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How to Manage the Coexistence of Corporate Entrepreneurship and the Core Business

The story of large companies pursuit of tomorrow´s business

Kauser Kader and Johanna Kalnins

Supervisor: Johan Brink and Ethan Gifford
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By Kauser Kader & Johanna Kalnins

School of Business, Economics and Law, University of Gothenburg, Vasagatan 1,
P.O. Box 600 SE 40530 Gothenburg, Sweden

Contact: kauser90.kader@gmail.com; johanna.kalnins@live.com

ABSTRACT

Large companies today faces many challenges due to the changing global environment, new conditions require new ways of managing the company. Further, due to the bureaucracy and hierarchy that follows with the size a company, large established companies find themselves losing the innovation and risk taking they once had. Corporate entrepreneurship is presented as a solution to this dilemma. However, corporate entrepreneurship is difficult to manage since it requires both new and old organizational traits. To be able to both explore and exploit at the same time companies need to establish an ambidextrous organization. In light of this, the main purpose of this thesis is to investigate how large established companies manage the coexistence of corporate entrepreneurship with their core business. The theoretical framework suggest different ways of organizing the company in order to achieve ambidexterity, and different tools to use in order to manage the operations of corporate entrepreneurship. The empirical findings demonstrate that the investigated companies organize themselves in similar ways for corporate entrepreneurship but experience challenges with it. Further, the case companies make use of the different tools suggested in order to manage corporate entrepreneurship, but to different extent and with different engagements.

Keywords: Corporate entrepreneurship, ambidexterity, large established organizations

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1. Introduction

In the following section background information will be provided for this thesis. It will also introduce purpose, research question, and delimitations.

1.1 BACKGROUND

Large companies today face many challenges, many due to the changing environment. The business environment of today manifests intense changes in technology, legalization, and labor and resource markets. New conditions require new ways of managing and organizing the company (Gibb, 2000). History is filled with large companies that despite their strength and intelligence still are unable to survive. In the year of 1959 General Motors was the largest manufacturing firm in USA according to *Fortune* magazine. Half a century later it filed for bankruptcy. The giant Enron suffered the same fate in 2001. It is as Charles Darwin once said *"It is not the strongest of species that survive, nor the most intelligent, but the one that is most responsive to change"* (O´Reilly, Harreld and Tushman 2009, p 1).

The author March (1991) noted that what determines a firm's ability to survive over time is its ability to exploit existing assets and positions in a profit producing way and to simultaneously explore new technologies and markets. By adjusting organizational resources companies are able to seize both existing as well as new opportunities. According to March (1991) this is vital in order to ensure a company's long term survival. Levinthal and March (1993, p 11) states that *"The basic problem confronting an organization is to engage in sufficient exploitation to ensure its current viability and, at the same time, devote enough energy to exploration to ensure its future viability"*.

The task of exploring new opportunities and at the same time exploiting existing capabilities might be one of the toughest challenges a company faces, and there are only a few companies that have been able to do this successfully. Kodak is a recent example of a once dominant company that failed to adapt to market changes and eventually went bankrupt (Tushman and O´Reilly, 2004).

A way to both look at the old existing business, and at the same time focus on the development of new businesses is corporate entrepreneurship (hereafter referred to as CE) (Garvin and Levesque, 2006; Van de Ven and Engelman, 2004). Recently there has been an entrepreneurial response from large companies to the new global competitive environment (Gibb, 2000). CE is a strategic answer to the challenge of organic growth; it is a tool for the innovation opportunities that does not fit neatly into the company's core businesses (Wolcott and Lippitz, 2010). Hence, it differs from the innovation processes within a company; with CE the company could develop businesses outside their core business and hence meet the challenges of a changing environment (Wolcott and Lippitz, 2010). Thus, CE is entrepreneurial activities performed within a company (Rutherford and Holt, 2007).

Yet, companies that set up new ventures come in contact with many barriers, and the majority of these ventures fail. The problem lies in the fact that new businesses usually does not mix well with the established systems, processes, and cultures. Garvin and Levesque (2006) point out that successful CE requires both new and old organizational traits, a mix of characteristics which is achieved through something they call *balancing acts*. If a company is unsuccessful in keeping these forces in equilibrium, they will fail (Garvin and Levesque, 2006).

Van de Ven and Engelman (2004) highlight other difficulties related to the management of CE. According to the authors Van de Ven and Engelman (2004) organizations dealing with CE struggles with balancing the attention of employees between exploration and exploitation activities. This difficulty is connected to the fact that employees and organizations are primarily designed to focus on and exploit existing practices rather than paying attention to exploring new ideas. CE is also difficult to manage because its activities does not only adapt to the existing organizational structures, they also transform them (Van de Ven and Engelman, 2004). Hence, CE is not without friction.

Yet, Kuratko et al (2004) points out that firms increasingly rely on the use of CE to cope with the challenge of simultaneously develop future core competences and at the same time nurture the existing business.

According to Kollmann and Stöckmann (2008) there are three approaches on how to manage CE, i.e. how CE is undertaken. The first concept is entrepreneurial orientation, it involves the mindset of the firm and its willingness to undertake risk and pursue innovations. The second concept is entrepreneurial management, i.e. management that puts an opportunity-based behaviour in focus. Entrepreneurial firms pursue and exploit business opportunities without regard to currently controlled businesses. The third concept is ambidexterity. A lot of research about CE focuses on how to overcome inertia by implementing entrepreneurial behaviour and processes, but neglect the challenge of simultaneously efficiently managing the existing business (Kollmann and Stöckmann, 2008) An ambidextrous organization consists of different competences that allow the firm to both compete in new and mature markets. It requires the ability to host multiple contradictory structures, processes and cultures within the same firm. And this ultimately lets companies pursue both incremental and discontinuous innovations (O'Reilly and Tushman, 2004; Tushman and O'Reilly, 1996).

Since large firms seems to be struggling on how to compete in the new environment CE could be of even more importance to them. Large companies often lack the degree of innovation and risk taking that they once had, due to bureaucracy, complex structures and hierarchy as a consequence of their size. CE is seen as a solution to this dilemma (Thornberry, 2001). As these firms already have their established business to exploit, an ambidextrous organization seems to be vital to pursue the search of tomorrow's innovations. In light of this, we intend to investigate how large established Swedish firms manage the coexistence of CE with the core business.

1.2 PURPOSE

The current literature states many problems regarding the management of CE. Despite this fact an increased number of firms turn to CE to solve its inertia. It is of interest to investigate how they manage this relatively new concept which seems to involve many ambiguities. Therefore, the purpose of the study is to investigate how large established Swedish companies manage the coexistence of CE with their core business. The aim is to compare and contrast how the firms manage the coexistence, and not to find a best practice. In doing this we will examine how companies manage their operations regarding CE and how they organize themselves in this area.

1.3 RESEARCH QUESTION

The above stated purpose leads up to the following research question:

How do large established companies manage the coexistence of the core business with corporate entrepreneurship?

In order to be able to answer the research question the following two sub-questions have been created to help us guide our research.

How can companies organize themselves for corporate entrepreneurship?
How can companies manage operations of the corporate entrepreneurship process?

1.4 DELIMITATIONS

Firstly, there are many theories regarding how to manage CE. As Kollmann and Stöckmann (2008) stated, it could be divided into three main areas: ambidextrous organization, entrepreneurial management, and entrepreneurial orientation. Our focus will be on how to investigate CE management in the light of ambidextrous organization.

This study focuses on the organization level of how large Swedish firms manage the coexistence of CE and the core business. It will not focus on the individual level, and how the individual entrepreneur contribute to CE.

Due to practical reasons our focus will be limited to Swedish companies. Further, the study is limited to large Swedish companies and does not address how SME's manage the coexistence.

2. Theoretical Framework

In the following section the theory which the study is built upon will be presented. First, the concept of CE and four different models of CE are explained. Second, the concept of ambidexterity is explained, including how companies could organize themselves in order to achieve ambidexterity and how they could manage it.

2.1 CORPORATE ENTREPRENEURSHIP

2.1.1 THE CONCEPT OF CORPORATE ENTREPRENEURSHIP

Kollmann and Stöckmann (2008) describe CE as the result of the integration of two theories, organizational design and entrepreneurship. CE itself focuses on the entrepreneurial behavior in larger established companies. Since entrepreneurship is associated with growth, innovation and flexibility, many theorists and practitioners want to apply these desirable traits to established companies as well (Kollmann and Stöckmann, 2008).

The difference between entrepreneurship and CE is that the emphasis shifts from the individual to the organization (Kollmann and Stöckmann, 2008). CE is not the same thing as corporate venture capital. Corporate venture capital mainly focuses on financial investments in external companies, even though CE have some similarities in common there is still a difference. CE can also collaborate with external partners and capabilities. Another difference in these two concepts is that CE involves a considerable amount of resources of the established company and usually internal teams manage the CE-projects. CE is also not to be confused with spinouts. Spinouts differs from CE since it usually is constructed as a self-sufficient enterprise, which does not leverage the "original" company's assets in order to conduct their business and realize their goals (Wolcott and Lippitz, 2010).

CE includes innovation in products, services, channels, brands and so on (Sawhney et al, 2006). CE wants to overcome constraints such as restrictions related to only developing opportunities which fit the existing business functions and activities. By developing ideas which are outside of a company's current business companies can expand their opportunity horizon (Wolcott and Lippitz, 2010).

During the past decades CE has increased considerably in terms of popularity. According to Kollmann and Stöckmann (2008) this originates in the fact that that CE can in a variety of ways contribute to a firm´s financial and nonfinancial performance. In terms of financial performance it can improve a company's growth and return on assets. In terms of nonfinancial performance it can facilitate the creation of new products, services and processes. Which means that a company's overall competitive advantage increases.

Another key factor in explaining why CE has gained such momentum during the last three decades, lies in the changing competitive environment. The increasing globalization and the technological revolution have created major challenges for companies and managers in order to remain competitive. The digital revolution is one example of a change that has fundamentally changed how companies conduct their business. The disruption of industry boundaries, and the opening of global markets are just two examples of many factors which has caused strategic discontinuities (Kollmann and Stöckmann, 2008). It is in this turmoil or new competitive environment in which CE has gained more attention. Companies need new strategies and organizational designs in order to assure survival and maintain their competitive advantage (Kollmann and Stöckmann, 2008).

Thornberry (2001) has another explanation to CEs increase in popularity. According to Thornberry (2001) CE can be a viable solution to large company *"staleness, lack of innovation, stagnated top-line growth, and the inertia that often overtakes the large, mature companies of the world"* (Thornberry, p.1. 2001). Hamel (1999) explains that large companies are using CE because they have lost their continuous innovation, growth and value creation that they once had.

Burgelman (1983) refers to CE as the process where companies engage in diversification through internal development. This diversification needs new resource combinations in order to spread a company's activities in unrelated areas, or slightly related, to its current competences and opportunities. The authors Covin and Slevin (1991) agrees with Burgelman´s definition and quote him in their work. Chung and Gibbons (1997) have a different perspective and define CE as an organizational process that, through the management of uncertainties, transform individual ideas into united actions. Zahra (1993) states that CE is a process concerning organizational renewal that has two different but still connected dimensions innovation and venturing, and strategic renewal.

Even though there is a lack of clarity surrounding the concept of CE, there are still a number of common factors related to it (Covin and Miles, 1999). The first factor is that CE is about the creation of something new. The second factor is that new things require resources and or changes in the distribution of resources in the organization. The third factor brings up the fact that organizational learning takes place in both the creation of the new thing and the implementation process surrounding it. This results in the creation of new organizational competencies and capabilities. The fourth factor concerns the fact that the CE-project is supposed to result in long-term economic value and create fortune for stockholders, owners or society. The fifth factor highlights the fact that the financial returns from *new things* are prognosticated to be better than the returns gained from the current business. The last factor brings up the fact that there is an increased risk involved with CE since these innovations or things are unproven (Covin and Miles, 1999). Thornberry (2001, p.4.) summarizes these elements by saying that CE *"is not about business as usual. It is about unusual business…"*.

In light of this, the adopted definition that will be used for CE throughout the thesis is from Wolcott and Lippitz (2007, p 2); "*the process by which teams within an established company, conceive, foster, launch and manage a new business that is distinct from the parent company but leverages the parent´s assets, market position, capabilities, or other resources"*.

2.1.2 DIFFERENT MODELS OF CORPORATE ENTREPRENEURSHIP

There are different models of CE, depending on how the company is constructed. Wolcott and Lippitz (2007) suggest four different models of CE based on two different dimensions: organizational ownership and resource authority. Organizational ownership is defined as who in the organization that has the ownership over new business creation, and resource authority as how the new business is founded; is there a dedicated pot of money to CE, or is the new business development founded in an ad hoc manner through divisional budgets or "slush fund". The two dimensions generate a matrix in which the four different models could be found (see table 2).

