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Faculty of Business Economics

Master of Management

Master's thesis

A Deep Dive into Intrapreneurship: The Personal Needs and Organisational Drivers behind Product vs. Service Innovation

Shauna Soons

Thesis presented in fulfillment of the requirements for the degree of Master of Management, specialization Strategy and Innovation Management

SUPERVISOR :

dr. Relinde COLEN

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www.uhasselt.be
Universiteit Hasselt
Campus Hasselt:
Martelarenlaan 42 | 3500 Hasselt
Campus Diepenbeek:
Agoralaan Gebouw D | 3590 Diepenbeek

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This thesis represents the end of my study at the Hasselt University in the program Master of Management with the specialization: Strategy and Innovation Management. It was a valuable journey and I am happy with the knowledge gained during lectures, projects and particularly during the conducting of my master thesis.

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Shauna Soons

EXECUTIVE SUMMARY

Innovation has become increasingly important for organisations to stay relevant and survive in its fast-changing business environment. The importance of innovation is reflected in a multitude of studies. Intrapreneurship, employees who act as entrepreneurs within a company, is considered as a crucial driver for innovative performance. However, it can be quite challenging for organisations to encourage an entrepreneurial spirit among employees. Despite the dominance of services in the economy, innovation research is mainly focused on product innovation rather than on service innovation. Therefore, the aim of this thesis is to explore how an organisation encourages an entrepreneurial spirit among employees and investigate possible similarities and differences between product and service innovation.

This study comprises a comprehensive literature review drawing on academic papers from which personal needs have been identified. First, intrinsic and extrinsic motivational factors are essential in order to encourage employees in their entrepreneurial efforts. Second, resources and access to knowledge and information is important to validate ideas rapidly and facilitate the generation of new creative ideas. Third, personal development indicates that employees dare to take risks and take initiatives. Fourth, when employees are skilled networkers it is more likely that ideas are implemented.

Furthermore, organisational drivers have been identified that are important to encourage intrapreneurship. First, a shared vision is important so that employees are encouraged to contribute to the vision of the company. Second, literature shows that several leadership styles seem to contribute to an innovative organisational culture, however there are similar characteristics that foster innovation, which are: being open, supportive, critical and demanding. Third, autonomy is likely to give employees the feeling of having responsibility and control over their job. Fourth, education improves employees' skills and knowledge that help generating and implementing creative ideas. Finally, organisational support encourages employees to contribute to their entrepreneurial behaviour.

Seven structured interviews have been conducted after identifying the personal needs and organisational drivers behind innovation from literature. The interview findings are compared with each other to find out differences between product and service firms. It has been found that the drivers do not differ for services and products. However, two additional organisational drivers have been found: feedback and organisational stability. The knowledge gained from this study should be applicable to managers in organisations with fast-changing environments where new ideas are essential for success and survival.

The results suggest that it is essential for companies to provide a work environment where innovations are supported and where opportunities are offered to facilitate innovative behaviour. Employees are able to contribute to innovation when they have for example training programs, workshops and brainstorm sessions, which will boost leaning and knowledge of employees. Besides this, employees need autonomy to generate innovation at work. Networking skills would also help

employees to flourish innovation. In addition, leaders are essential in the innovation process as they are able to inspire and to create an environment contributing to innovation. The results have also found that the size of the organisation influences innovation. Large organisations are bound to strict guidelines and take more time to make changes, whereas for smaller organisations implementations are made much faster. On the other hand, large organisations have the budget to make changes.

In addition, it is important to understand employees' behaviour to understand how organisational drivers can have an impact on how employees behave at the work place. These behaviours can be determined from the DISC behaviour model. In addition, communication is found to be very essential for organisations to increase knowledge and to increase the information flow between various departments. Access to other departments and information contribute to learning and as a result to generating new ideas.

There are three limitations that have to be taken into consideration. First of all, seven interviews have been conducted that do not cover al industry sectors, sizes and types of firms, which means that there could be possible differences between industries. In addition, the interview results are from a managers' point of view as no employees were interviewed.

For further research, it is recommended to analyse and test the drivers of product and service innovation in a quantitative study to validate whether these drivers are significant. In addition, two additional organisational findings have been found, these are feedback and organisational stability. Further research on these two drivers can provide further insights into their influence on innovation. In addition, another key finding of the study is that granting autonomy is important to encourage innovation. However, since employees have different preferences it is suggested to do future research in the psychological factors of employees.

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LIST OF ABBREVIATIONS

KPI: Key Performance Indicator

HRM: Human Resource Management

R&D: Research and Development

1 INTRODUCTION

Technological changes and globalization result in persistent market competition that puts pressure on firms to achieve a competitive advantage by being innovative (Nijssen et al., 2006; Baer, 2012; Olokundun et al., 2018). The introduction of new goods and services allow companies to create real value to its customers and the overall organization. This indicates that innovation is essential to stay relevant in its fast-changing business environment. However, innovation can be difficult to realise and the success gained from innovation can be even more challenging to maintain (Schulze & Hoegl, 2008). This explains the reason why academia has put a lot of research into this subject (Giannetti & Simonov, 2004).

Given the need for new products and services, firms have commonly relied on its employees to generate ideas as intrapreneurial behaviour is considered as a major driver of innovative performance (Schulze & Hoegl, 2008). Intrapreneurship is the act of behaving as entrepreneurs who aim to establish new ideas, new strategies for business growth and new ways of managing a business (Olokundun et al., 2018). Since the behaviour of employees tends to be the real reason that provokes benefits, it is important to examine what drives employees to be innovative. In order to unlock employees' full innovative potential, companies should be able to encourage an entrepreneurial spirit among employees (Cheng et al., 2013).

Despite the dominance of services in the economy, innovation research is mainly focused on products rather than on services (Page & Schirr, 2008; O'Cass et al., 2013) and companies tend to focus little on services compared to tangible products and technologies (Sirilli & Evangelista, 1998; Bitner & Brown, 2008).

Therefore, the aim of this thesis is to define the personal needs of employees to contribute to innovation and to determine how the organisation drives employees to effectively accelerate product and service innovation. In addition, this thesis aims to define possible differences and similarities in the encouragement between product and service innovation among employees. The discussion of this thesis is based on a review of the literature and structured interviews with managers from six companies that span different industries. The results of this study are aimed to deepen the understanding behind the drivers of product and service innovation, from a personal and organizational angle, and to identify the origins of a sustainable competitive advantage (Storey et al., 2015).

1.1 Research questions

The aim of this thesis is to define: *What are the personal needs and organizational drivers of employees behind product versus service innovation?*

Three research questions have been set up in order to answer the aim of this thesis:

1. *What do employees need to contribute to innovation?*
2. *What are the organizational drivers that encourage employees to contribute to innovation?*
3. *What are the similarities and differences of these personal needs and organisational drivers between product and service innovation?*
4. *What are the main reasons for these similarities and differences between product and service innovation?*

1.2 Justification of methods

For the purpose of this research, a deep investigation and the stated research questions are needed in order to deliver reliable conclusions. First, the literature will be studied. Second, a field study will be conducted using interviews with managers in innovation (e.g. Innovation Manager, Production Manager) from two firms that manufacture products and four firms that deliver services. These firms are both in B2B and B2C markets and vary in terms of size, age and level of diversification. Table 1 below indicates the used methods in order to gather information to answer the research questions. The table outlines the research questions, type of research, methodology and the sources consulted.

Table 1 Research methodology

Research questions	Research method	Methodology
1. What are employees need to contribute to innovation?	Desk research	Documentary analysis
	(Hackman & Oldham, 1976; Nochur, 1986; Ahmed, 1998; Sirilli & Evangelista, 1998; Deci et al., 1999; Ryan & Deci, 2000; Janssen, 2003; Miron et al., 2004; Damanpour & Schneider, 2006; Nijssen et al., 2006; Mansury & Love, 2008; Amabile & Fisher, 2009; Mothe & Nguyen-Thi, 2012; Baer, 2012; Anderson et al., 2014; Oldham & Da Silva, 2015; Costa et al., 2015; Hewett & Conway, 2016; Luo et al., 2018)	
2. What are the organizational drivers that encourage employees to contribute to innovation?	Desk research	Documentary analysis
	(Dewar & Dutton, 1986; Amabile et al., 1996; Ahmed, 1998; Axtell et al., 2000; Calantone et al., 2002; West, 2002; Hornsby et al., 2002; Shalley & Gilson, 2004; Miron et al., 2004; Slowikowski, 2005; Damanpour & Schneider, 2006; Nijssen et al., 2006; Amabile & Fisher, 2009; Alpkan et al., 2010; Shoham, 2012; Chen	

	et al., 2014; Oldham and Da Silva, 2015; Ozlati, 2015; Ndubisi et al., 2015; Burcharth et al., 2017)	
3. What are the differences and similarities of these personal needs and organisational drivers between product and service innovation?	Desk research and structured interviews	Documentary analysis and structured interviews
	Retrieved from all interviewed companies	
4. What are the main reasons for these differences and similarities between product and service innovation?	Structured interviews	Personal interpretation
	Retrieved from all interviewed companies	

1.3 Thesis structure and reading guide

The research of this thesis has been structured in the following way: The first chapter indicates the introduction to the research, motivation for conducting the research and research questions. The second chapter comprises the literature study on the areas that are relevant to the research questions. Chapter three represents the research method that investigates the problem and provides a detailed explanation of how the research (structured interviews) is carried out. In chapter four, the results of the in-depth interviews will be given. Chapter five provides a reflection and argumentation on the results given. Chapter six is the final chapter of this research and presents conclusions and answers to the research questions. Table 2 below outlines an overview of the research structure and the research questions that are covered in the six chapters of this research.

Table 2 Thesis structure and research questions covered

Chapters	Phase of methodology	Research questions
1. Introduction	Problem identification and motivation	-
2. Literature study	Objectives	Research question 1 Research question 2
3. Method	Objectives	-
4. Results	Development	Research question 2 Research question 3
5. Discussion	Evaluation	All research questions
6. Conclusion	Summary of level of achievement of research aim and objectives	All research questions

Figure 1 indicates a graphical presentation of the research structure. Each of the blue blocks represents a chapter of this thesis. The grey blocks represent the phase of methodology.

