being large - in a fast moving industry; raising the question of formality. This research therefore firstly targeted formalisation in the FEI with the assumption that it potentially was more structured than the Fuzzy Front End research claimed it to be, even though the industry, being "fast moving", somewhat indicated the opposite. Following subsections will provide our conclusions as for both parts of the research question.

6.1.1 Formalisation in the Front End of Innovation

We found that the formalisation in the FEI is strongly influenced by top management, bringing structures in terms of generic ways of developing ideas, mandatory innovation templates for the Brand Managers to fill in and demand of meeting high KPIs and criteria in regards to new ideas in the FEI. Furthermore, resource allocation put pressure on Brand Managers of prioritised brands to deliver big innovations. This is causing overestimations of the financial potential of ideas in order to hit the set target levels that the top management established, decreasing the accuracy of forecasts.

Additionally, top management is through its resource allocation and structures unintentionally creating a championing culture, where Brand Managers of lower priority feel encouraged by their disadvantage to innovate, increasing their creativeness within their budget boundaries. Findings showed partial support for that consistency is required to benefit from formality, as inconsistent training in tools sometimes was found to decrease creativity in a structured CIT setting that normally contributed to creativity.

Further, the NPD innovation time of 1,5 year due to formalised processes was found constrain innovation since it consequently affected their possibilities to grasp market opportunities in the fast moving market.

In conclusion, we found a formalised FEI with one exception - the very first screen of ideas. Even though most ideas are found in structured ways (e.g. trend trips, databases, CIT meetings) the first evaluation regarding its strategic brand fit, is intuitive based on experience with what suits the brand. It was although stated that when being new at a brand the tacitness decreased and formal criterion for evaluation was consulted.

6.1.2 Front end formalisation and project portfolio objectives

We found that formalisation brings many standards documents and set criteria to the FEI that pressure to deliver innovation. This tends to have a double effect on the maximisation of portfolio value. While set criteria are aiming to achieve the highest economical value by especially putting emphasis on selecting projects with the highest financial and market potential, these strict criteria also have a negative downside on the portfolio value. Brands that feel continuously pressured to innovate due to management budget allocation, sometimes tends to overestimate criteria to deliver innovations that meet the expected criteria levels. The value of projects in the portfolio represent a certain value while in reality they represent a lower value. Hence, the overall portfolio value will be lower than was anticipated on as ideas with most potential cannot be separated from the ideas with less potential.

Furthermore, findings indicate that the formalised set criteria pressure innovations which tends to misbalance the portfolio. Formalisation creates some kind of consistency amongst projects selection, directing the selection towards similar innovations, while the aim of portfolio balance is to bring diversity. Big launches are selected over smaller projects while low risks are selected over higher risk. The criteria encourage comparability of projects, however these are not used in balancing the portfolio.

Strategic alignment is essential in both the FEI and PPM and is therefore positively affected by formalisation as it put extra emphasis on the importance of selecting projects that are meeting the brand's strategy. Therefore, everyone is aware of the strategic frames and would put a idea with a strategic fit over any other idea. The strategic alignment is therefore also represented as "brand fit" in the "formal funnelling criteria". Even though, strategic alignment is embedded in the formalised processes, it is ironic that the decision of highest importance for the project portfolios is generally made tacitly.

Formalisation in the FEI strongly puts strategic alignment in focus having implications on the other two portfolio objectives; portfolio balance and value. Due to the focus on strategic alignment, ideas that could bring a better balance or bring higher value are

not always considered. Strategic alignment is essential and therefore sometimes diminishes the other objectives. Hence, a conflict amongst the project portfolio objectives is identified which is caused by formalisation.

6.2 Managerial implication

We contribute with the analysis of large, leading portfolio company in the FMCG industry, where mostly formalised structures are in place supporting the development of new ideas. We want to highlight that the effects that managerial impact has on the organisational front end structures and the specific behaviour it can trigger amongst employees.

We identified that consistency through the operation benefits formalisation and inconsistency in training of organisational support systems and tools that support innovation decreases creativity. Therefore, consistency in the organisation is needed for formalisation to be effective. Furthermore, management should be aware of how financial resources are allocated. While employees with limited budgets feel encouraged to work creatively within the budget lines, high budgets pressure employees as it comes with expectations to continuously develop new innovations. This in combination with setting too ambitious, inflexible screening criteria, such as set financial KPIs, can result in overestimations of projects in the FEI, meaning that these projects have a lower potential than was accounted for. This can provide negative implications on portfolios and their value when the most promising ideas cannot be separated from the least. Though, employees that do not feel pressured to innovate and deliver, set criteria could work as a guiding tool to evaluate ideas. Moreover, we can also see that formalisation can increase innovation time. Therefore, grasping market opportunities can become harder as you might lose the first mover advantage and could therefore affect the portfolio value as the company misses opportunities on the market it otherwise could capture.