The opportunist model is often the initial model for companies to start with. There is no designed organizational ownership of resources and the CE proceeds based on the efforts and initiatives of individuals. The opportunist model needs a trusting corporate culture to work well, and it is further important that the culture is open to experimentation and have diverse social networks behind the official hierarchy. Otherwise, new ideas could fall through the organizational cracks or not receive enough funding. Therefore, the opportunist model is not suitable for all companies. When an organization grows, and hence focus more on organic growth, many managers realize that this diffused ad hoc approach is not enough (Wolcott and Lippitz, 2007).

The enabler model is based on the premise that employees across the organization are willing to engage in the development of new concepts and businesses if they are given the right support. The resources does not have any formal organizational ownership but are dedicated to the development of new business, which enables teams to pursuit opportunities on their own. In the most elaborate forms of this model the company provides: a clear criteria for selection which projects or opportunities to pursue; guidelines for funding; transparency in the decision-making; recruit and support of entrepreneurial employees; and also the support from senior management. Hence, it is not only about allocating funding to CE projects but also about the dedication of the management and the overall company to these projects (Wolcott and Lippitz, 2007).

In the advocate model the company only provides a modest funding for CE projects to the core group and the organizational ownership for innovation is assigned to expert groups. The CE is facilitated with collaboration with the business units, i.e. each business unit is responsible for its own innovations and the funding of this. However, they could get help from innovation experts to, for instance, generate and conceptualize ideas (Wolcott and Lippitz, 2007).

Another way to pursue CE is through the producer model. In this model the company pursue CE by supporting and establishing formal organizations. The funding is dedicated or actively influenced over business units. An aim is to protect emerging projects from “turf battles”, to encourage cross unit collaborations, and to encourage radical new business ideas (Wolcott and Lippitz, 2007).

The four different models involves both success factors and challenges. These are presented in table 1. The opportunist model is not included in table 1 because according to Wolcott and Lippitz (2007) it is not actively managed like the other three models.

	ENABLER	ADVOCATE	PRODUCER
SUCCESS FACTORS	Innovative Culture Structural Flexibility Well-defined milestones for funding decisions Well communicated process and criteria for selection	Knowledge in building new businesses Knowledge in building internal and external networks Support from senior executives	Leadership with internal decision authority Knowledge in building new businesses Attention to CE executive career incentives
CHALLENGES	Maintaining a balance and discipline in respect to the core business Finding project champions Senior management bandwidth	Overcoming the business units pressure for near-term Finding executives that can build new business	Reintegrating projects successfully Management succession Lack of support from business units

Table 1 – Based on Wolcott and Lippitz (2007, p. 79)

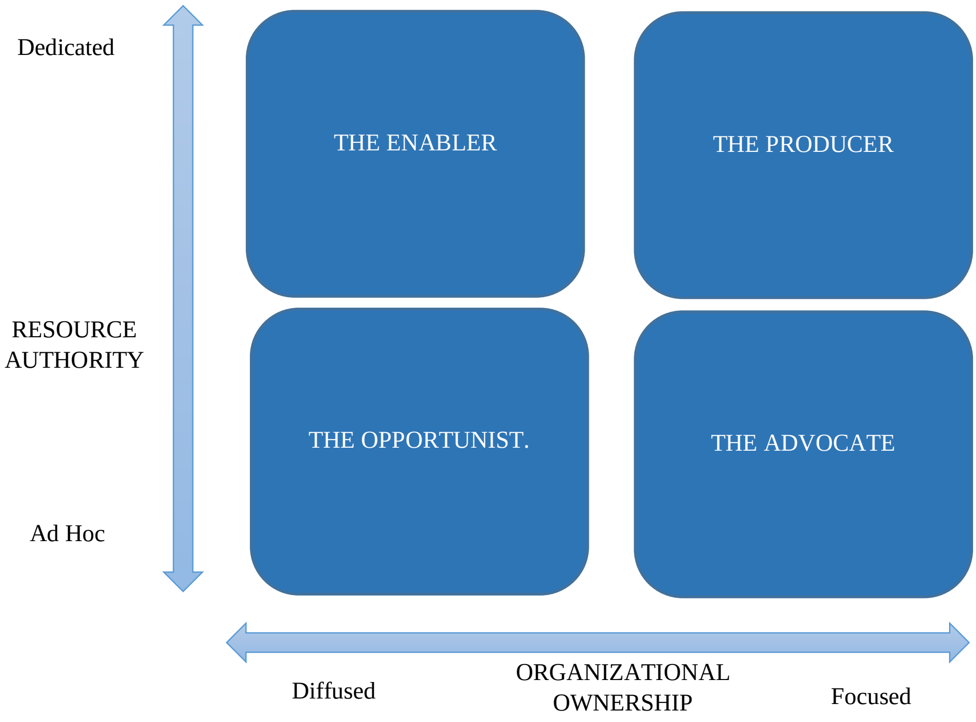

Table 2 – Based on Wolcott and Lippitz (2007, p. 77)

2.2 AMBIDEXTROUS ORGANIZATION

Duncan (1976) was one of the first to use the term ambidextrous organization, referring to companies that could shift their structure and strategy to both explore and exploit. Tushman and O'Reilly (1996, p. 24) further developed the term of ambidextrous organization, and defined it as "*The ability to simultaneously pursue both incremental and discontinuous innovation […] from hosting multiple contradictory structures, processes, and cultures within the same firm*". Gibson and Birkinshaw (2004) define ambidexterity as a firm's capacity to simultaneously attain alignment and adaptability at a business unit level. Kollmann and Stöckmann (2008) state that this approach afterwards has been dedicated to the business unit level in large established companies. Further, Kollmann and Stöckmann (2008) describe ambidextrous organization as the dual management of tasks that seems opposing and that require managers to accept the challenge of paradox management. Ambidextrous organizations that combine entrepreneurial and preservative activities are built to excel both today and tomorrow. The firm needs to develop and preserve its existing business and to develop and explore the future business in order to sustain the firm in the long run (Kollmann and Stöckmann, 2008).

March (1991) was one of the first to conceptualize the concepts of exploration and exploitation. Exploration involves activities involved in search, risk taking, variation, flexibility, experimentation, discovery, and innovation. Exploitation looks more at refinement, selection, production, efficiency, implementation, and execution. Companies that focus on exploration are likely to find that they suffer the costs of experimentation without gaining its benefits, i.e. underdeveloped new ideas. Other companies that focus more on exploitation are likely to become "*trapped in suboptimal stable equilibria*" (March, 1991 p 71). Hence, maintaining a balance between the two is crucial for system survival and prosperity. Since the resources of a firm often are scarce, exploration and exploitation competes for the same resources. Thus, companies have to make choices and tradeoffs between the two (March, 1991).

2.2.1 ACHIEVING AMBIDEXTERITY

Sequential

There are different views on how ambidexterity is achieved within an organization. Duncan (1976) suggests a sequential approach. Firms need to shift their structures over time to match the firm's strategy, i.e. they shift between explore and exploit (Duncan, 1976). Studies has shown that sequential ambidexterity is better suited in stable, slower moving environments, and for small firms that lack the resources to explore and exploit at the same time (Chen and Katila, 2008). However, Tushman and O'Reilly (2013) argue that in the sequential approach it is not clear how the sequential ambidexterity occurs or what the transition process looks like. It could be argued whether this really is ambidexterity (Tushman and O'Reilly, 2013). For instance, House and Price (2009) describe that HP has failed in its struggle to shift from products to services, despite changes in structure and strategy. The company has failed in its exploration. Hence, HP failed in its attempt to balance exploration and exploitation even though it did structural changes.

Structural

Tushman and O'Reilly (1996) argue that in rapid change sequential ambidexterity is not effective, and argue for a simultaneous approach. The firm should explore and exploit at the same time. This could be accomplished by establishing structural separate and autonomous units for explore or exploit. Each unit have its own structure, processes and culture. But to ensure the use of resources and capabilities the different units have targeted integration (Tushman and O'Reilly, 1996). O'Reilly and Tushman (2004) further explains that an ambidextrous organization can be achieved by creating *"organizationally distinct units that are tightly integrated at the senior executive level"*. That is, the separated units are held together by a common strategic intent and values, and shared assets (O'Reilly and Tushman, 2004). This could essentially be seen as a leadership question, and not a structural one. Hence, the structural ambidexterity requires a leadership that could manage the possible tensions with multiple organizational alignments. Further, structural ambidexterity also calls for *"targeted integration to leverage assets, an overarching vision to legitimate the need for exploration and exploitation"* (O'Reilly and Tushman, 2013, p 10). Kauppila (2010) also states that internal and external approaches to achieve the ability to explore and exploit at the same time are complements rather than substitutes.

Contextual

Other researchers argue for a more contextual approach to ambidexterity. Gibson and Birkinshaw (2004) explained the ability to balance exploration and exploitation as a function of an organizational context that is characterized by stretch, discipline, and trust. This requires a supportive organizational context that encourage individuals to divide their time between alignment and adaptability, i.e. exploration and exploitation. The individuals are also encouraged to make their own judgments on how divide their time (Gibson and Birkinshaw, 2004). Khazanchi, Lewis and Boyer (2007) see alignment and adaptability as a function of an organizational culture that promotes both flexibility and control within a unit; control is needed for the execution and flexibility promotes creativity. However, Kauppila (2010) presents a shortcoming of contextual ambidexterity: that it does not present or consider how a firm could conduct exploration and exploitation simultaneously. Contextual ambidexterity assumes that the exploratory knowledge exists within the firm and is available to use. Therefore, Kauppila (2010) argues in favor of a structural separation between exploration and exploitation units. Yet, within a given unit or project it would be possible to see how contextual ambidexterity would function (Kauppila, 2010). Burton et al (2012) on the contrary found that it is more beneficial to separate exploration and exploitation on a project level.

Markides (2008) emphasize that it is necessary to create the appropriate organizational environment for the desired behaviour to emerge. Markides (2008) consider the organizational environment to involve four basic elements: the culture of the company; the measurements and incentives used by the company; the structures and processes that constitute the company; and its people and the attitude (see table 3). Established firms already have a set of skills and attitude that make them good at exploiting their existing business. The set of skills needed for exploration is different from the ones needed for exploitation, and it is difficult to simply adopt these skills. The company should develop an organizational environment that encourage the desired behaviour, i.e. ambidexterity (Markides, 2008).

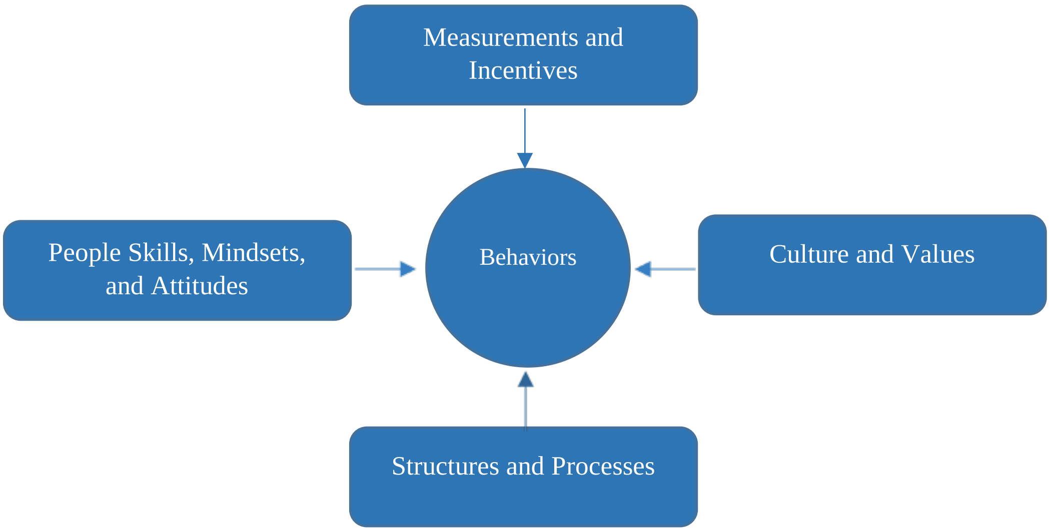

Table 3 – Based on Markides (2008, p. 116)

To conclude, the above mentioned way to achieve ambidexterity should not be seen as conflicting. It is not uncommon that a firm uses all three approaches to achieve ambidexterity over time (Kauppila, 2010). Further, firms face different type of markets with different types of competition and the need for exploration and exploitation may vary across these markets. For instance, in more stable environments a sequential approach might be more beneficial while a simultaneous approach is more appropriate when market conditions are changing (Benner and Tushman, 2003). O'Reilly et al (2009) suggest that structural ambidexterity is needed when creating the context for exploration. When the structures are set and gain legitimacy firms could switch into more integrated structures.

2.2.2 LEVEL OF AUTONOMY

Some companies are successful at both exploiting the present and exploring the future and they have similar important characteristics in common. These particular organizations separate *"their new, exploratory units from their traditional, exploitative ones, allowing for different processes, structures, and cultures"* (Tushman and O´Reilly, 2004). At the same time they have a tight connection across the different units at a senior executive level. Tushman and O'Reilly (2004) call this specific type of company for *"ambidextrous organizations"*, and this type of company provides a proven model for executives whose goal is to develop radical innovations while pursuing incremental gains (Tushman and O´Reilly, 2004). Grant (2010) is of a similar opinion and also advocates that innovation is stimulated by autonomy and diversity. Grant (2010) continues by explaining that its exploitation and spread on the other hand requires coordination.