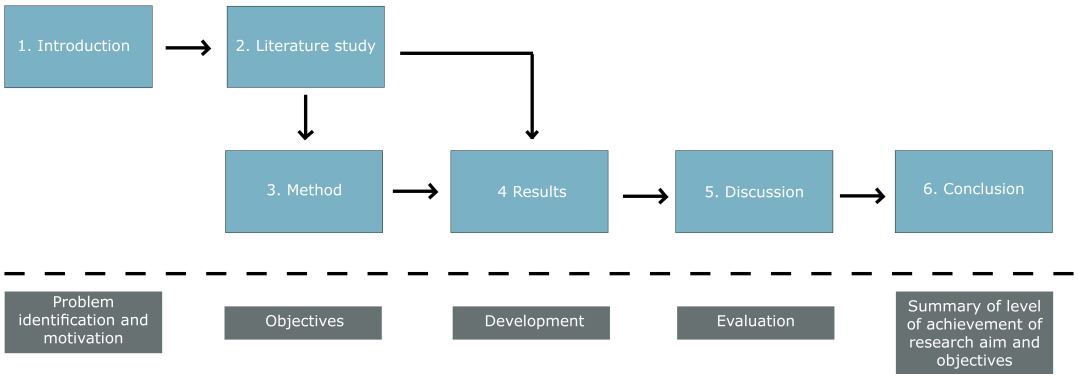

Figure 1 Research structure

2 LITERATURE REVIEW

2.1 Product vs. service innovation

Innovation research efforts have continued to grow in importance and the number of research has grown over the years (Amabile & Pratt, 2016). A review of the literature on product and service innovation indicates similarities, however also differences (Sirilli & Evangelista, 1998; Nijssen et al., 2006; Rubalcaba et al., 2010; Storey et al., 2015). In general, three similarities have been discovered for successful innovative firms. First, a similarity is that the development of products and services benefit from strong managerial commitment to innovation (Nijssen et al., 2006). Due to this commitment, management defines strategic objectives that focus beyond short-term success. As a result, its employees have a clear understanding of what management endeavours in regard to new products and services (Nijssen et al., 2006). Second, cultures and systems are aligned carefully to the firms' innovation processes in order to support employees in their innovative actions (Nijssen et al., 2006). Third, developed staff and resources complement to the success of innovation in product and service firms (Nijssen et al., 2006).

The differences between products and services that have been suggested in previous literature refer mainly to specific characteristics of services for making a limited effort in R&D activities (Mothe & Nguyen-Thi, 2012) and for being intangible, perishable, inseparable, heterogeneous and co-produced with customers (Sirilli & Evangelista, 1998; Nijssen et al., 2006; Rubalcaba et al., 2010). The interactive aspect of services is emphasized in the definition of Toivonen and Tuominen (2009, p. 893) who define service innovation as "a new service or such a renewal of an existing service which is put into practice and which provides benefit to the organisation that has developed it: the benefit usually derives from the added value that the renewal provides the customers" (Toivonen & Tuominen, 2009, p. 893). On the other hand, the technological aspect of the development of products mainly emphasizes product innovation: "the development of new products, making changes in the current product design or using new techniques and means in the current production methods" (Reguia, 2014, p. 147). Research suggests four distinctive features of services as important for innovation (Sirilli & Evangelista, 1998).

First, there is a close interaction between the production and consumption for services (Sirilli & Evangelista, 1998). In this respect, the relationship with customers is a typical feature of service innovation, which makes it less clear to differentiate product innovation from process innovation when compared to manufacturers (Sirilli & Evangelista, 1998). In addition, as services require human interactions, most of the activities are adapted to customers' needs without making any technological changes or improvements.

Due to these human interactions, there is a difference in the 'willingness to cannibalize routines' which is defined as "the extent to which firms are prepared to reduce the actual or potential value of their investments for creating and introducing new products and services" (Nijssen et al., 2010, p. 243). According to Nijssen et al. (2010), product innovation may require minimal change for

employees in the production process because a new product line may still use parts of its current product. Conversely, service innovation requires change in employees' skills e.g. employees need to learn how to operate software or to manage service procedures (Nijssen et al., 2010). This may suggest that there is a high interaction between a new service process and service delivery. This accordingly might mean that the interaction for services is stronger as compared to the interaction between products and its manufacturing development (Nijssen et al., 2010).

Second, due to services' intangibility and its high information-based characteristics, outputs of services are less visible than the outputs of product innovation (Sirilli & Evangelista, 1998). As a result, it might be difficult for service firms to define innovative results from services (Sirilli & Evangelista, 1998).

Third, human resources play a significant role in the delivery and development of services. For this reason, big investments in human resources may result in a competitive advantage for service firms. Even though trainings are not considered as innovative inputs, they may be considered as essential for improving skills of employees in the service sector (Sirilli & Evangelista, 1998). Services may mainly require "soft skills", such as emotional intelligence and communication skills (Sirilli & Evangelista, 1998; Mothe & Nguyen-Thi, 2012), whereas product innovation includes compelling improvements in technical specifications and integrated software (Mothe & Nguyen-Thi, 2012). Therefore, it is suggested that products mainly require "hard" skills such as expertise and experience.

Finally, due to the fact that services are adapted to customers, it is expected that organisational factors are more important for services when compared to product firms. This is due to the fact that services consist of high informative and intangible elements that belong to the products and processes of services (Sirilli & Evangelista, 1998).

2.1.1 Creativity and innovation

Previous research suggests that both creativity and innovation in the workplace have become increasingly important determinants of organizational performance, i.e. success and survival of the organization on the long term (Anderson et al., 2014). According to Amabile et al. (1996, p. 1154) "all innovation begins with creative ideas". A person or a team are the creative mind-sets behind successful implementation of new programs, products or services (Amabile et al., 1996; Shalley et al., 2004). In addition, Amabile et al. (1996) indicate that creativity is the seed of innovation, which signifies that creativity is the starting point of generating new ideas. Therefore, most theorists define creativity as "the development of ideas about products, services, practices or procedures that are (a) novel and (b) potentially useful to the organization" (Amabile et al., 1996; Zhou & Shalley, 2003).

From these definitions two activities have been distinguished in the innovation process: idea generation and idea implementation (Clegg et al., 2002; West, 2002; Amabile & Fisher, 2009; Oldham & Silva, 2015). According to March (1991), idea generation engages firms in divergent

thinking that aims to diverge from the current organization's traditional procedures and standardized business thinking. In contrast, it is suggested that idea implementation maintains convergent thinking through rigorous problem-solving (Revilla & Rodríguez-Pradob, 2018). Idea implementation consists of actions that refer to innovation modification and preparation of the organization for the adoption, trial use and acceptance of innovation by organisational members or customers (Damanpour & Schneider, 2006).

People can create innovative ideas but not everyone can take the initiative to ensure that these ideas get implemented. A personal initiative is a behaviour syndrome that results in individuals taking self-starting actions that goes beyond the job that he or she is required to do (Frese et al., 1996). The implementation of new ideas may face resistance from other people and obstacles such as a lack of resources. However, initiatives are suggested to be the power to deal with these obstacles persistently (Miron et al., 2004).

Baer (2012) examined the relation between idea generation and implementation of the innovation process and provided essential insights in the relation between how individuals' ideas are generated and the extent to which these ideas are implemented (Baer, 2012). Baer (2012) found that the odds of implementing creative ideas is increased when employees are highly motivated to push their ideas toward realization and when they have networking skills or strong network relationships. Networking ability and number of strong relationships are both functionally equivalent concepts in capturing the potential of employees to obtain support. However, the number of relationships is likely an indicator of access to resources whereas a networking refers mainly to exchanging information and ideas (Baer, 2012). The number of strong relationships is likely to have a bigger influence on idea implementation as compared to motivation. As a conclusion, motivation and networking ability or strong network relationships play a major role in the process of moving creative ideas forward to realization.

2.2 Personal needs

The previous section provides similarities and differences between product and service innovation and explains the division of the innovation process between idea generation and idea implementation. This section focuses on the individual side of intrapreneurship and reviews the available empirical evidence on the personal needs that employees require to be innovative. These personal needs provide insights into what makes an employee more inclined to intrapreneurial activity. The following five personal needs have been identified from previous research: (1) intrinsic motivation, (2) extrinsic motivation, (3) resources and access to knowledge and information (4) personal development and (5) network ability.

2.2.1 Intrinsic motivation

Several researchers have documented that the psychological process of motivation guides performance behaviour (Fischer et al., 2019) and can be classified into intrinsic and extrinsic motivation (Amabile & Fisher, 2009; Costa et al., 2015).

Among recent studies on innovation, tasks that require creativity are one of the tasks where intrinsic motivation is suggested to be important (Osterloh & Frey, 2000). Amabile and Fisher (2009) and Costa et al. (2015) found that challenging tasks have higher intrinsic motivation. Being involved in complex and challenging tasks enables employees to prove their competencies and abilities (Amabile & Fisher, 2009). Ryan and Deci (2000) suggest that intrinsic motivation is characterized by personal satisfactions and engagement. Similarly, Deci et al. (1999) indicate that intrinsic motivation is the motivation an employee has due to inherent satisfaction, enjoyment and interest. Hackman and Oldham (1976) argue that employees seek purpose in their work and an aspiration to be part of an organisation. As a result, intrinsic motivation holds the key for making the job meaningful and worthwhile (Hackman & Oldham, 1976). Baer (2012) discusses the role of individuals' motivation on idea generation and idea implementation. He argues that motivation regulates the extent to which creative ideas are moved forward to implementation. This may suggest that motivation is necessary for innovation (Baer, 2012). Therefore, intrinsic motivation is expected to be a determinant of intrapreneurial behaviour of employees and is expected to be equally important for product and service innovation as it encourages employees of inventing new ideas.

2.2.2 Extrinsic motivation

As described above, intrinsic motivation refers to an individuals' enjoyment to complete the job (Deci et al., 1999). In contrast, the literature on motivation indicates that extrinsic motivation lies externally and refers to any form of financial incentives such as money, bonuses and shares (Deci et al., 1998).

Previous research on extrinsic motivation commonly supported a negative effect on intrinsic motivation and performance (Ahmed, 1998; Hewett & Conway, 2016). Amabile and Fischer (2009) argue that individuals working under extrinsic constraint such as external evaluation, surveillance and contracted-for rewards in the work environment can decrease intrinsic motivation and performance. Ahmed (1999) indicated that the use of extrinsic rewards for individual performance results into individuals who tend to put their energy into achieving the extrinsic rewards instead of unlocking their innovative potential. This results into competition among colleagues that impede workplace relationships, diminishes risk-taking and hinder openness and learning which will eventually stifle innovation (Amabile & Fisher, 2009; Ahmed, 1998). Nevertheless, Ahmed (1998) suggests that extrinsic rewards should be mentioned to employees in order to make them feel comfortable with their salary. Similarly Nochur (1986) suggests that organizations that do not provide employees with the rewards needed to keep and motivate intrapreneurs, they stand to lose

theirs most valuable innovators to competitors. In addition, other researchers such as Deci and Ryan (2014) found that financial incentives for acknowleding the work of individuals are effective when financial rewards are expected to receive. It is expected that extrinsic rewards such as bonus, money and praise is expected to be equally important for product and service innovation as it encourages employees to invent, generate and implement new ideas.

2.2.3 Resources and access to knowledge and information

Having the ability to exchange and gather new and diverse information may provide the opportunity to initiate change and propose new and creative ideas for implementation (Damanpour & Schneider, 2006). This new information may come from internal or external sources such as employees, customers' insights, experts, traditional research or brainstorming sessions (Damanpour & Schneider, 2006; Oldham & Da Silva, 2015). The study of Damanpour & Schneider (2006) suggests that external sources can inform decision-makers about selecting proposed ideas and can help members in the company to help incorporate innovation into practices and normal procedures (Damanpour & Schneider, 2006). Disregarding the source, Oldham and Da Silva (2015) propose that employees, who are accessible to a greater number of creative informational sources, will most likely generate a greater number of creative ideas (Damanpour & Schneider, 2006; Oldham & Da Silva, 2015).