6.3 Limitations

Our study shows how the formalisation affects the FEI of a large brand portfolio company operating in the Swedish FMCG industry and the implications that formalisation has on the PPM objectives. However this also brings some limitations to our research. Firstly, this study is only focusing on one case company that operates in a specific industry in Sweden. Formalisation in the FEI and therefore PPM could be handled differently in other countries, such as Germany, as there is more emphasis on control and hierarchical structures. Secondly,

since this study was focused on two different, but closely related topics, the research could have been more in-depth in regards to both topics. However, as there is little to no research on the effects that formalisation in the FEI has in PPM, the effects of formalisation of the FEI in the case company first needed be addressed in order to make credible claims to the relations and effect on the PPM objectives. Furthermore, due to the central role of Brand Managers in the innovation process at the case company, this research was conducted with the operational levels in focus. Another perspective, e.g. top management, might look on the FEI processes and PPM objectives differently. Lastly, the possibility of method bias cannot be ignored. Even though, we took preventive actions, this cannot fully be excluded.

6.4 Future implications

As the relation of formalisation on PPM is a relatively new research field, there are several implications for future research. Literature shows that some sort of formalisation is needed to properly manage PPM, however our research shows that formalisation in the FEI has both positive and negative implications on the PPM objectives. Therefore, further research could explore how these implication affect the overall portfolio performance. Moreover, from the operational perspective taken in this study, we found that the influence of top management is apparent and impacts formalisation in the FEI and the way the PPM objectives are handled operationally. Therefore, a study from a top management perspective would be a possible future contribution. As this research was an early attempt, more in-depth research is required on these implications. Due to the explorative and qualitative nature of this study, a quantitative approach would be beneficial to test the data. Moreover, future studies could focus on different settings to develop structure and scale reliability. As this study is only conducted in the one Swedish company operating in the FMCG industry, additional research is needed in more companies as well as different countries to provide a broader perspective on the matter since different companies in different countries potentially work differently with both formalisation in the FEI and PPM.

Moreover, this research contributes to the ongoing discussion whether formalisation is positive or negative for the FEI. Consistent with different standpoints in literature, we found that formalisation in the FEI is complex topic. Our research could not provide a decisive contribution since our findings identified that formalisation can have both positive and negative consequences in the FEI process. Therefore, this discussion still deserves further analysis since there still is no full consensus amongst researchers.

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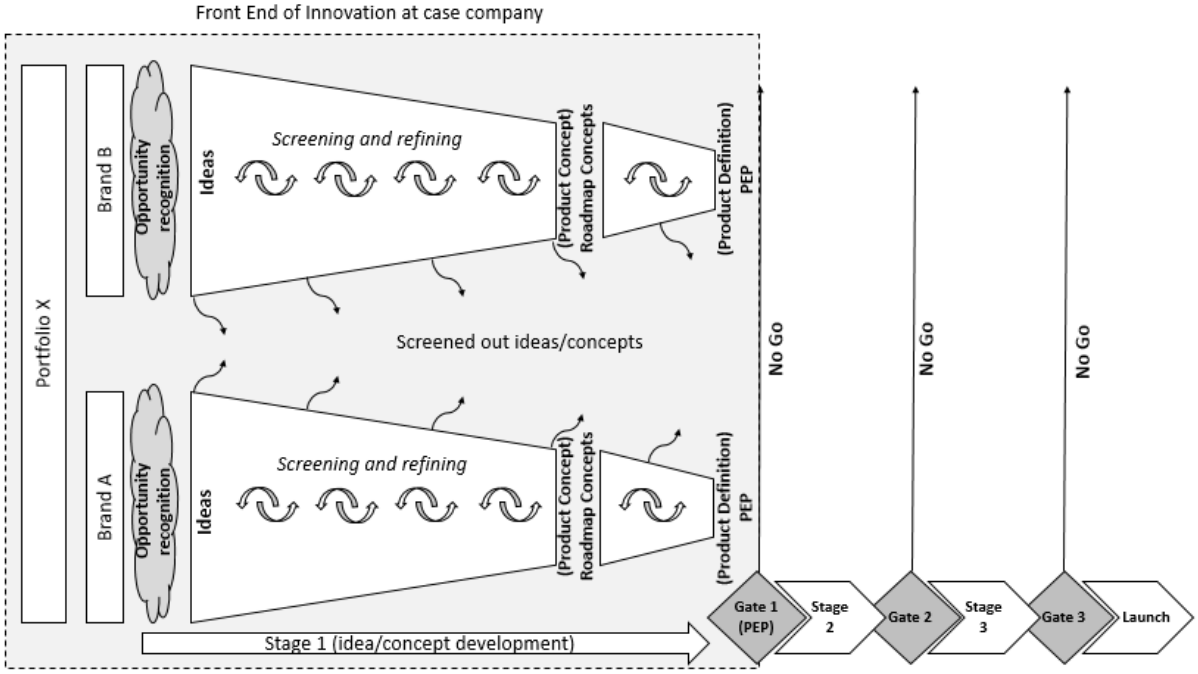
Appendices

Appendix 1: Case company's NPD process



Appendix 2: Interview guide

Introduction to interview: Thank you for taking the time for this interview! As you know, we are both writing a master thesis about the front end innovation process and are using [case company] as a case company. The focus of our projects is mainly on the early phases of innovation, so before the formal stage-gate process. We will not disclose any names of interviewees, and we are very interested in your honest opinion. We would like to record this interview in order to transcribe it for our data analysis, is that okay with you?