Hence, Tushman and O'Reilly (2004) suggest that the business units should be separated but with integrating mechanisms. In contrast, Porter (1996) states that a company should not compete with different strategic positions. The firm builds competitive advantages in their industry by focusing on one strategic positioning, i.e. the firm should hold on to its unique position and offer activities related to the chosen strategy. Therefore, the firm should not mix different strategies. If a firm compete with two different strategies simultaneously, i.e. in two different positions, it increases the risk of harming the existing business. (Porter, 1996). Bower and Christensen (1995) suggest that in order to mitigate potential conflicts the firm should keep the two units separate. By having the old and the new units separated the new business is protected from being suffocated by the old business culture and processes. Hence, the new business could develop its own processes. Companies should keep the units separated even when the new business has grown and its market becomes more commercialized. The new unit should be kept independent from the core business to avoid conflicts such as competition of resources and if the new product would cannibalize existing products (Bower and Christiansen, 1995). Utterback (1994) further argues that established firms could gain advantages from disruptive technology by establishing autonomous, separated units. By doing so, the firm is able to exploit the flexibility and entrepreneurial attitude required in the development of the new business (Utterback, 1994).

Markides (2008) however states that separation is not always the solution. Companies have failed even though they have created separate units, and other companies have succeed despite having different businesses in the same organizational structure. Markides (2008) further states that keeping the two units separated might decrease costs but at the same time the company cannot make use of the synergies between the units. Both aspects do have benefits and drawbacks. By keeping the units separated the new unit does not risk the interference of the core business; and by separating them the new unit cannot make use of resources and knowledge from the parent company. Therefore, the company should not adopt an either or perspective. The decision to separate or integrate could be looked upon by the following variables: how serious the potential conflict could be between the two businesses; and how strategically similar the new market is to the existing market (see table 4). Separation is better when the market for the new product is strategically different from the existing market, and could involve trade-offs and conflicts with the existing market. Integration is better when the new market is similar to the existing market and there are few conflicts involved. However, it is not always that easy. When the new market is strategically different from the existing but they are not conflicting, phased separation might be better. The firm build the new business inside the firm, as an integrated unit, so it can take advantage of the firm's resources. Later it is separated into an independent unit. When the new market is strategically similar to the existing one but involves conflict between the two units it is preferable to have a phased integration. In this case, it is better to have the two units separated for a period of time and slowly merge the two units together in order to minimize the disruption from the conflict.

Nature of conflicts between the established business and the innovation	**Low Strategic Similarity (different markets)**	**High Strategic Similarity (similar markets)**
Serious	Separation	Phased Integration
Minor	Phased Separation	Integration

Similarity between the established business and the innovation

Table 4 – Markides (2008, p. 87)

2.2.3 MANAGEMENT IN AN AMBIDEXTROUS ORGANIZATION

In order for ambidextrous organizations to be successful, ambidextrous senior teams and managers are crucial, i e executives that are able to deal with cost cutting and also have an entrepreneurial thinking. These talents are rare but essential according to O'Reilly and Tushman (2004). Kollmann and Stöckmann (2008) stress that ambidextrous management, if executed well, is an effective and helpful instrument that can deal with organizational inertia, the dynamics of a competitive environment, and sustain durable competitive advantages.

Another vital aspect to the success of the ambidextrous organization is to deal with resistance immediately. Resistance at the top levels of a company cannot be tolerated. The last tool in order for this type of organization to succeed is the relentless communication of a clear and compelling vision by a company´s senior team. General Managers have a difficult task, they have to manage the development of current products and processes, while simultaneously envision the future of their company (Tushman and O´Reilly, 2004). The task of exploring new opportunities and at the same time exploiting existing capabilities might be one of the toughest challenges a manager faces (Grant, 2010; Tushman and O´Reilly, 2004). Tushman and O´Reilly (2004) explains that this is also why such few companies are able to do this successfully.

Turner, Swart and Maylor (2013) investigate the different mechanisms behind achieving ambidexterity, i.e. how a firm could manage ambidexterity (see table 5). They divided their findings into three levels of analysis: organizational, group, and individuals. The mechanisms needed for each level was investigated and the resources needed, i.e. the intellectual capital resources, were divided into organizational capital, social capital, and human capital. Organizational capital involves processes and structures within the firm; social capital is knowledge within the networks of relationships; and human capital are the individual skills. These mechanisms appear to be connected and to reinforce each other. Regarding the organizational capital structures, managers can externally use wide networks and supply chains. Internally the managers need to consider the complex context of separation of the exploration and exploitation. At the group and individual level, structure is implemented by reinforcing incentives and routines of formal and informal mechanisms. Regarding the social capital, relations can help promote ambidexterity. Through networks groups can more easily access knowledge. Active management of these networks can facilitate both exploration and exploitation. Regarding human capital, a specialist management is required which also allows for flexibility (Turner et al, 2013).

LEVEL OF ANALYSIS	INTELLECTUAL CAPITAL RESOURCES		
	Organizational capital	Social capital	Human capital
ORGANIZATION	Structural configuration and separation.	Knowledge-sharing relationships with new and existing external parties.	Individuals reconcile and coordinate exploitative and exploratory functions.
	Development and maintenance of inter-organizational relationships.	HR practices supportive of ambidexterity.	Management ability to reconfigure organizational assets.
	Coexistence of formal and informal structures.		TMT behavioral integration and complexity.
GROUP	Reward systems to support ambidexterity.	Complex network of strong and weak ties for effective knowledge-sharing, supported by formal and informal behaviors.	Strong, compelling vision.
	Processes for creating dense social relationships and informal coordination.	Relationships supportive of ambidexterity.	Participation in cross-functional interfaces.
	Formal and informal managerial integration and control mechanisms.	Shared values and goals.	Transformational leadership.

Table 5 - Turner et al (2013, p. 322)

2.2.3.1 Balancing acts

In line with Tushman and O'Reilly (2004), Garvin and Levesque (2006) point out that successful CE requires both new and old organizational traits at the same time, a mix of characteristics which is achieved through something they call *balancing acts*. Garvin and Levesque (2006) also state that "*new businesses require innovation, innovation requires fresh ideas, and fresh ideas require mavericks*". There is a need for leaders who are not trapped by conventional thinking. Also, there is an unbalanced struggle between new businesses and old systems. This unbalanced struggle is especially visible in budgeting systems and human resource management. For instance corporate budgeting systems favor established businesses, since they provide higher financial returns. This stems from the fact that it is hard to calculate the return from investing in an unknown market, compared to a known market. This leaves new businesses in an exposed position, and if a company is cutting costs then it is always the new business which gets cut off. Human resource systems are designed in a way so that they develop executives whose skills match the needs of the mature business and not what start-ups require. Hence, companies need to conduct balancing acts within three areas: *strategy*, *operations*, and *organization* (Garvin and Levesque, 2006). The following table is put together with information from Garvin and Levesque (2006).

Strategy	Organization	Operations
Narrowing the playing field Finding new ideas is hard and an unguided search is an inefficient way. In order to increase the efficiency companies need to develop criteria which narrow down the choices and to be able to judge whether a technology or market is desirable.	***Assign corporate and operating sponsors*** Executives which act as corporate sponsors bring credibility and power to start-up ventures. Operating sponsors, recruited from divisions, contribute with organizational knowledge and nurture acceptance	***Staffing new ventures with "mature turks"*** Companies often assign young mavericks the role of commanding start-up ventures. This is however not the best approach since they usually have little knowledge of which corporate resources are available or how to access them. It is better to assess "mature turks" - *"managers who are already successful at running larger businesses but are also known for their willingness to challenge convention"*.
Learn from small samples, closely observed Due to the ambiguous environments, most knowledge can be extracted from interaction sessions with a small number of customers. Although surveys include a higher number of customers it does not reveal enough important information.	***Establish criteria for handoffs*** Companies can make faster transitions from corporate oversight to divisional ownership, if they establish standards beforehand. The criteria used can either be quantitative or qualitative..	***Changing veterans´ thinking*** Certain companies place top management personnel into boards of start-up efforts. The underlying reason is that familiarity is expected to lead to understanding, and understanding is supposed to lead to acceptance.
Use prototypes to test business models Most individuals have a hard time evaluating new ideas without having something tangible to discuss. Prototypes are useful because they enable informed responses from users.	***Employ hybrid organizational forms*** The third suggestion which will facilitate a good balance between identity and integration, is by using innovative organizational structures. These structures can take many shapes, most of them combine formal authority with informal oversight.	***Developing some capabilities, but acquiring others*** All skills does not have to be built or developed from scratch. Since all the best skills cannot be developed in-house, in some cases the best choice is to acquire skills through a purchase.
Track progress through nonfinancial measures Goals are crucial, however, in ambiguous cases (environments) goals must be expressed in the form of project based milestones. Targets must be expressed in a way so that it is measurable.		***Share responsibility for operating decisions*** New businesses usually have complete control over their own operations. However, since there is always a risk of losing perspective, the best thing to do is to share responsibility of the new business between the new and old management. When sharing responsibility the new business venture learns to accept certain established practices and becomes more successful at leveraging existing strengths.
Suspend judgment, but not indefinitely Since failures are very common in new business creation, companies must be clear on when and how they will decide to terminate a project. Otherwise there is a risk that it will continue for too long.		

Table 6 – Based on Garvin and Levesque (2006)

2.3 SUMMARY OF THEORETICAL FRAMEWORK

Corporate entrepreneurship
Corporate entrepreneurship is entrepreneurial activities within an organization (e.g. Burgelman, 1983, Kollmann and Stöckmann, 2008). There are different views surrounding the concept but common traits among the definitions are that it is about creating something new. Further, it involves changes in the required resources, and implementation. This results in the creation of new organizational competences and practices. It also creates long term economic value but involves an increased risk (Thornberry, 2001; Covin and Miles, 1999).
Different models of corporate entrepreneurship
According to Wolcott and Lippitz (2010) there are four models of CE depending on the resources authority and the organizational ownership, i.e. how dedicated the funding is and who has the responsibility over CE initiatives. The different models are the enabler, the producer, the advocate, and the opportunist (Wolcott and Lippitz, 2010).
Ambidextrous organization
Duncan (1976) first described ambidextrous organization as companies that could shift between explore and exploit. The concepts of explore and exploit were first conceptualized by March (1991). Exploitation involves activities involved in managing the existing business, while exploration focus on activities involved in finding tomorrow's businesses (March, 1991). O'Reilly and Tushman (1996) further developed the concept to organizations that simultaneously could pursue both exploration and exploitation. Kollmann and Stöckmann (2008) describe the concept as dual management of tasks and processes that seems opposing, with the aim of excel both today and tomorrow.
Level of autonomy
Tushman and O'Reilly (2004) suggest separate business units but with integrating mechanism. In contrast, Porter (1996), as well as Bower and Christensen (1995) suggest complete separation of the different units. Markides (2008) argues that separation or integration of the unit should depend on how similar it is to the established business and the nature of conflict between these two.
How to achieve ambidexterity
Sequential ambidexterity is when firms shift from explore to exploit over time. Studies have shown that this approach is better suited in stable and slower moving environments and for small firms (Duncan, 1976; Chen and Kattila, 2008). Structural, or simultaneously, ambidexterity is when firms explore and exploit at the same time. This is accomplished by establishing structural separate and autonomous units for explore and exploit, but with targeted integration (Tushman and O'Reilly, 1996; Tushman and O'Reilly 2004; Tushman and O'Reilly, 2013). Contextual ambidexterity suggests that the ability to balance exploration and exploitation is a function of an organization context and culture (Gibson and Birkinshaw, 2004; Khazanchi, Lewis and Boyer, 2007). Conflicting views state that this approach assumes that the knowledge of exploration and exploitation already exists in the firm (Kauppila, 2010) Markides (2008) emphases the necessity of create an organizational environment that supports exploration and exploitation at the same time.
Management in an ambidextrous organization
Management in an ambidextrous organization is a difficult and first needs communication of a clear vision by the senior management team (Tushman and O'Reilly, 2004). It involves different intellectual capabilities for different level of analysis within the organization. For instance structures for exploration and exploitation on the organizational level and reward systems to support it on a group level (Turner, Swart and Maylor, 2013). To manage the existing business and CE together, i.e. to explore and exploit at the same time, a firm should perform balancing act in the areas of organization, operations, and strategy (Garvin and Levesque, 2006).

Table 7 – Summary of the theoretical framework

3. Methodology

In the following section the methodology used to conduct this study will be presented and the reasons for conducting it in this way.