There are two reasons suggested why access to knowledge and information is important. First, it is suggested that idea generation is enhanced when employees have access to new and diverse information as individuals have different ideas, perspectives and knowledge (Oldham & Da Silva, 2015). Second, it is likely that when customers can share information between departments, they can easily and better meet customers' needs (Cooper & Edgett, 2008).

For product firms, it is expected to be important that employees have access to knowledge and information of the R&D department and can communicate between departments in regards to technological possibilities and market preferences. Timely and reliable knowledge about market preferences is considered as necessary (Cooper & Edgett, 2008). For service firms, access of knowledge and information is important because the human factor in the organization and delivery of services is essential and associated with substantial investment in human resources (Sirilli & Evangelista, 1998). The best service is likely to be achieved through a combination of soft (e.g. human skills, operating practices) and hard (e.g. equipment, computer software) technologies (Mansury & Love, 2008). Therefore, access to knowledge and information is essential to deliver effective performances and expected to be more important for services than for products.

2.2.4 Personal development

Since firms cope with many changes due to technology and unstable markets, it is likely that employees should have the skill to be open-minded. Open-mindedness refers to the willingness to evaluate operational routines and assess each other's ideas (Ahmed, 1998). This means that knowledge from others and learning from the past is important to update the knowledge base.

The hallmarks of personal development are learning and growing that enables to enhance skills, i.e. acquiring skills and knowledge to take more responsibility in the firm (Ahmed, 1998; Miron et al., 2004). "Personal initiative is a behaviour syndrome resulting in an individual's taking an active and self-starting approach to work and going beyond what is formally required in a given job" (Miron et al., 2004, p. 178) that indicates personal growth. Employees may face obstacles and resistance from others, however taking the initiative means that an individual deals with these obstacles and reacts passionately and carefully (Miron et al., 2004). Several researchers have documented that personality factors, such as extraversion affect innovative behaviour. Extraversion on a group of employees has a positive effect on their innovative behaviour, as extravert employees are more likely to take risks and thus pursue higher status and power (Luo et al., 2018). Hence, personal development is suggested to be a need of employees to be innovative behaviour and is expected to be equally important for product and for service innovation.

2.2.5 Networking ability

Idea implementation is likely to increase when employees are driven to pursue their ideas and when they have the abilities or social relationships that allow them to involve and exploit resources in the organization (Baer, 2012). Additionally, Baer (2012) examined that idea implementation is regulated by the number of strong relationships that employees maintain. These social relationships come in certain strengths and are measured in the number of strong buy-in ties (Baer, 2012). An example is the empirical study of Janssen (2003) who showed that innovative behaviour often created conflict at work which resulted in less satisfactory relationships. When this happens, ideas may fail and as a consequence people may have obtained a bad reputation (Janssen, 2003). Hence, this suggests that the effect of creativity on implementation is facilitated by the presence of strong relationships with co-workers and thus is considered as a need for innovation. This may suggest that people who have better relationships are likely to have a greater innovative performance than employees who do not have these relationships (Janssen, 2003). Network ability is expected to be more important for product innovation as having strong relationships might facilitate the implementation of new product ideas.

2.3 Organizational drivers

This section focuses on the organisational side of intrapreneurship and provides the organisational drivers that have been derived from previous research. A driver is a generic or specific factor that provides a motivation and has a significant impact on achieving goals, targets or objectives (Lyons, 2007). Nijssen et al. (2006) suggest that the drivers of innovations for product and service innovation might be identical, however, the importance of these drivers might be different.

Table 3 indicates five organizational drivers that have been derived from previous studies and are the following: (1) shared vision, (2) leadership, (3) autonomy, (3.1) pure decision-making, (3.2) task and time allocation, (4) trainings and (5) organizational support. The table demonstrates two

approaches: top-down (orange arrows) and bottom-up (purple arrows). This indicates that the drivers complement one another. The top-down approach is as follows. First, a vision aims to stay focused in order to grow and to contribute to innovation (Ahmed, 1998). Second, strong leadership is required to design and communicate the shared vision to employees (Axtell et al., 2000). Third, leaders or managers provide employees autonomy i.e. the power to decide on how to accomplish their work tasks (Amabile et al., 1996). Fourth, task and time allocation is the ability to work on tasks at certain times. Fifth, education is required improve their knowledge and competences. Finally, organizational support is needed to provide employees the necessary requirements to accomplish their tasks (e.g. resources, information, education, policies and procedures) (Burcharth et al., 2017). On the other hand, the bottum-up approach indicates the reverse of the top-down approach. This signifies that employees who have intrapreneurial behavior will help and be involved in determining the vision of the company.

Table 3 Links between organisational drivers and personal needs

Chapter	Organizational drivers	Personal needs	Characteristics
2.3.1	Shared vision	(1) Intrinsic motivation	Communication Focus Common understanding
2.3.2	Leadership	(1) Intrinsic motivation (2) Extrinsic motivation (3) Networking ability	Inspirational vision Long-term perspective Encourage teamwork Facilitate innovation
2.3.3	Autonomy (2.3.3.1) Pure decision-making and risk-taking	(1) Intrinsic motivation (2) Personal development	Engagement Commitment Ownership Responsibility
	Autonomy (2.3.3.2) Task and time allocation	(1) Intrinsic motivation (2) Personal development	Taking initiatives Constructive feedback Responsibility
2.3.4	Education	(1) Personal development	Talent Expertise Soft and hard skills
2.3.5	Organizational support	(1) Resources and information (2) Personal development (3) Networking ability	Internal communication Constructive feedback Regular meetings

2.3.1 Shared vision

A vision provides a direction and purpose that is related to innovation effectiveness (Ahmed, 1998; Calantone et al., 2002;). Defining and communicating the organisation's vision accordingly embed the tone of voice regarding the company-culture. Employees will be able to understand why they

are doing the course of action (Ahmed, 1998). Without a common direction, it is likely to be difficult to form a team, build long term relationships and strive for company goals. An empirical study of Nijssen et al. (2006) has indicated that a clear understanding of what the firm is aiming for contributes to successful innovation (Nijssen et al., 2006).

Furthermore, the litterature suggest that a shared vision coordinates the focus of various departments and is corresponding to internal communication and integration (Calantone et al., 2002). Brown and Eisenhardt (1995) noted that individuals from different departments obtain information differently, which as a result suggest that communication is particularly essential. Brown and Eisenhardt (1995) suggest that various departments may require overcoming cross-functional communication barriers to ensure a flawless exchange of information and coordinate actions with other departments. In view of this, it is expected that a shared vision provides a common understanding of innovation and coordinate the focus of intrapreneurial spirit among employees.

A shared vision is shaped by organisational culture. Organizational culture refers to beliefs, norms, and practices shared by members of the same organization that influence their behaviours (Ahmed, 1998). It incorporates the mission of organisation and defines the environment of the company as it reflects a common way of thinking in doing the activities of the core business (Miron et al., 2004). Ahmed (1998) considered culture as a primary determinant of innovation since it provides the organisation with the fundamental elements to innovate (Ahmed, 1998). Ahmed (1998) suggests that innovative demands require a culture that guides its employees to strive for innovation.

Based on the review above on a shared vision, it can be suggested that a shared vision is likely to provide a common direction and a clear understanding of the executed activities within the organisation. Since services are in a certain sense unique, they need to be aligned to the organization's vision. Therefore, a shared vision is expected to be more important for service innovation as compared to product innovation.

Link between shared vision and intrinsic motivation

It is likely that when an organisation is able to share its vision in a compelling way, employees are motivated to be part of the organisation to accomplish that vision. An appealing vision is expected to increase the "positive feeling about the job" and employees will feel the energy to contribute to that vision (Ryan & Deci, 2000). This is likely to result into high involvement of the team as they are then bound to spend extra efforts on their tasks.

2.3.2 Leadership

Many studies have focused on the effects of leadership on innovation. It has been found that leaders are influential in decision-making about organizational strategy and operations and are able to create conditions needed for innovation to flourish (Chen et al., 2014). There are several leadership styles considered as effective in different contexts and different stages of the innovation

process. However, a leadership style most favourable to innovation might be collaborative or participative (Axtell et al., 2000; Damanpour & Schneider, 2006).

Several studies suggest that leadership is an integral part of in organisational innovation in two ways. First, it has been found that leaders play an important role in supporting innovation (Chen et al., 2014). Shalley & Gilson (2004) suggest that leaders are able to create the context and opportunities for employees that favour innovation. There is a consensus that a favourable climate is established by leaders who describe inspirational visions, have a long-term perspective and encourage teamwork to accomplish new and meaningful outcomes (Anderson & West, 1998; Damanpour & Schneider, 2006; Amabile & Fisher, 2009). A favourable climate may create an environment where employees do not feel afraid to take risks and to make mistakes. Overall an attitude of top executives that favours innovation facilitates the initiation of innovation by making employees feel confident and providing support for innovation (Damanpour & Schneider, 2006).

Second, leaders focus on the organisation's desires to become innovative (Shalley & Gilson, 2004). It is suggested that the desires can be realised by facilitating knowledge and financial resources, allocating the required resources, skills and time (Shalley & Gilson, 2004), motivating employees, managing rewards (Deci and Ryan, 2014) and granting autonomy to employees (Axtell et al., 2000). In addition, leaders who coach and mentor their employees, help them become efficient and capable of performing their job, which enhances the employees' contribution and engagement to innovation (Chen et al., 2014). Leaders who possess these characteristics are expected to influence innovative outcomes. Therefore, leadership is considered as an organizational driver and is expected to be equally important for product and service innovation.

Link between leadership and intrinisic and extrinsic motivation

As previous studies suggest, leaders are able to motivate employees as they are able to reward their performances (Deci and Ryan, 2014).

Link between leadership and personal development

According to the study of Slowikowski (2005) leaders are able to encourage employees easier when they are able to identify, understand and manage the various work style behaviours and preferences of employees. The DISC-based assessment is a personality test that is able to identify these work style behaviours (Slowikowski, 2005). The DISC model is illustrated in figure 2 below. DISC stands for four basic styles: Dominance (red), Influence (yellow), Steadiness (green) and Compliance (blue). Each of the quadrants indicates typical characteristics of their personalities. The white quadrants indicate individuals are people-oriented, introverted, task oriented, extroverted and its respectively characteristics. Slowikowski (2005) suggests that all people have the four personalities, however, it is suggested that usually one colour is dominant. It is indicated that an understanding of these personalities is likely to help organisations in tendencies and behaviours in employees.