We are expecting this interview to be 30 to 45 minutes.

Topic 1. The interviewee's position at the company and previous experience

1. Opening question: Could you tell us a bit about your role here at the company?

2. For how long have you worked at the [case company]?
   Follow up: Did you have any other positions within the company?
   If so, please briefly elaborate on that.

3. What is your previous experience before starting at "case company"?

Topic 2. FEI: Opportunity and idea recognition

4. How do you come up with new ideas?

5. When you get an idea (e.g. if needed; walk on the street, colleague approaches you), what is the very first thing you consider to assess whether it is a good idea or not?

6. How do assess whether that ideas a good idea or not?
Follow up: how do previous experience and brand characteristics influence this early assessment?

Topic 3. FEI: Screening and refinement (funnelling process towards product concept)

7. How do you develop an idea into a (product) concept?
Follow up: how does the funnelling process looks like?

8. More specifically, what criteria do you take into consideration when evaluating ideas?
Follow up: what information do you collect?

9. In what order do you use these criteria?

10. What are reasons to kill/screen out an idea?

11. How does the maturity/immaturity (e.g. brand association) of your brand affect innovation of your brand and work with ideas?
Follow up: how you work with innovation?

12. What type of different documents support the development of new ideas?
Follow up: at what point in the process do you use them?

13. How did you acquire the know-how to develop ideas in [case company]?

Topic 4. FEI: Building the product definition

14. What information needs to be considered before entering the formal product development process?

15. How is the information required in the PEP reflected in how you build concepts in the early phase?

16. What type of different documents support the development of develop a PEP?

Topic 5. FEI: Project Portfolio Management

17. How does financial resource allocation affect your way of working with innovation?

18. We are aware of that the roadmap you use is a form of concept prioritisation. On what grounds do you prioritise and re-prioritise concepts when you decide what concept should be further developed?

19. How do you optimize your brand portfolio through product development?
Follow up: How do you optimise 1. Strategic alignment? 2. Portfolio value? 3. Portfolio balance?

Appendix 3: Project Establishment Paper (PEP)

Project Document: Gate 1 (PEP)
New Product [product name]

To:	[relative stakeholders]
Copy:	[project members]
Date:	[date]
Project:	[project name]
Screening date:	[screening date]
From:	[project owner]

Decisions FROM LAST GATE MEETING
[…]

Decisions and key discussions at this gate meeting
[…]

PROJECT BACKGROUND & FIT WITH THE BRAND STRATEGY

[explanation of fit with the brand strategy]

Market Attractiveness

[explanation of all market related information]

OBJECTIVES AND MANDATE

Business objectives
[presentation of specific financial goals]

Project objectives
[presentation of launching objectives]

Mandate
[presentation of resource requirements]

PROJECT INSIGHT AND IDEA

Consumer Insight
[presentation of consumer insight(s)]

Consumer Idea
[presentation of consumer idea]

Consumer Benefit
[presentation of consumer benefit]

Reason to believe
[presentation of reason to believe in the project/product]

Discriminator
[presentation of unique selling point(s)]

ADD MOOD BOARD IF APPLICABLE

MARKETING MIX - CONSUMER

Branding

[explanation of branding intentions]

Positioning

[presentation of positioning information]

Target group

[presentation of target group(s)]

Product description

[extensive product description]

Packaging

[presentation of packaging]

Pricing

[presentation of selling price]

Promotion

[presentation of promotion strategy and budget]

COMMERCIAL PROPOSITION TRADE

Category & Customer insight

[presentation of consumer insights in related category]

Position/ Role in category at customer

[explanation of the role for the customer of project in the related category]

SALES STRATEGY

Launch strategy

[presentation of launching strategy]

Distribution/Assortment strategy

[presentation of distribution strategy]

Shelving strategy

[presentation of distribution strategy]

Technology and sourcing

Process and technology

[explanation of required processes and technology, including risk calculations]

Sourcing facilities

[presentation of production facility]

Investment needs and investment plan

[explanation and presentation of potential investment needs and plans]

Logistics implications

[explanation of logistic implications]

Commercial potential

[extensive presentation of financial figures, including cannibalisation and three year forecast]

Critical Success Factors

[presentation of the most essential critical success factors, actions to take and potential risk]

Project Organization

Project organization

[presentation of employees involved in the project and their role]

Project schedule

[presentation of project timeline]

Appendices

[presentation of all supporting information, including tables, calculations etc.]