3.1 RESEARCH STRATEGY

In order to answer the research question the chosen method is of a qualitative approach. Since the aim of the study is to understand and describe a phenomena, a qualitative study is the most suitable approach (Bryman and Bell, 2011). We seek a deep understanding of how the coexistence of the core business and the CE projects are managed and thus a qualitative approach allows us to get a more thorough and broader picture. Further, a qualitative approach is suitable since “quantitative research cannot deal with the social and cultural construction of its own variable” (Eriksson and Kovalainen, 2008 p. 4). This means that many qualitative approaches are interested in understanding and interpretation rather than testing hypotheses and statistical data as in a quantitative approach (Eriksson and Kovalainen, 2008).

Since the study focuses on describing how the management of the coexistence of CE projects and the traditional businesses is conducted, the study is of a descriptive character. The study further focuses on understanding processes and does not seek to test hypothesizes and thus an inductive approach will be used. An inductive method also leads to a more iterative approach (Bryman and Bell, 2011). This means that we have been able to move back and forth between theory and the empirical material. This has allowed us to further deepen and develop the theoretical framework. This means that we were able to reflect upon theory while simultaneously collecting empirical data.

This study does not seek to find any best practice amongst the investigated companies. The aim is rather to understand and to compare how the firms manage the coexistence of CE with the core business. Hence, the study is of a regulatory character and not radical. The regulatory paradigm describes what is going on in the business while the radical is concerned with how the business should look like (Bryman and Bell, 2011).

3.2 RESEARCH DESIGN

Based on the objective of the study and the chosen research strategy, a suitable research design is the multiple case study. Bryman and Bell (2011) suggest the multiple case study approach as a method when the research is focused on multiple cases and their unique contexts. Since we are going to explore how various large companies are managing CE, we believe that a multiple case study is the most suitable research method for our research questions.

Another reason for choosing the multiple case study as a design is that we aim to compare and contrast a number of large companies in order to understand how large Swedish firms handle CE. According to Yin (2003) a multiple case study allows a researcher to explore differences and similarities within and between cases. The benefits of being able to compare cases is that we are able to determine what is unique, and also identify common traits across cases (Bryman and Bell, 2011). The authors Bryman and Bell (2011) explain further and mean that by using this particular design, the researchers are more prone to conduct theoretical reflection on the findings.

The firms are selected on three criteria: first they either have or are conducting CE; second all the investigated firms are classified as large companies according to the Swedish *Årsredovisningslagen* (FAR, 2014); and third, their headquarters are located in Sweden. The investigated firms are from different industries in order to match the criteria.

We have used the definition of large companies from *Årsredovisninglagen* (FAR, 2014) 1st chapter 3§. As long as a company meets more than one of these requirements it is considered a large company: the average number of employees in the company has during the last two years been more than 50; the company´s total assets has during the last two years exceeded 40 million SEK; and the company´s net sales has during the last two years exceeded 80 million SEK.

3.3 RESEARCH METHODS

Primary data will be collected from interviews. Secondary sources of data will be collected from books, articles and databases. We have used databases such as: GUNDA, Retriever Business, Google Scholars, and Business Source Premier. We have also used Harvard Business Review. The search words were: *corporate entrepreneurship, strategic corporate entrepreneurship, entrepreneurial management, strategic management, entrepreneurial strategy, ambidextrous organization, corporate entrepreneurship challenges, corporate entrepreneurship in established firms*.

To investigate how the chosen companies work with CE, semi-structured interviews were conducted. Since we did not know a lot of details concerning the companies´ CE, semi-structured interviews were beneficial from our point of view. It was beneficial since it allowed us to ask new questions, change the order of the questions and if needed even change the phrasing of the questions. Semi-structured interviews made it possible to elaborate more on certain aspects and interesting answers given under the interview (Bryman and Bell, 2011). To ensure our cross-case compatibility an interview guideline was used (see appendix).

The interview guideline was built upon the four categories that Markides (2008) found constituting the organizational environment of a firm that determine its behaviour (see p. 9). The categories that constitute the organizational environment are: structures and processes; people skills, mindsets, and attitudes; culture and values; and measurements and incentives. It is the organizational environment that determines the behaviour of a firm (Markides, 2008). Therefore, this was used as a base to investigate how the companies manage the coexistence of CE and the core business. In the interview guideline the two categories: people skills, mindsets, and attitudes; and culture and values are presented as one category which we call *competences and attitudes*. This is done due to the relatedness of mindset and attitudes in relation to culture and values. Hence, we built the interview guideline around the following headings: organization; competences and attitudes; measurements and incentives; processes and structure; and strategy. The organization section is included to describe the organization for CE within the company, it is followed by the organizational environment and as a last category we have used strategy to capture the companies' intentions with CE. However, Markides framework (2008) should not be seen as a means of analysis, only as a framework that helped us structure the questions.

We have conducted ten interviews with candidates from six different companies. According to Yin (2012) there are no universal formula on how many cases to include in a multiple case study. A higher number of cases increases the confidence and certainty of the study. However, what is considered as good or bad is subjective (Yin, 2012). Five out of the ten interviews have been face-to-face. Four interviews were via telephone and one was a video-conference. The interviews were on average 50 minutes long. In cooperation with the participant candidates we decided that all companies are to be anonymous. The companies will be addressed as company A, company B, and so on (see table).

	Company	Date	Current Position	Length
1	A	31/3-2014	VP, Director Group research programme	45
2	A	31/3-2014	Director (Innovation Management)	45
3	B	8/4-2014	Innovation Project Manager	58
4	C	9/4-2014	R&D executive	40
5	C	16/4-2014	R&D Project Coordinator	40
6	D	1/4	Director (Corporate innovation office)	48
7	E	31/3-2014	R&D Director	60
8	F	22/4-2014	Innovation manager	60
9	F	3/4-2014	VP, Innovation, strategy and technology	53
10	F	7/4-2014	CEO for the company responsible for Venture Capital	60

Table 8 – Information concerning the conducted interviews

To find suitable companies to include in our research we did this in two different ways. Firstly, our supervisor, Johan Brink, recommended us a number of companies which met our criteria. Secondly, our other half of the included companies in the research were found after contacting large established companies which followed our criteria.

Bryman and Bell (2011) highlight the following advantages related to telephone interviews compared to face to face interviews. Telephone interviews is substantially cheaper and less troublesome to administer. In our case where we have a sample which is scattered all over the nation, we could save a lot of time and money by conducting telephone interviews instead. Another advantage is that telephone interviews are not affected by characteristics of the interviewer as may be the case in personal interviews (Bryman and Bell, 2011). The interviewee might be influenced of the presence, class or ethnicity of the interviewer, and might for instance give an answer which they feel is desirable by the interviewers according to Bryman and Bell (2011). This potential bias is disrupted due to the remoteness involved with telephone interviews. A disadvantage related to telephone interviews is that interviewers are unable to observe the interviewees, i e body language and facial expressions. This puts us in a situation where we cannot respond to for instance signs of discomfort, confusion or puzzlement. In personal interviews the interviewer is able to change the phrasing of the question or explain and clarify the question (Bryman and Bell, 2011). We have used both of these methods strictly due to practical reasons. After having transcribed the interviews we have not found any dissimilarities between the personal interviews and the telephone interviews, in terms of the quality of the interviews.

3.4 DATA ANALYSIS

We have used grounded theory as a framework, since it helped us guide the analysis of data. The two pillars of grounded theory is that it develops theory out of data and that it is iterative. That it is iterative means that data collection and analysis *"proceed in tandem, repeatedly referring back to each other"* (Bryman and Bell, 2011). This particular strategy did not only structure the analysis, it also structured the collection of data as well (Bryman and Bell, 2011). Since we collected and analyzed data continuously throughout this thesis, we were be able to save time.

Grounded theory consists of components which were helpful when we analyzed the collected data, for instance we used the tool *coding*. We did this by breaking down the data from the interview into component parts. In order to make the coding as accurate as possible it was important to also transcribe interviews in detail (Bryman and Bell, 2011). The transcribed interviews were then coded into different keywords and categories. For instance, one category were organization, and a subcategory to that were ambidexterity. Codes included in the category of ambidexterity were, for instance, "parallel strategies". The other category was management, which included subcategories such as "tension" and "selection". These codes helped us structure the analysis, discussion and conclusion.

3.5 RESEARCH QUALITY

To ensure the quality in a study validity and reliability are two important factors. Validity refers to what degree a study measures what it aims to measure and to what extent the results are generalizable. There are two types of validity, internal and external validity. Reliability, on the other hand, refers to whether the results from the study can be repeated, i.e. if another study will get the same results (Merriam, 1994).

3.5.1 VALIDITY

Internal validity determines to what degree the study measures what it aims to measure. In case studies a frequently used method to ensure internal validity is that the participants can get a chance to control the results and decide whether the results are reliable (Merriam, 1994). To ensure internal validity all the transcribed interviews were sent back to the interviewees. The participants have been able to read the transcribed interviews and they have also had a chance to express their opinions regarding the interviews and control the results. Hence, the study will better measure what it aims to measure. To further strengthen the validity we have also emailed the questions one week before the interview to the participants. By doing so the participants had a chance to understand the questions and could prepare answers. Another step in assuring the internal validity all the interviews were recorded. By doing so it is easier to go back and listen again, to make sure that everything is understood.

External validity defines to what degree the results are generalizable. There is a discussion regarding the application of external validity on case studies. Since the specific case is chosen to suit the purpose of the study and not chosen randomly it is difficult to use the classic significance of external validity. In addition, it is discussed whether the concept could be applied on case studies or if the concept should be reformulated (Merriam, 1994). The same arguments are used by Bryman and Bell (2011) with the concern regarding generalizability. The purpose of a case study is not to generalize the results but should, on the other hand, be to focus on the uniqueness of the case and to develop a deep understanding of the complexity (Bryman and Bell, 2011).

3.5.2 RELIABILITY

To ensure the replicability of the study a clear documentation of procedures, interview guides etc will be provided. By sending back the transcribed interviews to the participants, they had a chance to check the results which could further strengthen the reliability. However, reliability could be difficult to apply to a case study since the information given is a function of the person who contributes with it. Thus, there is an approach stating that instead of aiming at a high degree of reliability in its strict significance, the aim should rather be to come up with meaningful, consistent and dependent results (Merriam, 1994).

4. Empirical Data

In the following section the empirical data will be presented. The findings for each company are presented separately. The headings follow the same structure presented in the theoretical framework. All of the data presented is derived from interviews. The chapter will end in a summarizing table.

Companies that were chosen to be included in the current research fit the following criteria:

- The average number of employees in the company has during the last two years been more than 50.
- The company´s total assets has during the last two years exceeded 40 million SEK.
- The company´s net sales has during the last two years exceeded 80 million SEK.

In table 9 a short overview of the companies’ characteristics are presented. The included data in the table is not particularly explicit, due to the fact that the included companies are anonymous. However, they still reveal their considerable size, strength and age.

	Number of employees	**Turnover (billion SEK)**	**Age of organization (years)**
Company A	20001-45000	51-100	0-60
Company B	5000-20000	20-50	121-
Company C	45001-65000	51-100	121-
Company D	5000-20000	101-	61-120
Company E	20001-45000	51-100	61-120
Company F	65001-120000	101-	61-120

Table 9 – Short overview of the case companies´ characteristics

The empirical findings will be presented in the following way: each company profile starts with describing the companies´ organization for CE. It continues with dividing the company profile into the categories that according to Markides (2008) constitute the organizational environment of a firm. The categories are: structures and processes; people skills, mindsets, and attitudes; culture and values; and measurements and incentives. However, the two categories: people skills, mindsets, and attitudes; and culture and values are presented as one category which we call *competences and attitudes*. This is done due to the relatedness of mindset and attitudes in relation to culture and values. It is the organizational environment that determines the firm’s behaviour. Hence, in order to understand how the companies manage the coexistence of CE and the core business, their organizational environment for CE is presented in this section.

4.1 COMPANY A

4.1.1 ORGANIZATION

Within company A long term R&D is conducted in all the departments. Company A has named their CE efforts, group research. This particular unit consists of six people and they work with questions which covers all business areas within the company. These six key individuals are involved with the decision processes. Whenever a project arises and the particular group needs to find competent individuals, they scout for personnel in all the different divisions in the company. Group research also work a lot with external partners and together they, for instance, co-manage decisions regarding the development of these projects. The knowledge and experience which is created in these collaborations are incorporated in to the company with the assistance of personnel from internal R&D centers.

The company used to have a more open and explicit organization surrounding CE. However, this has changed and the previous structure is on hold. The current organizational structure governing CE is ad hoc. The reason for why company A changed the organizational structure has to do with the company streamlining its business. The company decided to focus more on its core business, and everything else which was not part of the core business got downsized.

In terms of who is responsible for group research, there is not any particular unit or boss. However, group R&D is in charge of the finances and since no one has the main responsibility for group research, it unofficially becomes group R&D which decides what are good- and what are bad ideas. When it comes to the overall R&D for company A there is a steering committee which steers the R&D efforts. In this particular committee all the divisions partake, and it resembles a formal cross-functional organization. This steering committee decides whether or not a project is allowed to start.