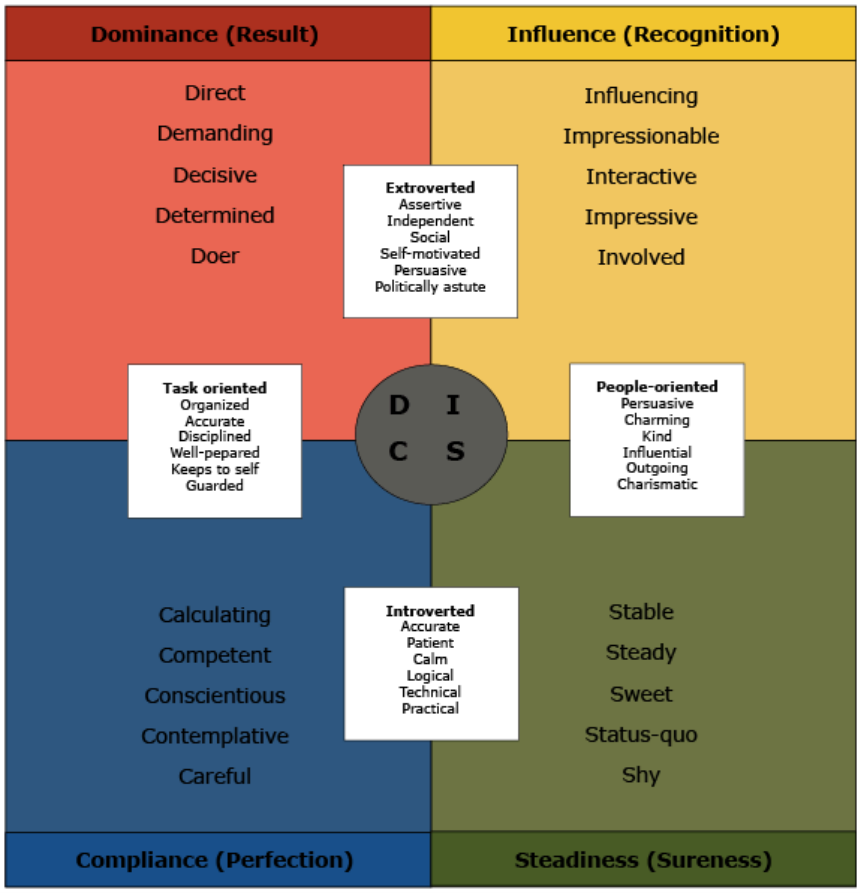

Figure 2 DISC model, inspired by Slowikowski (2005)

2.3.3 Autonomy

2.3.3.1 Decision-making and risk taking

Autonomy has been studied as an underlying element supporting intrapreneurship (Amabile et al., 1996; West, 2002; Burcharth et al., 2017). Research on creativity suggests that autonomy stimulates creative work when employees are able to choose how to accomplish their work tasks (Amabile et al., 1996) and when they feel confident across a wide range of work areas (Axtell et al., 2000). Ndubisi et al. (2015) suggest autonomy as "the freedom granted to individuals and teams who can exercise creativity and champion promising ideas and innovations that facilitates the occurrence of entrepreneurship" (Ndubisi et al., 2015, p. 550). Autonomy does not mean that there are no rules and authority. Guidelines are necessary as they aim to assist in decision-making e.g. to prioritize those elements that are critical for the organisation as a whole.

From a psychological perspective, decision-making autonomy is likely to stimulate engagement at work because autonomy provides employees the freedom to plan out their tasks and procedures in the job. When employees feel that they have the ownership of their work, employees are likely to be more engaged (Axtell et al., 2000). Oldham & Da Silva (2015) state that engagement signifies that individuals are alert, emotionally connected and are concentrated when doing their job

performance. Previous studies indicate that individuals, who are engaged to the organization, are more likely to step out of their defined jobs and collaborate with others to improve organizational performance (Axtell et al., 2000; Oldham & Da Silva, 2015). Moreover, having a variety of responsibilities and having more control over the execution of work, is likely to increase the confidence of employees to innovate (Axtell et al., 2000). In addition, autonomy is seen as the opportunity to influence work, which strengthens enthusiasm and commitment (Burcharth et al, 2017). It is suggested that employees with higher autonomy are willing to take more risks compared to individuals with lower autonomy (Burcharth et al., 2017; Giannetti & Simonov, 2004). This results into a higher innovation performance. When risk tolerance is unclear or unknown, employees will not take risks or feel engaged in trying to innovate (Giannetti & Simonov, 2004; Ahmed, 1998). Since autonomy fosters out-of-the-box thinking, which enhances creativity, it is expected to be a crucial driver for innovation.

To make sure that employees have work autonomy, there are several things an organisation can do. First, an organization can grant employees the ownership of his tasks. To provide ownership, trust from the organisation is needed (Ozlati, 2015). Second, it is suggested that an organisation should clearly define the risk tolerance as this helps employees to understand the space within which they are allowed to act and the occasions they need to fulfil actions, e.g. the time employees are able to spend on projects (Ahmed, 1998). Third, it is necessary that employees understand priorities of innovative actions, so that it enables them to decide what tasks to work on. Finally, the study of Ozlati (2015) indicates that providing autonomy is enabled when an organisation allows employees to make mistakes.

Since services are to a certain extent unique and are difficult to reproduce time after time, it might signify that autonomy is more important for services because service firms need to meet customers' wishes (Mansury & Love, 2008). As customer commitment are essential for services, autonomy is expected to be more important for service innovation.

Link between autonomy (risk taking and decision-making) and intrinsic motivation

According to Axtell et al. (2000), the responsibility that employees feel towards their job is positively related to employees taking control of workplace change. By contrast, employees who are passive and who have a "that is not my job" orientation are less likely to invent and implement new ideas since they avoid doing someone else's job (Frese et al., 1996; Axtell et al., 2000). Furthermore, these individuals who are engaged to the job are besides being curious and willing to learn, also risk-taking, which enables creativity (Zhou & Shalley, 2003; Oldham & Da Silva, 2015).

Link between autonomy (risk taking and decision-making) and personal development

It is likely to be expected that when people can decide on how to accomplish their work tasks, they are able to grow and develop their competencies and capabilities because they are not restricted. They can go outside their "comfort zone". It is expected that employees will then take more risks and as a result be more creative and innovative. It means the organisation has a belief in the individuals' impact on the organisation, which will make employees feel competent and confident in

the ability of doing well (Ahmed, 1998). In addition, due to the responsibility that is allocated, they feel responsible for the job and thus make the best out of it.

2.3.3.2 Task and time allocation

A common goal of employees is to get as much as possible done. To this end, task and time allocation are suggested to be important for completing the work in an organized way (Hornsby et al., 2002). Previous literature indicates that the allocation of free time to employees improves innovative performance (Alpkan et al., 2010). Allocation of free time is defined as the "provision of sufficient time to work on developing novelties without any burden of routine workload" (Alpkan et al., 2010, p. 735). In other words, it points out the sufficiency of time that employees are able to work on developing new and creative ideas. Allowing employees to take initiative and determine how their time is spend, stimulates employees to have more responsibility about their work and feel more challenged (Axtell et al., 2000). As explained under the driver "autonomy", greater responsibility stimulates idea generation (Axtell et al., 2000). Additionally, free time provides time to think, develop, observe and experiment with peers (Alpkan et al., 2010; Burcharth et al., 2017), which further strengthens idea generation. In addition, free time encourages employees to practice the implementation of new ideas (Hornsby et al., 2002).

Ahmed (1998) suggests that the organization should define the time frame of action in a broad direction that is clear and consistent. This enables employees to effectively manage tasks through the process of planning, execution and completion (Alpkan et al., 2010). However, a time frame should not be too precise, as precision stifles innovation and creativity. Hence, free time is suggested to be important for two reasons. First, it provides employees the freedom to allocate their time and choice, which work to perform. Second, it provides employees the possibility to take foreseen and unforeseen risks and practice the implementation of new ideas (Hornsby et al., 2002; Alpkan et al., 2010).

Task and time allocation may provide employees the opportunity to think, develop, observe and experiment and eventually to take risks. As stated earlier, services are unqiue to a certain extent and require human interactions. Therefore, it may indicate that allocation of free time is more important for service firms as services are regularly adapting and amending their activities to provide solutions to differentiated customer requirements (Mansury & Love, 2008). To provide these differentiated services, allocation of free time is expected to be more important for service innovation.

Link between autonomy (task and time allocation) and intrinsic motivation

Being able to allocate time and work on your own tasks is expected to be satisfying for employees as granting autonomy means that employees have the responsibility and ownership of their tasks. The provided ownership and responsibility is expected to imply that employees are trusted to complete their work tasks. This is likely to provide employees the intrinsic motivation to endeavour their best, which results in high levels of productivity.

Link between autonomy (task and time allocation) and personal development

When an employee would like to grow within the organisation, it is expected to be important that an organisation allocates time to employees in order to experiment and pursue new ideas. This is necessary in order to make employees comfortable in their work and to enable employees to do their work in the most efficient way. Providing employees the freedom to decide on their tasks will likely result in appreciation.

2.3.4 Education

Studies found that innovation initiatives depend heavily on employees' knowledge and expertise (Calantone et al., 2002; Shoham, 2012; Prange & Pinho, 2017). This has led to an increase in the importance of a learning orientation. Calantone et al. (2002, p. 516) defined a learning orientation as the "organization-wide activity of creating and using knowledge to enhance competitive advantage". A learning orientation encourages the development of knowledge and motivates to conduct learning activities through training programs (Calantone et al., 2002). Training activities and education sessions by the firm are normally not considered as innovative, but they are considered as an important method to upgrade technological capabilities of firms in the service sector (Sirilli & Evangelista, 1998). In addition, an organisation that stimulates learning is expected to increase the sharing of knowledge across divisions. Hence, knowledge sharing and trainings likely facilitate creativity and the ability to absorb new information as long as the firm has the needed internal knowledge and resources (Dewar & Dutton, 1986). It expected that education is more important for product innovation as the development of products require knowledge on machines (hard skills).

Link between education and resources and access to knowledge and information

It has been found that skills of employees such as talent, expertise and technical skills are key inputs in the innovation process (Ahmed, 1998; Chen & Huang, 2009). High quality developed staff and other resources complement to successful innovation (Nijssen et al., 2006). It is likely that firms should have the aligned capabilities in order to deploy resources that allow firms to compete via their chosen position in the chosen market. Both resources and capabilities are essential for the fundamental nature of firms (Sok & O'Cass, 2011).

2.3.5 Organizational support

Previous research suggests that an organisation that provides support is willing to engage in innovative efforts and encourage innovative behaviour by providing clear guidelines and resources (Alpkan et al., 2010; Burcharth et al., 2017). In addition, research suggests that support is essential for awakening entepreneurial spirit and is required for problem-solving and conflict resolution in the intrapreneurship process (Alpkan et al., 2010). If employees experience that the organization encourages their creative efforts, employees are more likely to continue generating ideas and will even invent ideas in their free time (Burcharth et al., 2017). Moreover, the study of Axtell et al. (2000) suggests that innovation is encouraged when the organisation has digital tools

were employees can easily propose ideas, share feedback and make suggestions or when trainings and workshops are provided (work-related or non-work-related) (Axtell et al., 2000).