According to the interview candidates from company A, there is not a lot of tension between CE projects and the core business. The interviewee states that one reason for this is the fact that from a financial perspective the two parts are not competing for the same money. The company has made a distinction between what resources will be used in long term business, including CE, and what resources will be used in more day-to-day business or short term business. These funds cannot be used for something else, because they are very carefully labeled. This distinction helps facilitate any tension that might occur. Group R&D finances everything from semi- to long term, and everything else is financed by the separate divisions themselves.

4.1.2 COMPETENCES AND ATTITUDES

The interview candidates explain that depending on what step of the CE process individuals are involved with, differences can be made as to the individual's competence and time with the company. For instance, the six individuals constituting group research are veterans within company A. However, the individuals constituting the different project teams have a more diverse background, since they are handpicked for each project. In some cases, the CE unit has recruited external personnel, due to the necessity of special competence, since some projects are so different compared to the core business.

One of the questions from the interview asks how CE projects gain legitimacy within the organization. The candidates answered that it is hard to pinpoint how this is obtained. They said that since these projects are financed separately and are very interesting for the employees, there is not really any problems. The problem arises when it is time to transfer these ideas into the "regular" business, i e the business surrounding the core business. It is even more difficult if the CE projects generates a completely new type of business, which requires new competencies and new investments, for instance in infrastructure. According to company A, they have a lot of work to do when it comes to putting together new types of sales organizations or other types of organizations.

The candidates unanimously say that there is not really any difficulties with creating commitment to new projects. However there are other issues related to this subject. Since it is the same people who work with the core business as those who are recruited to the CE projects, sometimes competitive situations arises. In these cases both parts are interested in the same "hands and minds". In some cases there are not enough people in the organization which can handle everything that group R&D wants to accomplish.

In company A there is a strong interest for new thinking in general, therefore the organizations attitude towards new CE projects is good. They do not have any troubles with the organization not accepting new projects. Instead the difficulty lies in the fact that sometimes resource-competitiveness arises.

4.1.3 MEASUREMENTS AND INCENTIVES

Company A has a variety of different models in order to evaluate new ideas and projects. These models fit perfectly regarding ideas or projects which lie close to the core business. However, as soon as the evaluation concerns something which is farther and farther away from the core business, then the bigger the uncertainty becomes. And also the less relevant these models become; in some case they even have to rely on their gut-feeling. Company A also uses common economic elements involved in the evaluation-models such as; IRR, return on capital employed etc. The candidates explain that the farther from the core business the idea is, the more ad-hoc is the evaluation and more and more feelings and beliefs get involved in the process.

More specifically if an idea is close to the main business, then Company A has a template which they follow and it includes certain criteria which are then rated. However, as mentioned earlier, ideas that are far from the core business cannot take advantage of those particular established criteria, due to lack in resemblance. In some cases they use balanced scorecards to evaluate ideas.

Company A believes that the individuals involved in the projects are driven by personal goals. The company earlier experimented with possibilities of ownership if a new company was created out of an idea. However, since that proved to be very hard and sensitive they decided to abandon that model. The reason for it being a sensitive matter is partially related to the potential financial payouts. The individuals which are involved in these high-risky projects not only get their ordinary salary paid by the company, they also stand to gain from a commercialization of the idea. The involved individuals might take a greater risk since they only stand to gain from the projects and not lose their own investments, i e the company are funding the project. This is also known as the principal-agent problem.

When the interview candidates were asked who is involved in these evaluation processes, they explained that it varies over time. It depends on a number of factors such as; where these projects originate and what the expected outcome is. Usually the CPO is in charge of CE projects. Also involved in the process are executives from marketing, business analysts or in some cases they acquire external which will conduct the analysis.

4.1.4 PROCESSES AND STRUCTURE

Company A states that project´s autonomy have changed over time and that it depends on how the organization is built. One interviewee thinks that the projects are not given enough autonomy, that the process is rather controlled. Another interviewee says that it depends on what is meant by autonomy. Each project has a steering committee which makes decisions. These projects are not autonomous in relation to the steering committees, however they are autonomous in relation to company A´s highest executives. The second interviewee also believes that due to the current structure of the organization, they are not able to give enough autonomy.

When it comes to the point when CE projects are no longer projects, but instead new companies, then they are relatively autonomous. Meaning that they are not controlled by company A. These companies do however get forced into the administrative system and this is not always easily done. Since these new companies usually have a simple structure, problems tend to arise when they are being integrated into a larger organization with a more complex structure. From that point of view they lose their autonomy. The interview candidates stress the fact that it depends on what is meant by autonomous and where the focus lies.

The steering committees which was previously mentioned, usually contain the competence which the project needs. At this point in time they include internal staff members. Unlike previously when they could hire personnel from outside the organization. The reason for hiring external personnel was because they needed expertise in areas which were far from the core business.

The project leader in the CE projects reports to the steering committees. The individuals constituting the steering committee also report back to their line-operation and some sort of portfolio team, such as Group R&D. However, the steering committee still is the employer. In company A it is always the portfolio team which has the overall responsibility for CE projects. They are in charge of budgets, project start and project end. As longs as the steering committee stays within these parameters they can act independently.

4.1.5 STRATEGY

The interview candidates were asked if Company A´s long-term goals and vision are the same for the core business as well as for CE projects. They answered that they have the same long-term vision of creating growth. However, the goals does not necessarily have to be the same for the core business and CE. There is a general strategy for the entire company including its CE operations when it comes to economical goals and creating growth. A more precise strategy exists in the various business areas.

The biggest challenges company A has encountered trying to manage the coexistence of CE and the core business is when it comes to the implementation phase of entering a new market. This is according to them much more challenging than changing technology or making additions to technology. The company is used to enormous volumes, large flows and large contracts, whilst new businesses is substantially smaller than their established ones. It is quite a challenge to have the same staff handling both the current business and new.

It is in the company's nature to streamline the organization in order to create profitability. It can be counterintuitive to be flexible, since it is required to create new business and the supply of competence required to that. According to the company even the simplest things, such as logistics, is completely new for the company in small scales. They are efficient in handling large volumes, but they might not be in smaller volumes. They believe that flexibility is a key word for success.

4.2 COMPANY B

4.2.1 ORGANIZATION

Company B is divided in several divisions and business areas but also has several centralized units, such as HR. The different division often works as independent organizations with product development, a purchasing department, and such. Group R&D is one of those centralized functions, and it employs nine people including the manager. The department is responsible for the company's overall research and development for the company; hence it is responsible for the company's work with CE. The group R&D also works with external research and is the company's contact with external parties. Hence, group R&D also works with open innovation, and has collaborations with different institutes, other companies and universities. Further, the department has a responsibility for the overall need for innovation within the different divisions. It is also responsible for the long-term innovation and for the overall innovation processes for the company.

The company does not use the term CE as such, but states that it does work with it. Within the internal innovation processes the company states that entrepreneurship and intrapreneurship is a common topic. The group R&D is now developing an innovation education with workshops once a week during several weeks. The workshops are an education for the employees that have an idea but do not know how to convert it into an idea within his or her business unit. The goal of the workshop is to teach employees how to convert an idea into a business plan.

Company B has no clear system for its work with CE. There is one employee that is responsible for the company's overall innovation processes including CE, but within the different divisions or business units there is no one responsible for these kinds of projects. However, there are several people working with the more incremental innovations regarding, for instance, different brands. The company has collaborations with an external innovation incubator. It is a well-known incubator that is skilled at developing ideas from a company; to create businesses from that idea; and to take these companies to the market. Company B started the collaboration with the incubator before the summer of 2013 because it realized that it needed help with how to transform certain ideas into businesses. Especially ideas that are interesting for the company but do not fit in the different business units. With the collaboration company B has an opportunity to present different ideas to the incubator. Then the incubator will tell if it is something that they could help the company with, or if it is better for the company to develop the idea internally. It varies from project to project who is responsible for the projects, sometimes it is an employee from the company and sometimes it is an external part. However, company B is in the steering committee for the different projects, and it is not uncommon that company B also is the part-owner.

Not all these projects are suitable to be developed by the incubator. It has happened that the incubator has said that it could not help the company, and then the project is developed internally with its own steering committee and budget. Today company B also works on how to better capture internal ideas and to develop them into business plans. For that purpose they are developing the innovation program, which was mentioned before. The workshops in the innovation program will end with a “dragons den”, where the employees will present their ideas to the external incubator and to managers within the company. The judges included amongst the dragons depend on the idea. The current innovation program is connected to all the different business units, with one exception. The interview candidate says that this needs to be investigated by the company.

4.2.2 COMPETENCES AND ATTITUDES

Company B encourages their employees to come up with new ideas through different workshops. However, the company also counts on the divisions and business units to do their job with collecting ideas from their employees. They have the responsibility for collecting new ideas that are connected to the core business and product development. The innovation program is responsible for collecting ideas that are outside the company’s stage gate. However, CE is connected to other innovation processes and it is difficult to separate. For instance, the business units have idea generation days, and the interviewee states that the company could be better at collecting ideas that are outside of their business unit´s scope. Therefore, the company needs to be better at taking radical ideas from the innovation processes and turning them into CE projects. The company has seen that ideas that are suitable for CE projects could come from many different places in the organization.

It is the employees who are responsible for generating an idea that later on gets to work with it, which is seen as an important factor for motivation. Another factor that motivates the employees is that they get an increased knowledge base from attending the innovation programs and workshops. The interviewee compares it to an internal education.

Overall the attitude within the company regarding CE projects is positive. In general people within the organization understand that it needs to develop and renew itself. However, there are some that wonders why they are doing this. The projects are financed with the group R&D´s budget since it is a mission they have from the top management, and from that budget each project gets its own budget.

An important part of the CE process is the management. In order to be sure that the different CE projects gain legitimacy the managers in the different units are crucial, not only the top managers but also the middle managers. Therefore, the group R&D department spends a lot of time on reasoning with the managers. By doing so, they get an acceptance that an employee can spend a couple of hours each day during a few weeks’ time on projects that are not part of that business unit. It is crucial that the managers approve. Therefore, there is a group that consists of the different R&D managers within the different areas that continuously presents what the R&D department is doing, why it is doing it, how it could help the company to develop, and so on. All these initiatives come from a strategy from the top management.

4.2.3 MEASUREMENTS AND INCENTIVES

The ideas in the dragons den will be judged on mainly three criteria, or balanced scorecards: first they look how mature the idea is, if it is more developed or if it just is an idea; second they look at the business, if it has potential customers; and third the idea has to be a fit for the company and to fit in with its overall strategy. Today the company is discussing if it should add more criteria so it better fits in with the business model canvas that the incubator works with. Also, the workshops will use the canvas and therefore the company wants to use it in its judgments.

To continue, the interviewee states that this work with reasoning with the middle managers not is efficient. The R&D department has had to inform the middle managers about why innovation is important and how it will affect the company. The R&D department in company B tries to show that it will not only generate new ideas but that CE also will increase the knowledgebase for the whole company. It is important for the organization to gain knowledge on how to work with innovation and business development. Yet, it has been difficult to get some of the divisions to focus on this. The divisions that does not show good financial results are not interested in focusing on innovation and new ideas. They rather focus on what they already know and are currently doing.

4.2.4 PROCESSES AND STRUCTURE

During the innovation programs there are no steering committees but the group R&D department is there to support the employees. When the idea is ready, the person responsible for the idea gets an innovation coach. The idea could be developed with the help of the innovation program, but if an idea is very well developed from start it does not have to go through that channel. Then the project gets help in terms of who they can contact and so on. During the project a steering committee is created, and the people involved varies from project to project. The project managers and the steering committee together agrees upon how and when the project should report to the committee. During the process the projects could act autonomously but receive guidelines from the committee. When the project moves on and becomes a business model the steering committee is there to help the project to enter the market. After all these steps, the project more or less acts as an own company.

4.2.5 STRATEGY

One of the biggest challenges for company B on how to manage CE together with the core business is the resources. CE needs resources in terms of employees, and it takes the focus away from the core business. Company B has struggled a lot with this. For instance, the group R&D does not get any projects or ideas from some departments because they have too much work. Hence, not all departments will be able to work with CE projects.

Further, the overall vision for CE in company B is to generate new ideas, to increase the knowledgebase, and to create a culture of innovation within the company. Company B states that it is important to be able to catch ideas that before fell through the cracks. This also involves another goal that is to be able to capture the results from internal research. Sometimes it is not clear where a research project will end up when it is finished. There are many research projects that cannot easily be applied in the existing business, so that is also something that company B works with.

4.3 COMPANY C

4.3.1 ORGANIZATION

Company C does not have an organizational structure set up particularly for CE. They previously had a unit within their company which handled new ideas and acted as an incubator. After that particular unit´s dissolvent its tasks are more incorporated into the entire company and into its R&D. The reason for why company C reorganized this is because it was inefficient. The new setup is more closely tied to corporate level and the benefit of this is that it is easier to separate it from the core business.

CE exists in many different channels in company C. For instance there is a group which works with corporate R&D. Individuals within the company may approach this group and ask for funds and get a specific organization linked to the idea. This allows them to explore a completely new field. This group which works with corporate R&D can also act on their own. They continuously do external environment analysis, in order to find areas which they find interesting and where there might be business possibilities. If something is found, they create a contemporary separate organization which explores the idea. This separated organization then receives funding from corporate level.

There is also a group which specifically works with finding synergies. This group tries to collect pieces from different parts of the core business and find new businesses through research projects. In this group there are eight individuals and these individuals have different focus areas. Some of them work with strategic related assignments and some work with development of R&D centers. They all have different roles and focuses, but they still work closely together. Tied to this organization is a R&D board. In this board are representatives from all the different business areas and they act as a steering committee.

Thirdly, the company also collaborates with various science parks and startups. Their own employees can relocate to these science parks and start their own business.

Company C also has a business area called venture. In venture they can put ideas which will grow or new acquisitions which does not quite fit the core business. The goal of venture is to let them grow and either turn into the next big business area or they divest it.

The relationship between the core business and the CE business is competitive. In some cases these two parts compete for the same resources. In those cases where specific competences are only held by a key individual, this is resolved by making the key individual working for both simultaneously. In those other cases where the resources cannot be split up, the core business always wins. In these situations the CE projects either hire external expertise or collaborate with universities. Otherwise company C tries to keep the two separated. Organizationally CE is usually attached to one of the business areas, as an experiment workshop. Though they do not have many of those workshops.

If tensions arise between these projects and the daily business it is handled with the help of dialogues. The involved parties sit down and discuss; what is most important? How have things been prioritized? How can the situation be solved by still achieving the goals? It varies from time to time who needs to rethink their initial strategy. Sometimes it is the people from the core business and sometimes the people involved with the CE projects. This strategy of solving tensions was agreed upon rather early, according to one of the interview candidates. Usually resources are secured first before a project starts. However, in reality situations change and in those cases the situation has to be revised one interviewee explains. Since steering committees are assigned to every project, they usually assist and help solve any conflict that may occur.

4.3.2 COMPETENCES AND ATTITUDES

Company C explains that CE gains legitimacy with the help of top management and the collaboration with the R&D board. One interviewee explains that it is much more difficult to get the understanding and attention for working with these completely new projects further down the ladder in the company. The R&D board tries to create understanding through communication, even the top management is included in this communication. The individuals working with this remind employees that innovation is a part of their company´s culture. That most of their products were non existing 30 years ago. They communicate that they have to renew themselves continuously and that without their previous bold moves they would not be where they are today.

According to one interviewee commitment for CE projects exists as long as it is possible to create time for the projects. The organization is very enthusiastic and the people working with the projects are very committed. Another interviewee mentioned that as long as the involved parties feel that the project is important and know why they do it, the commitment is there. The problem lies in the short-term business which tries to confiscate all the resources. When the interviewees are asked how they solve this, they answer that they communicate with the managers involved. They also highlighted that today it is getting more and more accepted that people work with multiple projects. Timing and resources are two important factors to consider when trying to create commitment for new CE projects.

4.3.3 MEASUREMENTS AND INCENTIVES

In company C each business area takes care of ideas from the employees, and they also have systems in place that analyze them in a good way according to one of the interview candidates. Employees can also approach group R&D on the corporate level, which work with these CE projects. After consulting group R&D they can approach the research council which can help them attain funding. Anyone can present their idea, and the system is relatively easy and non-bureaucratic. In this research council are: the director of research, the director of patents, research management from each business area, two specialists and an external business analysis. They are involved with analyzing these potential CE ideas.

In terms of how company C evaluate ideas, one candidate says that it is open and without restrictions, because it is hard to estimate the real business potential in some ideas. If it is high risk then they know that the core business will not work with it. The R&D group is left with analyzing it and determining if it is worth proceeding with. High risk means that it is some sort of technological innovation or market innovation. To aid them in this assessment they have a template containing a number of questions, which will help them determine if they should proceed with the idea or not. Two criteria are financial returns and overall benefits to company C´s business. The R&D council have very few comments regarding what type of project it should be. However, it should be related to the company´s strengths, customers and industry.

Company C uses different ways of evaluating projects and the progress they have made. One of them is through the help of a project chart. They follow the chart, and see if they have followed their plan, the time schedule and what they are trying to achieve. In the end of a project they always ask themselves; is it done or should someone continue with this project in a specific business area? Or should it be implemented in production? Company C does this so that the project has a continued life cycle.

CE projects are financed on a corporate level. The funding can continue for up to two years, in order to push the idea forward, test it and verify it. The various business areas has funds to conduct similar tasks that are closer to their area. However, those funds are smaller. The finances are controlled on a central level.

The company does not have an extensive reward system or use any monetary incentives. The only exception is if an individual´s idea results in a patent and then they will get some money, but not much according to the interviewee. The most important incentive is that the employees get to work with the ideas which they present.

In terms of personal evaluations, this particular task is left to the employees' business area manager. Those in charge of the CE projects are not involved in this. In most cases the employees' managers are involved in one way or the other in the CE projects.

4.3.4 PROCESSES AND STRUCTURE

CE projects are given various degrees of autonomy. It depends on how dependent the projects are of other's resources. However, according to an interview candidate they try to make the projects as autonomous as possible, it is important according to the interviewee. The interviewee gave some examples and said that in a few larger projects which they are currently running, the project manager is given funds and is free to manage the project in the best way possible. The R&D group follow up the projects every quarter and check if they need help with anything. Other than that they work without restraints. During these follow-ups the project leaders present what they have done so far. Due to the difficulties of deciding a goal in the beginning of a project, the R&D group has decided to have quarterly meetings instead. Company C reexamines the potential of each project every six months. One interviewee mentions that this setup works since the project leaders are experienced and the people in the steering committees are experienced as well.

In terms of governance the projects are not centralized. They are funded through corporate funds, however, they are not controlled on a corporate level. They remain independent. They are allowed to freely depict what they will do.

The project groups only have to report to the steering committees. In addition to the previously mentioned quarterly reports, the project groups also send in status reports. These quarterly updates work similarly to the TV-show "dragons den". In the "dragons den" they are also given the opportunity to get feedback and help. The purpose of the reports and steering committees is to assure that the projects are moving forward and to ensure results.

4.3.5 STRATEGY

Company C´s long term goal and vision with CE is to find major growth areas; bigger areas where they can find new business or completely new additions to the existing businesses that fit into their corporate culture and general knowledge. Another goal is to build competence and to increase the knowledge base. The company also looks at threats against their organization and see how they can use it. The point of this is to ensure their existence in the future.

The biggest challenge in managing the coexistence of CE and the core business is the limited resources and how to prioritize. The people in charge have to balance between devoting time and resources to something that is uncertain but which could have great potential in the future, or to projects that are more certain and much closer in time. Managers rarely have the time, energy or the possibility to work on something that is in the distant future. Instead they focus on the existing business and how they can develop that. The interviewee explains that this situation makes it difficult to recruit employees which can spend time on projects that are long-term focused. The interviewee explains that this is why funding is decided on a central level. Business units rarely invest in something outside of their scope.

Another candidate says that the biggest challenge is the fact that company C is such a huge company. The task of choosing projects, prioritizing the right things and obtaining resources is difficult and that is the challenge with CE.

4.4 COMPANY D

4.4.1 ORGANIZATION

Company D has worked with CE during many years. However, it has not been organized before. It was individuals that worked with it without any clear structure, and the managers supported them. The company realized that it needed to have more structure for CE; therefore, in 2009-2010 it did an internal study regarding this area. Today, everything that happens in the ordinary organization for development is more incremental innovations and there is a department that works with the more radical innovations. For instance improvements on the existing offerings are handled well by the developing department. It is the more cross-functional innovations; or the more long-term; or the more radical innovations that are outside these processes and their goals.

Hence, the department created after the internal study works with these types of innovations. Further, it is also responsible for business development. In the responsible department there are three employees, but they also organize people in the whole company. For instance, they put together idea teams or studies with employees from the organization. Then they have a management team that is parallel with the line organization. In theory, it would be possible to have people working full time with this but company D states that it has not been able to attract those people. It is also a balance between the work with the core business and the work with CE. It would be possible for employees to work full time with a CE project. However, due to the pressure from their core business managers, it is difficult for the employees to completely put their day to day work on hold. Hence, the employees work parallel with both CE projects and the core business.

The downside with this way of working is that the CE projects often get lower priorities. Sometimes the employees have their everyday tasks, which their managers evaluate them on, and therefore they prioritize these tasks. However, the advantages with this parallel work are that the CE projects get a contact with “the real world”, and that it is easier to hand over the projects to another part of the organization. Then the projects already have some kind of ground in that part of the organization, since employees from that department have already been involved in the project.

4.4.2 COMPETENCES AND ATTITUDES

The employees that have generated an idea in most cases also get to work and develop that idea together with a small team. The department for CE then helps the employee to put together a small team. Further, company D states that there are no problems in finding these people, mostly people are committed and think it is fun to be involved in these projects. The organization tries to build their work with CE on the motivation of the employees. In 75 percent of the cases the employee wants to continue to work with his or her idea. In the other 25 percent, where the person do not want to continue to develop the idea, the company tries to contact other employees that they know are skilled at developing CE projects. Despite the fact that some people are very committed to the ideas, they do not have time to work with it. It is crucial that the work with the project proceeds, otherwise the company has to revise its strategy. Company D states that they have had to stop working with 1-2 projects out of the 50 that they have had so far, because the employee responsible did not have time to develop it.

Overall the organization has a positive attitude towards CE. However, there are some people who consider it to be difficult and troublesome. The interviewee says that CE could be that as well, it requires that things are done a bit different and that could be troublesome for the gatekeepers in the organization. The strategy is also to let the different CE projects develop on its own until it is ready to be integrated in the organization, so it will not disturb the day to day business.

Regarding the legitimacy of CE in the organization top management is important. The managers in the management team for CE are there to give it legitimacy; it gives acceptance if a top manager says that this is important and it is ok to work with CE. Further, the managers have a role as champions as well. It gives acceptance if the managers talk about CE in meetings and such, and also tries to encourage the middle managers to help moving it forward. The middle managers are important in this process as well, since it is they who have the resources in terms of employees. Hence, to a great extent the involvement in CE depends on how interested the middle manager is in the project. Sometimes the team responsible for CE has to talk to the manager’s manager, in order to increase the interest. However, this rarely happens. In general people are interested in this type of development. It works much better than the team responsible for CE first thought, they thought it would be a lot of negotiations. But the employees are committed and often they have the freedom to create their own schedule, and overall the managers think that it is ok.

4.4.3 MEASUREMENTS AND INCENTIVES

The company get around 1000 CE ideas per year, and from that number they do a first screening. During that process they try to find the ideas that could be fitted within an existing part of the organization, ideas that already belong to a function. Then they send the idea over to that part of the organization, since they are more core business related. During the second screening they try to find the ideas that they think are more radical and new. Afterwards they have around 70-80 ideas and then three evaluation teams investigate the ideas with questions regarding the value for the customers or for the company internally. Those teams consist of different people; there is one team that is more oriented towards customers and one that is more internally oriented. There is also a third team that is more focused on the market and the business plan, i.e. not so technical or product oriented. These teams have a few sessions where they evaluate the ideas and then they are left with 30-40 high ranked ideas. These ideas are then pitched to a management team, and the management team does not know who has contributed with which idea. Afterwards the team does a second evaluation, sometimes through voting and sometimes through discussions. This results in approximately 15 projects that the department then manages.

In a few occasions it has happened that a top manager has taken a CE project directly to their department for development, instead of going through the normal channels. This is not a deliberate action from any manager. It has only happened because the manager has had a special interest in that specific area.

The CE projects are financed through a central budget, which is not that big. The normal procedure is that the working hours are invoiced, but some departments do not work in that way. In the deviating departments, the employees have their salary and then the CE department have to make an agreement with the project member's managers on how to finance the work with CE projects.

In company D the HR department used to be in charge of employee evaluations. However, this has changed due to a restructuring. After the restructuring the responsibilities are not clear. The HR department wants managers to conduct the evaluations. However, the CE department wants HR to be in charge of this, since they want the evaluations to be better integrated in the system.

The company has no monetary reward for the employees involved in the CE projects; the motivation is instead that they are able to work with their own ideas and that they get credit in terms of attention for doing so. However, company D does have a ceremony where they pay attention to and congratulate the project members for their efforts. As mentioned, there are no monetary rewards involved, it is only for the company to show its appreciation towards the efforts of the project members.

4.4.4 PROCESSES AND STRUCTURE

The CE projects in company D act more or less autonomously. Some project managers want to have a manual and clear directions from the CE department. Others are more independent, and only receive a few recommendations from the CE department. For instance, the CE department reminds the CE projects to search for patents and such. However, there are no formal guidelines on how the projects should be managed and proceed.