In addition, the implementation of ideas entails risks that can disrupt the status quo of the firm and can threaten stakeholders' positions and authority. Hence, it can be threatening for managers, especially when ideas are radical (Oldham & Da Silva, 2015). This means that when managers and stakeholders are evaluating the creative ideas from a financial and strategic perspective, these ideas will be considered with resistance, hesitation and scepticism (Damanpour & Schneider, 2006; Oldham & Da Silva, 2015). Having support in the workplace will neutralize this resistance and scepticism for generated ideas (Oldham & Da Silva, 2015). Therefore, organizational support is expected to be more important for service innovation than for product innovation because services are difficult to reproduce. This suggests that employees need to be able to take ore risks, and as a result more support from the organisation.

Link between organisational support and resources access to knowledge and information

The literature suggests that employees produce more ideas when they experience support from others, these can come from inside (e.g. peers, co-workers and supervisors) or outside the organisation (e.g. customers, friends and family) (Oldham & Da Silva, 2015). Receiving support from the organization results in more refined ideas, as employees will for example screen available information and perspectives on how to integrate certain perceived and available information and combine those into new ideas (Oldham & Da Silva, 2015). Besides this, employees are expected to feel supported when information can be easily attained, i.e. when managers are reachable at any moment in time (Oldham & Da Silva, 2015).

Link between organisational support and network ability

Research shows that innovation is most likely to emerge when employees have strong relationships with credible people inside or outside the firm (Baer, 2012). Support in the organization can be achieved through communication via the means of e.g. sharing monthly business updates or internal information. Involving employees within the business process enables them to gain knowledge on where the firm stands in regards to profit, assets, liabilities etc. with this information employees know where they are standing in respect to achieving their goal. Therefore, support may indicate that the organization should provide the adequate resources (e.g. manpower, capital, corporate knowledge, information and equipment) to drive innovation (Baer, 2012; Luo et al., 2018).

Link between organisational support and personal development

Employees who experience support from the organisation are likely to feel more secure and comfortable in taking risks, challenging idea evaluators and attempting to push their ideas from idea suggestion to idea implementation (Zhou & Shalley, 2003; Oldham & Da Silva, 2015). In addition, the empirical work of Luo et al. (2018) suggests that organizational support has a positive impact on innovative behaviour of employees, as employees feel inspired to care about organizational welfare and work to achieve organizational goals.

3 METHODOLOGY

The methodology of this thesis is structured in four parts. First, the research design is presented. Second, the data selection is discussed concisely. Third, an explanation of the analysis process is provided. Fourth, the quality of the research will be assured.

3.1 Research design

This is a qualitative study based on interviews with management in innovation from two firms that manufacture products and from four firms that deliver services. The aim of this research was to explore how an organisation encourages employees to be innovative. A qualitative method is used because it can reveal new information and provides more detailed insights into the reasons of organisations for behaving in a particular way (Qu & Dumay, 2011). This is essential in order to understand the encouragement of intrapreneurship.

This research consisted of two successive phases. First, desk research was used to determine the employees' needs to be innovative and what an organisation can offer to fulfil these needs. Second, structured interviews were conducted to examine how organisations encourage employees and to assess differences between product and service firms. The seven interviews conducted for this research were selected through theoretical sampling. Theoretical sampling is a process of selecting the unit of analysis in order to ensure the possibility of testing the theoretical framework (Eisenhardt, 1989).

3.2 Data collection

Both primary and secondary data was collected for this research. First, this study started with desk research to gain better insights in the personal need of employees to be innovative and how organisations encourage intrapreneurship. For this, the literature was the main source used. Second, primary data was gathered from face-to-face, structured interviews to provide an in-depth understanding of how organisations encourage intrapreneurship and to determine potential similarities or drivers between product and service innovation.

3.2.1 Structured interviews

Seven respondents were interviewed in order to collect qualitative data. Qualitative methods such as interviews have more in-depth insights as compared to quantitative methods such as online surveys. The use of structured interviews is a suitable interview method when there is a well-developed understanding of the topic being studied (Qu & Dumay, 2011). A set of personal needs and organisational drivers has been gathered from the literature and for this reason structured interviews were chosen. A key feature of structured interviews is that they are organised around a set of predetermined set of questions (Hamza, 2014). A disadvantage of this method is that the

interviewer and interviewees have little freedom compared to semi-structured and unstructured interviews (Hamza, 2014).

A structure was established with predetermined questions, written in an interview protocol, to be asked to the respondents. This means that the same questions were asked in the same manner to ensure consistency in the data being collected. The interviews were conducted during February 2019 to April 2019 at the offices of the respondents and the average duration of the interviews was one hour. Each interviewee gave the permission to record the interview. Afterwards the interviews were written out to avoid biases. Furthermore, field notes were made to facilitate the data analysis and to emphasise the most important elements and drivers said during the interviews.

The interviews have three functions. First, was to find out how strong the initiative within the organisation is. Second, was to find out what the company is currently doing to stimulate employees to be innovative. Third, was to be informed on their internal judgement on their way of encouraging employees to be innovative.

3.2.2 Respondents

Data was collected from seven interviews with representatives from multiple industries and is anonymized (table 12). More representatives from several other product firms were approached, however were not inclined to reply. The interviewees were selected on the basis of their function within their respective organisation. The interviewees are responsible for one or more team(s) where product or service innovation is encouraged. Company D has been interviewed two times because in this way the researcher was able to view the organisation from two perspectives: a global and local perspective. The Global Marketing Manager from Company D has a view on the global level, whereas the Team Lead Sales Development has knowledge on personal development i.e. personal drivers. Table 12 below provides an overview of the companies, interviewees' functions and the type of innovation.

Table 4 Overview of the data sources

Company	Function interviewee	Type of innovation
A	Scientific Sales Support	Product innovation
B	Site Leader Innovation	Product innovation
C	CEO and Founder	Service innovation
D	Global Marketing Manager	Service innovation
D	Team Lead Sales Development	Service innovation
E	Senior Sales Operations Consultant	Service innovation
F	Managing Accountancy and Advisory	Service innovation

Company A is a Belgium family-owned company since 1935 that is focused on food specialties and has an organic range. All products are sold to the professional world through wholesales and to large and medium-sized distribution. The company has a strong competitive position and quick decision-making. As a result, it would be interesting to examine the drivers of encouraging entrepreneurial spirit.

Company B is an international company that has a reference in the industry for its innovative aspect. The company is focused on improving people's health and achieving better healthcare outcomes with the use of advanced technologies and in-depth insights into clinical applications and the needs of consumers to develop integrated solutions.

Company C is a young and agile disruptive agency that provides data-driven services with a strong focus on e-commerce and online marketing. It would be interesting to examine how a young company encourages intrapreneurial behaviour of employees.

Company D is an international multi-brand staffing organisation that provides recruitment services. The company has created an entrepreneurial culture and embeds innovation via intrapreneurship.

Company E is a recruitment agency that provides compliant staffing solutions to several industries: Engineering, Life Sciences, IT, Global Energy, Construction and Supply Chain.

Company F is an international consulting company that provides services in the areas of accountancy, consulting, financial advice, risk advice, tax advice and related services.

3.3 Data analysis

In order to organize the structured interviews, it was necessary to thoroughly analyse or code the data. The method of coding has been applied and was based on the needs and drivers that were derived from the literature review introduced in chapter 2. The interview transcripts and documentation was first individually written out and analysed. The transcript was made with the attempt to represent the respondent's opinion and statements as good as possible. Then the interviews were compared to each other to find out similarities and differences. From each interview the most important explanation emerged after analysis.

3.4 Quality of the research

In order to discuss the trustworthiness of this thesis, the four criteria of Korstjens and Moser (2018, p. 121) have been used as guidance. The four criteria are credibility, transferability, dependability and confirmability.

3.4.1 Credibility

Creditability is the degree to which the research findings are credible and the research represents plausible information drawn from the data gained during the interviews (Korstjens & Moser, 2018). All interviews have been recorded to make the transcriptions more reliable (Korstjens & Moser, 2018).

3.4.2 Transferability

Transferability is the degree to which the results of qualitative research can be transferred to other contexts or settings with other respondents (Korstjens & Moser, 2018). As this is a qualitative research, it is less easy to generalize than when a quantitative research would have been chosen. Nevertheless, a 'thick description' of the participants and research process is included in chapter 4, to facilitate the transferability judgment by a potential reader (Korstjens & Moser, 2018). In addition, transferability is achieved through recording, documenting and reporting of processes during the research. Furthermore, the limitations of this thesis are defined as clearly as possible in order to clarify in what cases the empirical transferability can be relevant.

3.4.3 Dependability

Dependability concerns consistency in the results found if the research is conducted once again with the same participants and methods (Korstjens & Moser, 2018). As the used research methods were described in detail, it is possible for future researchers to repeat this research. Therefore, information on the interview companies is provided and the interview protocol can be found in appendix A.

3.4.4 Confirmability

Confirmability is the degree to which the findings of the research study are objective and based on the collected data from the interviews and not based on the motivation, preferences or interests from the researcher (Korstjens & Moser, 2018). Confirmability was achieved by detailing the process of data collection, data analysis and interpretation of the data (Korstjes & Moser, 2018). Chapter 4 presents the results from the interviews.

4 RESULTS

This chapter provides the analyses of the conducted interviews. To be able to test the research results against the findings of similar studies from the past, the same structure is used as for the literature study. The findings in this chapter are described per personal need and organisational driver. As outlined in the literature study, the personal needs derived from previous research include intrinsic motivation, extrinsic motivation, access to knowledge and information, personal development and networking ability. The organisational drivers derived from previous research include shared vision, leadership, autonomy, education as well as organisational support.

4.1 Importance of innovation

To find out the differences between product and service innovation, the interviewees were first asked why innovation is important for their organisation. The respondents unanimously identify innovation as crucial for the organisation to effectively grow and to stay ahead of competition. The following quotes provide examples on how important innovation is to Company A and Company B:

"*It is very important, we are actually more in the food service, which is a more conservative sector, so we have to make sure that we adapt our products to the method of cooking, colour and taste of different countries.*" (Company A)

"*Innovation is very important. It is in the core of our business and of what we do. You can see that very clearly in our communication and also in the work what we do. We want to make products that improve people's life. So being meaningful for the health and life style of people. That is in the strategy and vision of the company that is focused on what we do: health continuum… To get this done, we need to think of new ideas, new concept and new innovations.*" (Company B).

"*The sector was changing and there was a kind of revolution thanks to digitalization... There was a market demand for something new and different. There was a need and the company started to prepare for changes and determine what was going in the market in order to find out what we could do, internally and externally."* (Company F)

4.1.1 Product versus service innovation

This section provides an analysis that is divided into two stages: idea generation and idea implementation.

Both product and service firms indicate that every employee can generate ideas, however these ideas also need to be proposed to the organisation. From the respondents at product firms, there has been analysed that ideas come mainly from employees that have a clear image of the customers' needs and wants. As one interviewee indicated, it is more difficult for employees to

propose ideas when they do not communicate with customers. Not all employees have access to customers and, in such cases, employees need to have a feeling of what customers desire. If employees have a small perspective on the market, the chance is likely low to generate meaningful ideas that will eventually get implemented.

Furthermore, from the interviews with product firms it has been noted that many ideas are proposed and need to be managed. In this respect, two respondents indicated that it is essential to have a system that manages generated ideas because ideas are generated continuously and often come unexpectedly. As a result, new ideas need to be managed. A system that manages ideas facilitates sharing employees' ideas and facilitates the selection and implementation of ideas for higher management.

Three out of seven respondents indicated that the organisation already has a system to manage these creative ideas. Company A, for example, discussed how ideas were managed. Company A has had, before the take-over, a quality system with a community where directors and a coordinator were present to discuss idea proposals. Teams of employees were composed with an animator in order to train problem-solving skills and to generate new ideas during structured and objective meetings. The animator is external and was objective from the group to prevent people from having basic ideas. When an individual proposes an idea, the animator would investigate the idea and suggest it to the directors. Here the animator provides an explanation of the idea proposal in order to determine if an investment is required and whether the idea is aligned with the company's vision. After the idea and its investment were accepted, the animator would communicate it to the idea generator. Moreover, one time a year, an innovation competition is organized where teams compete with their ideas. The organisations that do not have a system desire to implement one, as it is considered as timesaving, manageable and structured.
From this result, it is clear that there has to be a system to manage all ideas. Also ideas can best be examined and selected by a person who has an objective view on the ideas.

In regards to testing products and services, it has been noted that there is a considerable difference in testing ideas for products and for services. Ideas for services are almost impossible to test due to its intangibility. In addition, four out of five respondents indicated that ideas are implemented as soon as possible onto the market. In this respect, it is stressed to make sure that resources and budgets are aligned to the ideas. According to Company C: "*Services are a market-oriented approach and services are not tested in a sense. Services are directly applied onto the market.*"

On the other hand, the two respondents from product firms indicated that ideas are tested in several ways. Ideas can be tested in the form of paper-based concepts (idea presentation) or a quick proto type (development phase). The ideas will be tested on whether they suit the customers' needs and wants. The duration of the implementation trajectory depends on the type of products. After ideas are implemented, products will be tested and evaluated again in order to check whether expectations are met. Medical products, for example, such as MR scans take up to

five years to be implemented because of clinical trials, whereas the process of non-medical products is less regulated.

From these results it is clear that there is a difference between employees working on strict projects and employees working on the development of products. From the respondents in service firms, it is noted that ideas are directly taken to the market whereas product ideas in product firms need to go through a long and complex process with often much regulation.

4.2 Personal needs

4.2.1 Intrinsic motivation

As the literature review indicated, motivation can either be intrinsic or extrinsic motivation. For both product and service firms, intrinsic motivation is found to be more important than extrinsic motivation. All interviewees indicated that employees are rewarded in the form of recognition. Financial rewards are less often used for rewarding good performance. Two interviewees indicated that employees are not rewarded with financial incentives. The respondent from Company E said the following about motivation:

"*The rewards that employees receive is the recognition of performing well ... If employees are rewarded in the form of financial incentives, the employee will be motivated externally instead of internally. The job of employees should be performed with interest from the heart. Tasks should not simply be executed for financial rewards."*

Both Company A and Company B indicated that success is the achievement of a gate or milestone. Employees are rewarded in teams and not individually. How success is celebrated depends on how the team would want to celebrate. In addition Company C emphasized: "*One time a year there is a dialogue provided where employees and managers look back at the year and get evaluated, which results most of the times in a reward which comes in the form of a recognition."*

Four out of seven respondents indicated that a contest is held where employees can propose ideas. If the employee or employees have won the contest they would also receive recognition. They would have the opportunity to have an extra day off or could do some fun activities such as going out for lunch. It has been noted from Company D that they the company informs its employees about the best ideas, which means that the whole organisation is aware of that person's good performance. Furthermore, all respondents emphasized the importance of making sure that employees feel happy in their job. According to Company B: "*The most important thing is that our people are engaged and that they have a purpose in life and at work*."

Company F added to this that everyone in the organisation is involved in the innovation process: "*We think it is important to ask for the opinion of others… We care for other involvements… We ask*

them questions. For example, how would you feel about it? What do you think if we would implement this? What option would you think is the best?"

It is also interesting to note that two respondents indicated that it is critical to motivate employees with opportunities for growth at work. As for example Company D indicated: "*Employees find it important to have the opportunity to grow within the organisation. You receive the tools to grow... You have the freedom to do what how you would like your career path.*" This statement suggests that employees who receive growth opportunities are likely to receive enjoyment from their job and as a result contributes to innovation.

From these findings on intrinsic motivation, it is suggested that managers motivate employees via the means of growth opportunities and reward employees for their good performance with recognition. This is the case for both product and service firms.

4.2.2 Extrinsic motivation

As analysed above, all respondents from product and service firms indicated that good performance is rewarded via recognition. In addition, it has been indicated that both product and service firms try to involve the employees at all times in the innovation process. Financial rewards are commonly not used.

4.2.3 Resources and access to knowledge and information

The respondent from Company B indicated that the organisation has a clear strategy that opts for cross-functional teams. Therefore, it is essential that teams work accurately together and communicate at all times in the innovation process. In order to ensure that cross-functional teams collaborate well, a great deal of attention is paid to its recourses as well as providing access to knowledge, procedures and process descriptions. In addition, Company B stated that it is essential to listen to customers' needs and wants. According to Company A and Company B it is essential to listen to customers' needs and wants, which enables co-creation.

As an example, Company B indicated that knowledge is made available through, among other things, an internal database where employees can connect online with each other in order to gain knowledge. Coaching, training, on the-job-learning and workshops are essential. Initiatives can only come from employees when they are proactive and able to contribute freely. However, the importance here is to do it in a structured and organized manner. Everyone can come with ideas but it should be aligned with the vision. Therefore, there are brainstorm sessions in guided created sessions so that everyone is able to make a contribution.

The following statement emphasized the importance of making sure that employees have access to all necessary knowledge and information for achieving successful innovations. The required resources are provided to employees in order to develop and test products in the early stage of the innovation process. There is a setting developed where employees are able to test and experience

new technologies and where proposed ideas can be transformed into tangible products with the use of 3D printers. The interviewee from Company B stated that collaborating between various departments is essential as he stated:

"*We have a department called "value proposition creation", which is the basis of the innovation process. Three aspects need to be considered: (1) What is it? (2) Who will use it? (3) Who is using it and how do we create value? In this process, all questions need to be taken into account. If only one aspect is considered, it will not work. For example, any organisation can push a technology but if the customer does not want it, then it is not successful. The other way around, if you only check what the customer wants, but there is no technology to produce it, it will not work*."

From the interview with Company F, it is very clear that they opt for a strategy in which the 'access to resources and information' is determined by customer demand. In this respect, the customer needs are being recognized. For Company F, creating clarity in customer needs means a seamless connection of the necessary resources, knowledge level and available expertise. Also, the respondent indicated that the organisation is a "knowledge institute" which indicates that up-to-date and in-depth business knowledge can be accessed quickly for customer questions. Regarding Company D and Company E, an identical strategy and knowledge structure can be assessed.

The product firms emphasized on having the required resources that closely collaborate on the development of a new product. Therefore, knowledge and expertise fit seamlessly into every phase of the innovation process. On the other hand, service firms first focus primarily on customer demand and second focus on the required resources and knowledge. Aimlessly, it can be concluded that for both product and service firms, it is essential to have resources and access to information.

4.2.4 Personal development

Throughout the analysis of the various interviews, the extent to which employees are open to learn was emphasized. Acquiring knowledge can be achieved through, for example, trainings and experiences. From all interviews, it is also noted that employees' interest is essential to take initiatives and to move forward.

From the interviews with product and service firms, six out of seven respondents indicated that personal development plans are made in order to improve skills of employees. The HRM department has the joint responsibility over employees and managers work together with employees on personal development.

In addition, all respondents in the service sector think that learning is important for individuals. Employees learn from their previous experiences and eventually will dare to go out of their comfort zone and take risks. For example, the respondent from Company F indicated that learning is a life long process and that individuals learn from their experiences by just executing the job. The following quote underlines that experiences are important for services:

"*Sometimes, there is a project and there is simply no manual available for delivering the service. Therefore, you have to discover it yourself by assessing your skills and qualities. How are you going to approach that? That is the nice thing about the service sector. Employees are experiencing and experiencing and that is great for their personal development*." This underlines just how important personal development is.
Moreover, when discussing the importance of personal development, a wide range of personality traits that influence intrapreneurial behaviour was identified. According to the seven respondents, an employee who successfully contributes to innovation is: focused, driven, creative, open, flexible, opportunistic, engaged and inquisitive. The employees have problem-solving abilities, listening skills and think out-of-the-box.

All respondents emphasized the importance of having a team with different personality traits. There are several methods or games used to determine employees' personality traits. All respondents referred to four colours including blue, yellow, red and green. Every employee has a different blend of colours. This tool provides the ability to understand human behaviour and personal preferences within different environments, communication with others, ability to organize and reactions or avoidance of conflict, and more. With the understanding of someone's personality blend, the organisation is able to compose effective teams where employees feel comfortable and empowered.

This response from Company D emphasizes the need for diversity in teams: *"At the moment you understand someone's personality traits, you are able to build a team. Previous research shows that the best teams are diverse. This is assured and proven. When you have a team composed of people with the same personalities and people who think the same way, who are from the same environment and who live the same way, you are never able to build a good team. If everyone thinks the same, there is no disagreement. And if there is no disagreement, you cannot say: "How can we do this better?" You will always agree with each other*."

These comments seem to provide evidence that personal development is essential for product and service innovation. First, learning and experiences are essential and especially crucial for services, as they do not have guidelines to deliver to customers. This suggests that learning and experiences are more important for services than for products. Second, there is a need for team diversity in both product and service firms.

4.2.5 Networking ability

When discussing the networking ability, it has been noted that the best ideas are generated when employees have sufficient interactions and strong relationships with different departments. These interactions enable employees to become aware of information from others about several perspectives, domains and technologies.

All respondents mentioned that communication in general and communication with other departments is essential. Company C indicates the importance of networking with the following

statement: "*Employees have different capabilities and knowledge, they are therefore not allocated to one project. They have more projects to work on. In this respect, employees work with their capabilities together to deliver the best service. They collaborate together and help each other.*"

In addition, when discussing networking ability, Company A referred to cross functional teams, where experts with different functional expertise are working together in an open and constructive manner on a common goal. He said that this is important to work on new product development and that strong relationships with various departments are essential to work together and contribute to invent innovations. It is also noted that networking and communication is important. However, a remark has also been made on how communication is realized. It is namely better to communicate face-to-face.

From the analysis on personal needs, a key finding that has emerged is that the lifetime value of products as well as for services is getting shorter. This indicates that both typologies of companies need to innovative as fast as possible. Section 4.3 will analyse the data on how organisations encourage an intrapreneurial spirit among employees.

4.3 Organisational drivers

4.3.1 Shared vision

During the interviews, all respondents referred several times to the vision of the company, which can be considered as crucial to generate and implement ideas.

All respondents indicate that it is important that ideas are aligned with the vision. The vision provides a direction for employees to be able to generate ideas that are likely to provide value to the firm and the market(s). A vision should also come with a set of priorities to make sure employees generate ideas that are aligned with the vision. Ideas should not only be connected to the vision of the firm, they also need to be managed.