The projects are centralized in terms of the CE department being centralized. The CE department reports to the top management, which is cross-functional. These managers are also present at the first pitch for the CE ideas, and help decide which ideas that should move forward. The employees involved in the CE projects do not have to report to the line managers, but they often do that as well. Their managers often want to know what they are doing, if it is interesting for their department. But it is not something that the CE projects have to do.

In order to make CE projects more prioritized amongst the employees the managers need to help. The company wants to include entrepreneurship as a factor in the evaluation process on an individual basis. They had it for a while but then it disappeared, now it is coming back but in another form. However, it is not all managers that appreciate that kind of behavior. Yet, there are managers that do appreciate it and asks the team responsible for CE to help them evaluate their employees in terms of entrepreneurship.

4.4.5 STRATEGY

The strategy and structure for CE is constantly changing, since the CE managers recognize the need for development in order not to stagnate. The team responsible for CE state that they would like to have more people employed to only work with CE, in order to shorten the lead times. During the first years the strategic focus was on developing a structure for CE, and now the focus lies on keeping that structure. They are currently searching for the next step in the process; for instance they now work closer with the department of patents within the company. The two departments conducts joint-research for new ideas, i e desktop studies and investigations. Another change in the strategy has been the external work, the company does not have to continue with an idea internally. It is possible to start some kind of partnership or to license the ideas.

Overall the core business and the CE have the same goals. However, the CE department tries not to look too much at the core organization since they are more concerned with new and radical thoughts. However, the CE department has been discussing the possibility to use sub goals, much like the core business does. It has happened that the CE department have had a goal that later has become a goal for the core business as well. For instance a previous project is now a new focus area for one of the core businesses.

Company D mentions that time mitigates tensions. Someone starts to promote the benefits, and after a while people starts to accept it and then it becomes integrated in the organization. Therefore, it is crucial that key individuals promote the CE projects. The department for CE creates networks with employees they know are good at influencing and promoting new ideas. Another way to create acceptance for new projects is through the managers, i.e. to make them positive towards new projects.

The interviewee states that the biggest challenge of managing the coexistence of CE projects with the core business is to make the employees allocate their time to the CE projects. Another big challenge is reintegrating the CE projects back into the organization. However, the interviewee states that overall the processes regarding CE works well. They are still trying to find the best and most efficient processes. Today the company is striving at becoming more flexible in their CE processes. As it is now, company D has have certain periods when they are analyzing the needs for projects and certain periods when they are starting the projects. If the CE department approaches another department during the wrong period, then it is difficult launch a project. Because during that phase they have already decided which projects that should be started, and it is difficult to come in with something completely new. This results in longer lead times, which the company wants to avert.

4.5 COMPANY E

4.5.1 ORGANISATION

Company E has two corporate research centers, one in Holland which focuses on product development and which is more basic R&D. They also have one in Sweden which is focused on the manufacturing process itself, and this is also basic R&D. In addition to this, they also have two development centers for each product in all of the different business units. On a global level this adds up to quite a few, most of them are located in Europe. Company E is currently in the process of trying to separate between what is product development and what is advanced product development. Their intention is to create a bigger critical mass, where much of its advanced product development is centralized. The company wants to collect all the generic research in one single place.

The interview candidate explains the process of decentralization and centralization as a pendulum, going back and forth. The current process surrounding advanced R&D is decentralized and the candidate points out that it is maybe too decentralized. That is why they are revising this process.

The R&D centers have connections to the core business, however they firstly belong to a business unit. This makes them very focused on their own product. This current organizational structure makes it difficult to reap the benefits of synergies. This is however, something they are trying to improve, and the interviewee explains that this improvement will take a few more years.

The strategies concerning integration of new products are developed on a central level, including managers from the different business units. Those with the most responsibility and commitment are from product and technical development.

When the interviewee is asked if tensions exist between the core business and CE, the interviewee stated that tensions do exist. Both positive and negative tensions exist. The interview candidate expresses their opinion and says that tension is what pushes organizations forward. It is important that people treat each other and each other's ideas with respect, and that they believe in the knowledge and competence which exists in the company.

Company E does not incorporate CE in the company´s vocabulary, instead it uses something called TRL – technology readiness level. This is applied to both the product and manufacturing departments. As long as a project is between the stages 1-6 it is developed on a central level. When it reaches the stages 7-9 one of the business units assumes responsibility and continues to develop it. Stages 1-3 is fundamental basic research, on stage 6 a prototype exists and in stage 9 full production is in place. The interviewee says that it is very difficult to find a balance between guidelines and flexibility. It might seem as if their process is well organized, with low flexibility and that they are not fostering creativity. However, guidelines has to exist for how to manage projects and other things.

4.5.2 COMPETENCES AND ATTITUDES

According to the interviewee it is difficult ensuring that CE-projects gains legitimacy in the core business. The interviewee continues and says that it is one of the most difficult things there is, to build a bridge between R&D and product and product manufacturing. The last two years the interviewee has been working on a technology-strategy, one of the goals of this particular strategy is to fill the gap between R&D and manufacturing or R&D and business units. The interviewee explains that they need to find guinea pigs where they can implement these projects. If these projects instead ends up in a report on a bookshelf, then it has no value whatsoever, which is why company E wants to centralize this. If there is a strong central unit which has the authority and responsibility to implement CE projects then it will become easier. If the process is decentralized, then the decision making is not close to the corporate level and it cannot be as easily implemented.

In company E the attitude towards new projects differs. Business units have difficulties with absorbing things that are in the distant future. Business units wants to earn profits on their efforts already during the first year, they are short-term oriented. Since it is difficult for the business units or divisions to see the benefits of new projects, it is hard for them to find it meaningful. That is why company E has divided everything they do into three boxes, short-term, semi long-term and long-term. These various boxes have different governance structures. The responsibility of looking forward, and finding areas to invest in so that they can be prepared for future customer needs is controlled on a central level.

The interviewee acknowledges that there are disadvantages related to the fact that business units are not so involved in the development of CE-projects. However, this has been developed in relation to the current organizational setup, where the business units have a more short-term focus.

4.5.3 MEASUREMENTS AND INCENTIVES

Company E uses a number of variables in order to measure the potential of new projects. A few of them are commercial success in relation to technological success. A project that has a low technological success and low commercial success will probably not get initiated. To measure technological success they use the TRL – technology readiness level. A low scale on the TRL indicates a higher degree of risk and uncertainty. A high scale on the TRL indicates that the technology is developed and available on the market. The same applies to commercial success, is it possible to sell or not? Is it possible to get paid for this or not? These factors has to be weighed in on the decision. An additional variable is: how much funds is necessary in order to reach projects goal?

The research units gets a budget depending on what they have decided to execute or what they suggest to do. There is a board supervising R&D on a general level on both the product- and manufacturing side. In this board are representatives from the divisions and business units. The company has monetary incentives based on both financial results and individual goals.

Company E encourages innovation from their employees. The employees have the possibility of submitting ideas and suggestions they come up with. The employees also visit conferences and on occasion fairs. The point of the visits is to see how the external world is developing. Based on the development a gatekeeping report is published once per year. The report is the foundation for suggestions for new activities in company E. Company E uses the concept “Dragons Den”. If an idea gets an approval, then both time and funding are allocated to the project. The dragons consists of one representative from each business area and the executive for all manufacturing related R&D.

In the dragons den one criteria is: how plausible is this idea. The interviewee says that in such an early stage a lot of "gut-feeling" is involved. The interviewee does not believe in financial goals in the dragons den. Financial measurements risk killing an idea too quickly.

4.5.4 PROCESSES AND STRUCTURE

The current project structures for CE-projects is, despite some degree of formalization, flexible. Since CE is about entering the unknown, it is hard to be specific. And that is why it is good to be flexible when working with new topics. Company E tries to ensure that each project has the right competence involved. They also make good use of their thousands of employees. During the development of a project, there are decision gates and then steering committees are appointed, to decide whether to continue or not with a project. The group which is involved with developing CE-projects report to group managers.

The company is currently trying to centralize much more of its advanced research including CE. However, they do not want to incorporate too much R&D centrally, since this will kill the creativity in the organization. They are trying to find a good balance. The goal is to improve the entire organization and not just a single unit somewhere.

When the candidate is asked how that balance is achieved he/she replied that you have to experiment. There is not a single, simple solution to this particular question, the candidate explains. The interviewee continues by saying that an important part is to open up a dialogue, and to try to create an understanding and united vision. This will facilitate change.

4.5.5 STRATEGY

General strategies are decided on a corporate level. Those broad and general strategies are then broken down. A lot of the input to the strategies concerning, for instance, the external surroundings comes from the "bottom of the pyramid" in the organization. The interviewee says that is preferable to meet somewhere in the middle, to consolidate.

The strategic goals are the same for the core business and the CE-projects, in order to make sure that the company is moving in the same direction. Even though there might be a general goal for central R&D, the short term goals however can be different.

The long-term goals for the core business and R&D is also the same. At company E the long term goals and visions surrounding CE and innovation is generally closely related to the environment. The company cannot give out any specific details concerning their strategy. However, they state that they want to reduce the negative effect on the environment caused by: their suppliers, the material company E uses in production, and their customers. A big part of their strategy is about finding smarter solutions.

The biggest challenge company E is currently facing in managing the coexistence of the core business and CE lies in the implementation. It is very difficult to integrate a process or product into the daily business. For example sometimes discussions with the topic of "not invented here" is raised. It is important to succeed in implementing what has been developed, otherwise all the efforts are just a waste. Company E is trying to build a structure within the organization which can handle these different tensions that could arise. For instance various organizational units are being developed which are going to act as a bridge between the core business and R&D. They are constantly working with this, and trying to improve it.

4.6 COMPANY F

Company F has a very clear separation between the internal R&D department and their work with CE projects and the venture company. The internal department work with CE projects based on ideas from the employees in the organization. The venture company work with CE projects that arise from collaboration between the venture companies and company F. Since they are two separated departments and their ways of working with CE differs, they are separated into different sections in the following chapter.

4.6.1 ORGANIZATION

Internal R&D department

The internal R&D department employs 500 people and works with many different types of innovation, such as early research and how to improve the innovation processes. In connections to that, company F has been working with CE as a way to develop the innovation processes. CE is also a concept that the company has been discussing both internally and externally, in collaboration with universities. One of the interviewees expresses a great interest in CE. The interviewee further highlights that it is an important question how the large company could drive innovation faster and use the entrepreneurship and flexible structures of a smaller company.

Internally company F has had a few CE projects, but it is not currently working with it due to a reorganization and an increased focus on cost efficiency. The company has tried to develop two projects as small companies within the organizations. However, legally they were not actual companies but they had a fictive CEO, business developer, and technicians. In both of those virtual companies the CEOs were entrepreneurs. After the reorganization in company F the two projects were put on hold.

Another way to develop CE within company F was also tested. The company had innovation jams focusing on a few areas the company wanted to develop. From that the R&D department received about 300 ideas, and after a first selection they were left with 40-50 ideas. These ideas were presented to a jury, in a dragons den.

In company F the CE projects and the core business were separated, since the CE projects had a separate management. The company did not want to mix CE projects with the core business until the CE projects were more developed, and could operate independently.

Some tensions occurred regarding where the CE projects should belong and raised questions such as: *why is this not in my portfolio?* and *why do I not get to decide over this?* One of the interviewees states that company F had no clear structure on how to handle tensions between CE and the core business, it was more of an experiment. Everybody in the organization was curious about it, yet it was difficult to integrate the projects in the organization. Some units did not want to have the CE projects when they were more developed since it was not invented inside their unit.

Venture Company

Besides the internal R&D department there is a department that is focused on external growth, and how to find external entrepreneurship in order develop the company. The venture company wants to find small companies with interesting ideas. Often they also start an innovation project between the company and these smaller ventures, i.e. CE projects. The R&D department and the venture company often work together, for instance with different innovation projects between the company and the venture companies.

One of the interviewees states that the balance between the CE projects and the core business is a bit difficult, it is a balancing act. The CE projects need to be a bit outside the organization, and at the same time they need to be integrated. The interviewee stresses the importance of ambidexterity, and that the management need to understand that.

The venture company has a much stronger financial focus then the internal R&D department. When they are investing the financial aspect is very important, but also the strategic benefits for company F. Hence, the investments have a clear connection to the core business. The manager for the venture company also has to report the strategic benefits to the top management, he has to explain what the department is doing and why it is doing it.

One of the interviewees states that tensions do arise with these projects. However, tensions does not have to result in conflicts. It could be that conflicts arise between the small venture company and the large company F, in terms of structure and processes. Both are used to their very different ways of working, and therefore it is not always easy to communicate. This is mitigated by a mutual understanding for the other party and expectation management.

The venture company also have a steering committee, consisting of ten managers with high positions in the organization. One of their tasks is to embed what the venture company is doing in the organization, and to inform. Even the employees in the venture company act as promoters of their business towards the entire organization. By doing so, they increase the interest and commitment for the CE projects.