From the interviews with the product firms, it has been noted that both company A and B have a structured system of developing, producing and marketing their products, which enables to align employees to the shared vision. The philosophy of Company B is based on the "idea-to-market' model. This suggests they focus on customer demands. In addition, Company A and Company B also a clear mission and vision. The shared vision is communicated within the organisation through a strategic plan and an annual operation plan.

Company B stressed the importance of a vision in order to generate ideas value for the firm. *"Initiatives can only come from employees when they are proactive and able to contribute freely. However, the importance here is to do it in a structured and organized manner. Everyone can come with ideas, however it should always be aligned with the vision. Therefore, there are brainstorm*

sessions so that all employees are able to make a contribution." This statement emphasizes that a vision is needed in order to contribute to innovation.

The interviewees from service firms indicated that the organisations' vision should inspire its employees. Inspiration can be expressed by showing eagerness to win. When innovation and performance is stagnated, it is considered as going backwards in the business sector. Creating value is crucial for the business and customers. In this respect, all organizations discussed that a shared vision is only useful when it is frequently communicated internally.

The results demonstrate that a shared vision is an organisational driver for successful product and service innovation. A vision is essential to make sure that generated ideas are aligned with the vision to enable idea implementation. Product firms have a more strict process as compared to service firms, whereby the shared vision is guidance for the business operations. As a result, it can be concluded that a vision is essential for both product and service firms.

4.3.2 Leadership

When discussing the leadership styles, a wide range of preconditions for a leadership style that encourages innovation was discussed. A leader who encourages innovation provides clarity, transparency, manages expectations, focuses on good communication and involves people into the innovation process.

Company B indicated that their leadership style is focused on the development of employees as they are the most valuable asset of the organisation. Every employee needs to receive attention. Company B indicated that a situational and functional leadership style is essential to encouraging innovation. Leadership is seen as a steering and also coordinating function. A leader who is responsible for quality control will use another leadership style than when the leader is responsible for coordination. This suggests that the leadership style is dependent on the team and job function.

According to Company F: "*A leader has to know when the performance is well, however, it is essential to look at how things can be improved. For me, leadership is a passion and entrepreneurship. Those being on the top are essential to inspire, then employees will also naturally be inspired as well.*" This statement indicates that leaders inspire employees to contribute to innovation.

Company F uses a leadership style that clearly focuses on the soft skills of its employees. In addition, the company indicated that employees have a coach for the realization of objectives. The respondent of Company C indicated that the organisation is more focused on the achievements of targets and emphasized the importance of communication. Company D has a strong board of directors that clearly define its company goals. On the other hand, the company is characterized by a culture of fear because employees are not allowed to fail or make mistakes. Company E strives for a structure, clarity and specific tasks for its employees.

The findings on leadership at least shows that a leader contributing to innovation involves the team and adapts its leadership style according to team and job function. In addition, a large diversity of leadership styles has been identified from the interviews. From the responses it is clear that a leader contributing to innovation is involving the team and adapting its style to the team and the job function. Both product and service-related organizations are very focused on achieving their company goals and coordinate their leadership style accordingly, whether situational or otherwise.

4.3.3 Autonomy: task and time allocation

As the literature suggested, autonomy provides employees the freedom to plan their time and activities. A finding is that all respondents indicated that they dedicate time for employees to 'free-thinking'. For example, Company B indicated that the organisation has implemented a 'Friday afternoon experiment', which means that employees are entitled to spend half time on generating new ideas. This allows employees to take a break from their current day-to-day activities and to start generating and developing new ideas. In combination with the freedom provided, there are, however, also clear job descriptions provided. A structured and organized approach is initialized for idea proposal and idea selection. The results highlight that a structured and organised approach is especially required in large organisations where employees propose a great number of ideas.

From the interviews in the service sector, it is notably difficult to determine the amount of initiatives from employees in the service sector as employees work on project assignments and allocate their time to provide the service. In other words, service firms allow employees the freedom to determine how much time is spent on a project as long as the objectives of the projects are met. As the respondent from Company E indicated: "*Employees have the control over your job*". This being said, however, it is important to respect the deadlines of projects.

This result highlights two things. First, both product and service firms indicated that it is important to provide employees the freedom to work on their tasks and spend time to generate new ideas. Second, the result seems to indicate that initiatives from service firms are difficult to determine.

4.3.4 Autonomy: Decision making and risk taking

It is interesting to note that all interviewees in the product and service sector indicate that autonomy is essential to ensure that employees feel involved and take the responsibility in their job. One interviewee indicated that the providence of autonomy is coordinated by trust. In other words, higher management should trust its employees on taking responsibility in the employees' job.

A further novel finding is that the extent to which an employee receives autonomy is dependent on the hierarchical position and level of experience within the organisation. For example, juniors, employees who just started working in the organisation, first require a lot of guidance and structure and as a result will have less autonomy than seniors who have a deeper level of experience.

When discussing the extent to which employees take risks, all respondents referred to the importance of a budget, its financial resources, that is made available for implementing ideas. For this reason, a payback system has been introduced in order to identify costs and investments. Company B added that there are strict procedures for experimenting, particularly for experimentations in health care. Health care innovations require a lot of testing and have therefore a complex process with a lot of regulation.

Three respondents from the service sector added that customer commitments are key. As a result, risks are less likely to be taken in the delivery of services because the company is committed to the deliverable of the project. In this respect, employees in service firms have to work within the boundaries of the project. Furthermore, Company C indicated that it is important to work on projects that are within the core business of the company. Pursuing activities that go beyond the core business could lead to troubles, in cases when the company does not have the required resources and knowledge needed to operate efficiently during the project.

This finding suggests that product and service firms try to minimize risks regarding financials and customer commitments and encourage taking risks in establishing solutions to customer problems and issues.

4.3.5 Education

Education and training are meaningful for Company A and Company B. Company B has for example an internal University, which aims to offer its employees a wide range of trainings, courses, workshops, coaching and development programs. A distinction is made between training and coaching in soft skills (personality) and hard skills (expertise and competences). Both Company A and Company B are convinced that education and lifelong learning makes a direct and indirect contribution to the innovation process, which results in new product market-introductions.

For service firms, education is also significant for its business operations. From the interviews, it can be emphasized that larger organisations have more time and financial resources available to invest in educating employees than compared to small organisation. Regardless of the size of the organization, it is interesting to note that education is a critical driver to achieve meaningful innovation.

Regardless of size and typology of the organisations, education and on-the-job learning are significant for their strategic operations. This suggests that education contributes to innovation and is essential in the encouragement for product and service innovation. In addition, it is noted that small sized firms are more likely to have budget constraints compared to larger organisations. This suggests that size may influence the propensity to innovation.

4.3.6 Organisational support

When discussing support with the interviewees, all interviewees have indicated that support is a driver for innovation. From the interviews with product firms, it is noted that support is needed to assist employees. The company provides support in the form of resources, materials and machines to test and education. In addition, employees have a coach and or team leader who is available for questions and issues at all times. For example: quote…

In addition, company A indicates that employees have the opportunity to contribute to innovation by proposing ideas, however, not all employees do have the choice to contribute and some feel the need to contribute, some may not. Furthermore, Company B and F indicated that brainstorm sessions and innovation days are organized to generate ideas. Company F discussed the following:

"*Innovation Fridays are meant to create more interactions between employees. At the brainstorm sessions a lot of ideas are generated often, however, not all of the ideas can be used. There are also many ideas of which we think that they are useful and valuable, which we would like to investigate*." This statement suggests that the organization supports employees to generate ideas and organizes session where employees can brainstorm together to generate meaningful ideas.

Besides that employees are encouraged to experiments as the resources are available to do so. Moreover, all respondents indicate that a supportive environment is created where employees feel free to express ideas without the risk of criticism. Company C indicates that support is provided at all times. Also, team collaboration is supported and encouraged. Teams are being supported for their contributions to innovations.

From the short review above, a key finding is that support include creating an environment where employees dare to take risks and where employees are provided with the required resources such as education, trainings and knowledge. This suggested to essential for both product and service firms.

4.3.7 Feedback

In analysing the interview data, the importance of feedback emerged on individual performance and overall organisational performances such as innovation improvements and the development process of new products and services. This suggests that feedback is an organisational driver, which will be discussed in this section.

For all interviewees, giving feedback is important at all stages of the innovation process. One interviewee discussed the importance of receiving feedback as early as possible in the innovation process. Company B indicated that the company has an additional department for feedback that is composed of experts who build a bridge between technologies, marketing and commercial aspects for product innovation. He discussed the importance of feedback: "*There is no worse thing than investing a lot of money on product development and to hear the product is unsuccessful, after*

product launch. Therefore, listening carefully to what customers want and their feedback are very essential for innovation."

This statement underlines the importance for receiving feedback. Another respondent added to this that the organisation has an animator, a person who is responsible of the team, who provides feedback to employees on idea generation and idea implementation. This animator is from outside the organisation and has an objective view of the ideas that are aligned to the vision. This improves the efficiency of implementing the meaningful ideas.

These comments provide support on feedback being essential during all stages of the innovation process. Additionally, it is noted that feedback from internals and externals, such as experts and customers, should be applied to the development of new products and services.

4.3.8 Organisational stability

In analysing the interview data, another organisational driver emerged, which will be discussed in this section. This organisational driver is the stability of the organisation, which is indicated to be the state of company's financials, human resources and production.

Company A indicated that the organisation has recently been taken over by a multinational. In addition, Company D is experiencing a transformation. From both interviews, it has been noted that being in a transition process influences the propensity to innovate. Company D indicated that a transition involves a lot of complexity as it includes adapting its employees, teams and business units to the new situation. Employees have to, for example, perform new tasks or work in different teams. In this respect, time is required to adapt, which has been emphasized by the following quote from Company A: "*People need to be satisfied within the organisation. It is essential that people manage their position and daily work activities. If employees have a working routine, it becomes easier to allocate time to think and generate new ideas*."

It is interesting to note that a takeover process is likely to stifle innovation at companies. First, it is essential that employees are adapted to the new situation before demanding creative efforts. When the organisation is stable and employees are adapted to the new situation, employees can more easily make time to think about innovative solutions. This is important for both product and service-related businesses.

5 DISCUSSION

Intrinsic motivation and extrinsic motivation

The findings from previous research are in accordance with the findings from this study. It has been noted that employees should be intrinsically motivated in order to do the job. As has been argued in the study of Hackman and Oldham (1976), this study also finds that it is important to inspire employees and to ensure that employees feel happy and satisfied in the job. When employees do not feel happy there is likely no motivation to contribute to innovation. Intrinsic motivation is therefore considered as essential for intrapreneurial behaviour. For both service and product firms it has been noted that intrinsic motivation is essential. Also, all the companies indicated that employees are commonly rewarded in the form of recognition. Extrinsic rewards are less common used, however they are considered as a tool to encourage employees. Ahmed (1998) suggested that employees who are rewarded externally tend to put their energy in the reward instead of contributing to innovation. This has not been concluded from the analysis.

Personal development

It has been noted that taking risks for service firms are more often avoided, as employees need to conform to customer commitments. There should be a good balance between idea proposals and investments. All employees have referred to the DISC model, which is a common tool used by managers to identify a persons' behaviour. This is in line with the finding from the study of Slowikowski (2005). The use of this model and tool, organisations are able to compose teams that can contribute to innovative behaviour.

Resources and access to knowledge and information

The theory suggests that resources and access to knowledge and information facilitates generating new ideas for the organisation. Besides this, it has been found that for service firms it is essential to have information and knowledge on customers' needs in order to deliver. The findings from this study indicate that product firms likely need to invest more time and money in implementing and maintaining expertise, knowledge and information. These drives are having a similar impact for both service and product innovation.

Network ability

In line with previous studies, establishing and maintaining a network is essential for innovation. Based on the research from Baer (2012) innovation is likely increased when employees are skilled networkers. It is found to be important to have strong relationships with employees in order to improve innovation. This is in line with the finding about communication with various departments. A lot of interactions and strong relationships help also to increase knowledge and learning that will as a result flourish innovation. In the findings it was discussed that a diversity of teams and expertise within the organization is essential. It is therefore essential that employees are able to network and have strong relationships in order to acquire more information and knowledge, which could facilitate to contribute to innovation.

Shared vision

Overall the findings of this study on a shared vision are in accordance with the findings reported by Ahmed (1998), Calantone et al. (2002) and Nijssen et al. (2006). It has been noted that a vision is essential to create an environment where employees are able to generate ideas that are aligned with the company goals. Without a clear vision it is likely difficult to contribute to innovation. Additionally, a similar finding was obtained from Brown and Eisenhardt (1996) as the findings show that clear communication is essential to ensure the focus of various departments and as a result flourish innovation. This study did not find a difference in the way of how organisations encourage employees with the use of a shared vision.

Leadership

The findings from this study are directly in line with previous findings on leadership. This study also found that leaders adjust their leadership style according to the context and stage of the innovation process. From the findings it is clearly noted that leaders provide resources, financial budgets and grant autonomy to its employees. In addition, a leader who involves the team, contributes to innovation. In line with previous study of Chen et al. (2014), it has been found that leaders coach and perform their employees and create an organisation where learning is encouraged, which helps employees to become efficient, capable of performing their job and being innovative. However, contrary to the findings of Damanpour and Schneider (2006), this study found that two out of six companies create a culture of fear, where employees are not allowed to take risks. An explanation for this could be that the sector has very strict sales goals. This is not necessarily the case to be a difference between product and service firms.

Autonomy

When comparing the results of those of previous studies on autonomy, it can be concluded that granting autonomy to employee is essential for encouraging intrapreneurship. In line with previous studies, all companies indicated that granting autonomy is essential, as they believe that employees who have the responsibility in their job will feel more engaged and commitment in their job. A key finding is that service firms find it difficult to determine initiatives from employees. A possible explanation for this is that the intangibility of services makes it difficult to determine innovation outcomes. In line with the study of Ozlati (2015) this study found an important link between trust and granting autonomy. In regards to risk taking, this study shows that firms try to minimize risks in financials and customer commitment and try to increase the risks of developing new solutions for customers. For service firms, it has emphasized that taking risks are minimized. From this it can be concluded that employees have to be careful with granting too much autonomy, as employees have to respect customer commitments.

Education

The findings on education are consistent with the results found in previous studies. The key finding is that education and trainings are meaningful for the companies to deliver services and manufacture products. Organisations are aware of continuous learning and that it generates as a motivator to effectively contribute and participate to innovation. A difference between product and service firms is that trainings for manufacturing firms consist more of hard skill trainings whereas

trainings for service firms focus more on the soft skills. Anyhow, both hard and soft skills are essential for product and service firms. Furthermore, it must be pointed out that size of the organisation is likely to determine the level of investments in education and trainings.

Support

Previous studies suggest that support is essential for innovation. The findings from this study comply with the results of previous studies. It complies to what has been found by Burcharth et al. (2017) as the respondents also provide tools where employees are able to propose ideas and share their feedback. Furthermore, a key finding is that innovation days and brainstorm sessions are organized in order to promote interaction with others where employees are able to acquire new and diverse information. This finding indicates that it is essential to provide those type of sessions to contribute where employees are able to brainstorm. As the study of Cooper and Edgett (2008) suggested, employees can contribute to innovation when they have the required expertise, knowledge and information.

Feedback

It is found that feedback is an additional driver, which has not been derived from previous studies. The study of Axtell et al. (2000) suggests that feedback is part of providing support to employees. This suggests that feedback is likely to reinforce positive behaviours and boost performances of employees. The interviews indicated that feedback is also necessary for the development of products and services. This suggests that employees, customers or experts are also invited to provide feedback. This ensures to meet customers' needs and to improve the quality of the products and services.

Organisational stability

Additionally, a key finding that has been found is that organisational stability is an additional organisational driver. This study did not conduct previous studies on organisational stability. From the interviews, it is clear that employees are able to contribute when the organisation is stable, which means that employees can stay focused on generating ideas and to think.

6 CONCLUSION

The purpose of this thesis was to identify the personal employee needs and the drivers of the organisation contributing to encourage innovation. Furthermore, the aim was to identify differences and similarities between product and service innovation. This master thesis is a qualitative analysis and the main contribution is in theory development.

This study comprises a comprehensive literature review drawing on academic papers. First, the study has started with literature on product and service innovation and second the study goes more detailed into the personal needs and the organisational drivers to encourage intrapreneurial behaviour. Seven structured interviews have been conducted as described in chapter 3. The main aim of this thesis was to explore how an organisation encourages an entrepreneurial spirit among employees and investigate possible similarities and differences between product and service innovation. However, the findings show that there are no differences between the encouragement of service and product innovation.

6.1 Managerial implications

The findings included in this thesis are important to expand knowledge on how companies encourage an intrapreneurial spirit among employees. This knowledge should be applicable to managers in organisations with fast-changing environments where new ideas and innovation is important for success and survival.

The results suggest that it is essential for companies to provide a work environment where innovations are supported and where opportunities are offered to facilitate innovative behaviour. Employees are able to contribute when they have for example training programs, workshops and brainstorm sessions, which will boost learning and knowledge of employees. In this respect, employees are likely to generate more ideas. Besides this, employees need autonomy, which provides them to control their tasks and take responsibility, to generate innovation at work. Networking skills would also help employees to flourish innovation. In addition, leaders are essential in the innovation process as they are able to inspire and to create an environment contributing to innovation.

In addition, organisations need to be aware of the importance of the organisational drivers that can have an impact on how employees behave at the work place. Organisations should therefore be able to understand employees' behaviour. These behaviours can be determined from the DISC behaviour model. Organisations could assign employees to projects who are most likely to contribute to innovation. In addition, communication is found to be very essential for organisations to increase knowledge and to increase the information flow between various departments. Access to other departments and information contributes to learning and as a result to generating new ideas.

Moreover, the size of the company is founded to be a factor that influences innovation. Larger organisations have extensive guidelines and rules that need to be considered. As a result, implementing new product ideas have a long process to go through. In addition, larger organisations are financially strong, have more resources and manpower, which means that the process for making decisions takes longer. On the other hand, small organisations have less manpower, are financially less strong but are able to make decisions faster as compared to larger companies. A recommendation is therefore to have sufficient financial funds, experienced staff and strong and quick decision channels to encourage innovation.

Finally, all types of organisations need to be aware that innovation is important to stay ahead of competition and to accelerate much faster compared to new market introductions by new or existing organisations.

6.2 Limitations to research

There are two limitations that are important to identify in order to define the boundaries of this study. The first is the types of industries and second is that the interviews have been conducted with managers, which indicates that only a managerial perspective has been obtained.

First, the focus of this research was demarcated in order to guarantee the feasibility of conducting this research by a single researcher within six months. Seven interviews have been conducted and as a result, these interviews do not cover all industry sectors, sizes and types of firms. Second, the results of this research are based on the perspective of managers. The researcher did not interview employees and therefore, the results are based on the narrative with a managerial perspective. The perspective from employees or their experiences could have provided a deeper understanding on the needs of employees that contribute to an intrapreneurial spirit. This limitation is considered as the strongest limitation of this research.

6.3 Future research

First of all, two additional organisational drivers have been found from analysing the data, these are feedback and organisational stability. Further research on these two drivers can provide further insights into their influence on innovation.

Second, a key finding of this study is that granting autonomy is important to encourage innovation. However, since employees have different preferences, it could suggest that some employees work better with limited guidance whereas other employees would need extra supervision. On the other hand, too much autonomy could also ensure failures. This suggests for future research on this topic. Since a qualitative method has been used for this study, researchers could try to analyse and

test the drivers of product and service innovation found in this study in a quantitative study to validate whether these drivers are significant.

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APPENDIX 1

Appendix A Interview protocol

1. How important is innovation for the organisation in general?
2. How do you encourage employees to innovate in the organization?
3. How do you motivate employees in taking initiatives?
4. What advantages and disadvantages do you see in how you motivate your employees to motivate ideas and initiatives?
5. How is the decision-making process for employees regulated in this?
6. To what extend are employees allowed to take risks?
7. Do you have the impression that creative ideas are only presented if they are instructed by the organization?
8. Do you experience that employees have to stand up for their ideas for their ideas?
    a. Is there an obstacle noticeable?
9. If the company tries to encourage ideas among employees, will there be a certain vision or guideline provided?
    a. How specific is this? Do you have an example?
10. When an employee comes up with an idea, will this first be tested whether it suits to the organization?
11. What is the implementation trajectory from the moment that an idea of an employee is implemented? Will this be communicated to the employee?
    a. Will they be notified when sales are made?
    b. Do you give feedback to the employees from whom the ideas are? Within the organization?
12. How are employees rewarded for contributing to innovation?
    a. Rewarded when successful project is done? Or submitted idea?
13. How do you balance the time of employees if different innovation challenges came up at the same time how would you set priorities?
    a. Do employees have the freedom to plan their own time to work on their own project topics? (Initiative employee)
    b. Is there a possibility to reserve some time for working on innovative projects?
14. If the company accepts an idea, how is the allocation of resources decided?
    a. Is the person involved?
    b. Are guidelines from higher management provided?
    c. How long does a phase take from idea to product?
15. Are there sufficient moments in which employees can coordinate with each other within R&D?
    a. Are there sufficient moments in which employees can coordinate with each other outside R&D departments?
    b. If yes: How does this work? Consultation structure?
16. How do you support employees who participate in an innovation project?

17. How does the organization ensure that employees have access to, e.g. new knowledge (expertise) and information?
18. How do you experience personal development of employees through training and coaching within the organization?
    a. How do you think training and coaching contribute to innovation?
19. Do you have the impression that the organization needs employees with certain common personal characteristics?
    a. How do you select employees?
    b. How does the employee get evaluated? (Team? / end result?)
20. How would you describe your leadership style?
    a. How does that style manage your innovation projects?
21. What elements that are discussed, are in his/her eyes the most important within the organization or which elements are interesting to implement?
22. Could you give an example of a successful innovation (or bad) of which you think that individual and innovative performances of employees where important?