4.6.2 COMPETENCES AND ATTITUDES

Internal R&D department

The CE project gained legitimacy in the organization when the top management supported the projects. One of the interviewees states that one success factor is acceptance from the top management. To develop something radical in a large company requires a different strategy, something more similar to the strategies of smaller companies. And to be able to have these two parallel strategies accepted from the management is important. Without the acceptance it is difficult to implement the parallel channels in the organizational structure. However, company F has not succeeded in this.

Company F creates commitment for CE projects by giving the employees the possibility to work with and develop their own ideas. In the dragons den it is important for company F to select the right ideas, but also the right person. The company wants a person committed to his or hers idea. Before the reorganization company F did a lot more to encourage the commitment of the employees. Now the company is more focused on cost efficiency. One of the interviewee says that there is a time and place for everything, and with the increased focus on cutting costs it is not the time for new innovation processes and CE. Before they were more focused on getting acceptance from management, including the CEO for the whole company. But after the reorganization they had to keep their head down in order to survive. However, there were always a great curiosity towards the CE projects and processes.

Venture Company

There is a healthy skepticism in the organization towards new projects, hence the attitude is a bit cautious. The organization has to choose what projects to prioritize and therefore they want to evaluated them well and not prioritize the wrong things.

The venture company works with both formal and informal structures in order to make CE projects gain legitimacy in the organization. The formal part is how they are organized, and the informal part is to make sure that the CE projects are visible for the organization. The interviewee states that it is almost like marketing. For instance, they work with storytelling in order to create an interest in the organization, and also to increase the manager's interests.

4.6.3 MEASUREMENTS AND INCENTIVES

Internal R&D department

The ideas in the dragons den were selected upon four criteria. The first was innovation, how new the idea actual was. The second criteria were the business value, if the idea could generate money. The third criteria was if it was doable, and the fourth criteria were the fire in the entrepreneur's eyes. It was important that they really believed in their idea. One of the interviewees states that this process was very difficult. It was difficult to know which criteria that are the best. The interviewee further states that it is important to have an understanding that these projects need time to develop, i.e. to think in the long-term interest of the company.

The projects were financed by an innovation budget form the R&D department. From the dragons den ten projects moved on and initially each project got 200 000 SEK. When the projects developed the budgets also changed. The company learned that the idea that seemed to have the most potential at the beginning might not be the most successful projects later on, and that the success of a project to a great extent depended on the individuals involved in the projects.

The evaluation of the CE projects were done by the innovation manager, another employee from the R&D department that worked with the development of the CE processes, and employees that could judge the technology. Further, the R&D department also tried to involve people from the different business units. The CE projects reported to the R&D department, and it reported to its managers.

Venture Company

The venture company has other criteria when evaluating a CE project/venture than the R&D department had when evaluating their projects. The venture company has a strong financial focus; for instance, they measure return on invested capital and evaluate how much the venture company will be worth in the future, and when they could sell it off. The other aspect they investigate is the strategic benefits to company F, for instance if a venture will increase the company's market share within an existing business.

The internal R&D department has their annual project budget while the venture company has their own balance sheet. Hence, the venture company is responsible for their own profits. They have not received any financial help since the 1990s. The venture companies report to the venture company. The company, in its turn, reports to a steering committee and to the head of strategy for company F.

4.6.4 PROCESSES AND STRUCTURE

Internal R&D department

The CE projects were given much autonomy, and the R&D department was there to support them. The projects did have some process guidelines and the R&D department helped the projects regarding the market, the technology, connecting with the right people, and risk assessment. The projects did have a steering committee, and the project managers decided themselves how often they wanted to meet with the committee. The projects were centralized since they had connections to the R&D manager, but they were not centralized in the organization. The structure for the CE projects was very flexible and not formalized. One interviewee states that the work with CE will most probably start again.

One of the interviewees states that company F creates commitment from managers to CE projects with the help of dialogues. The company has to think about its business model and where it wants to be in the future. Therefore, the interviewee thinks that they have to start talking about what they want with their business and how to reach those goals. CE could be a possible solution.

Venture Company

The external projects are given much autonomy, often company F is only part-owner, and act as a steering committee or such. When the venture companies have projects together with company F the balance between the big company and the small company is important. In order for a project to been seen as legitimate much of the processes in the project are the same as for the projects in company F's core business. It is a balancing act between giving the projects enough autonomy and at the same time making them fit in the company. It is important to give the projects transparency in order to avoid that the other employees think of it as skunk works.

4.6.5 STRATEGY

Internal R&D Department

One of the interviewees states that the biggest challenges with managing the coexistence of CE and the core business were frictions between different segments. Some people were wondering why other employees got to do the more exciting projects. To continue, these radical projects involves a high risk. And high risk involves high reward, however there is also a large possibility that the project does not succeed. Company F needs to be aware of the potential risk of failure involved with these projects. It is a challenge to implement that mind set in the organization. Further, top management is important to mitigate tensions. A CEO needs to be able to manage both the large organization and the smaller projects with more characteristics of smaller companies, for instance with a high risk.

Venture Company

Overall the CE projects and the company has the same goals, i.e. financial return and strategic benefit. The venture company investigates and evaluates how the two companies could grow together, and become strong together. Hence, it is very important that the different CE projects fit the overall strategies of the company.

The interviewee states that one of the biggest challenges with managing the coexistence of CE together with the core business is to find the right balance. It is difficult to make the large company work together with smaller companies or CE projects with characteristics of a small company. Therefore, the right balance is crucial. The venture company mitigates these tensions with dialogues and networking. They try to create the right relations between key personnel in the large organization and the small companies/CE projects. Another challenge is how to make the CE projects more prioritized among the employees outside of the venture company, i e those involved in the projects. Often the employees work parallel with CE projects and their work in the core business, and many times they prioritized their day to day work. The interviewee states that it is important to make the CE projects more similar to regular projects, to make them fit in the same structures. By doing so the CE projects become more legitimate and less viewed as skunk works

4.7 SUMMARY OF THE EMPIRICAL DATA

In this section a summary of the empirical findings have been constructed and assembled in the form of a table.

The categories used in the empirical findings reappear in the summary, but are broken down into sub-categories based on our interview questions. We have chosen to ask questions about what we believe constitute each of the categories. For instance, attitudes and competences is broken down into organizational attitude towards CE and legitimacy in order to describe the overall attitude towards CE. Further, measurements and incentives is broken down into selection, selection criteria, and finance in order to better describe what measurements and incentives that are used.

	Company A	Company B	Company C	Company D	Company E	Company F	
Organization						Internal	External
Organizational structure	A particular unit called group research, covers all business areas within the company. The structure governing CE is ad hoc.	A central unit responsible for group R&D and CE. There is one employee responsible for the innovation processes and CE as well.	Does not have an organizational structure set up for CE. However, CE still exists in many different channels in the company, i e many units are involved with this topic.	One department consisting of three employees is responsible for the CE projects and all the related activities.	Current structure surrounding advanced R&D is decentralized and in the process of becoming more centralized.	The internal department has worked and experimented with CE. CE projects are currently on hold.	The venture department creates CE projects together with the venture firms. The venture department operates as an independent company.
Tensions	Few tensions	Compete for the same resources	Compete for the same resources	Compete for the same resources. CE projects do not get prioritized.	Both positive and negative tensions exist. Company E sees tension as something that pushes the organization forward.	Tensions between different departments about where CE projects belong.	Between the large company F and the small venture companies when conducting a CE project together.
How to mitigate tensions	Clear distinction between what funds will be used where.	The use of dialogues.	The use of dialogues.	Through management and by including CE into evaluations.	Mutual understanding and trust.	No clear structure setup. However, the acceptance of managers are important.	Mutual understanding and dialogues.
Competences and attitudes							
Legitimacy	The fact that they are financed separately and the employees find it interesting helps the projects gain legitimacy.	Gains legitimacy with the help of top and middle management. Therefore, the R&D department spend a lot of time reasoning with the managers.	Gains legitimacy with the help of top management and the help of the R&D board.	Gains legitimacy with the help of top and middle management.	It is difficult to ensure that CE projects gains legitimacy in the core business. Company E is currently struggling with this.	Gains legitimacy with the help of top management.	The venture department gains legitimacy by making CE projects visible, i.e. through internal marketing.
Organizational attitude towards CE	Good.	Overall positive. Most employees understand the company's need to renew itself.	The organizations overall attitude is good. It is also becoming more and more accepted that employees work with several projects.	Overall a positive attitude. However, some people consider it to be difficult and troublesome.	The attitude in company E towards new projects differs. Business units have difficulties with absorbing things that are in the future.	Overall good.	Company F is a bit cautious. There is a healthy skepticism in the company.

	Company A	Company B	Company C	Company D	Company E	Company F	
Measurement and incentives							
Selection	It varies from project to project.	Dragons den and external incubator.	Employees can either submit their ideas to a system or they can approach group R&D on a corporate level. They also use dragons den.	Employees can submit their ideas to the CE department. The ideas in the process are evaluated by three different teams. The final ideas are pitched to a management team.	Dragons den or employees can submit their ideas.	Innovation jams that ends in a dragons den.	When they invest in a firm they base their decision on financial and strategic gains. CE projects are developed between the venture department and the venture company.
Selection criteria	Gut feelings, economic elements, balanced scorecards, beliefs, ad hoc.	In the dragons den there are three criteria: how mature the idea is; the potential market and customers; and how well it fits with the overall strategy for the company.	Two common criteria are financial returns and overall benefits to the company. It should be related to the company´s strengths, customers and industry.	The ideas have to be radical and new, and create value for customer or for the company.	A number of variables are considered, including: the technological and commercial chance of success, gut feelings and also how much funding that is required.	In the dragons den there were four criteria: how innovative the ideas were; potential business value; feasibility; and how committed the entrepreneur was to his or hers idea.	Financial and strategic benefits.
Finance	The funds dedicated to CE is carefully labeled for that purpose. Centrally financed.	Centrally financed with the R&D department's budget. Each project are then given their own budgets.	CE projects are financed on a corporate level and are granted funds for two years.	Central R&D budget.	Budgets for projects are determined after its size and goal.	Centrally financed with the R&D departments budget.	Has its own budget, since it is an independent company.
Processes and structure							
Autonomy	According to interviewees projects could be more autonomous.	The projects are given much autonomy.	A projects autonomy depends on how dependent it is of other´s resources. The goal is to make them as autonomous as possible.	CE projects act more or less autonomously. They receive guidance from the department for CE and can decide themselves how strict manuals and guidelines they want to have.	Company E has a flexible structure surrounding CE projects.	The projects were given much autonomy. The R&D department were only there to support them.	The projects are given much autonomy.

	Company A	Company B	Company C	Company D	Company E	Company F	
Report structure	The project leader reports to a steering committee, and the individuals in the team report to their line managers.	Each CE project reports to a steering committee.	Project groups report to steering committees. The project groups also send in status reports.	Project groups reports to the CE department.	Project groups report to a steering committee, and they in turn report to group managers.	Project groups reported to a steering committee.	Project groups report to the venture department.
Strategy							
Challenges	The implementation phase when entering a new market.	Conflicting resources in terms of employees.	The limited resources and knowing how to prioritize.	To get people to allocate their time to the CE projects.	The integration of processes and products into the daily business.	How to handle the friction between different segments; some people were wondering why others got to work with more exiting projects. Another challenge is how to manage the different strategies needed for the core business and the CE, and to find the right balance.	
Goals/vision	Creating growth.	Generate new ideas and increase the knowledgebase.	To find major growth areas.	Overall the same goals as the core business. However, they try not to look too much at the other parts of the organization.	-	Overall the same goals for the core business and CE.	Overall the same goals and visions, financial returns and strategic benefits.

Table 10 – Summary of the empirical data

5. Analysis

As a means to answer our research question this chapter will compare and analyze the theoretical framework to the empirical findings. The chapter will first discuss how companies can organize themselves for CE. And it will continue with a discussion about how companies manage operations of the CE process.

The headings in this chapter are the same as in the theoretical framework. However, they have been divided into two sections: organization and management. The two different sections have been chosen during the process of coding. They are suitable for answering the two sub questions which helps answering the research question. The organization section aims to answer the first sub question of how companies can organize themselves for CE. In the organizational section, the theoretical framework about how companies can organize themselves are presented, i.e. the different organizational models of CE by Wolcott and Lippitz (2007), and the ambidextrous organization (e.g. Tushman and O'Reilly, 2004, Markides, 2008, Kauppila, 2010). The management section aims to answer the second sub question about how companies can manage operations of the CE process. The section involves the framework of Turner et al (2013) and how the company should manage its operations by performing balancing acts (Garvin and Levesque, 2006).

5.2 ORGANIZATION

5.2.1 DIFFERENT MODELS OF CE

According to Wolcott and Lippitz (2007) there are different models of CE depending on two dimensions: organizational ownership and resource authority. Organizational ownership states who in the organization that has the ownership over new business creation. Resource authority is defined as how new business in funded, if there is a dedicated pot of money to CE or if the new business development is funded in an ad hoc manner through divisional budgets or "slush funds" (Wolcott and Lippitz, 2007).

Amongst the investigated companies company A has a unit called group research that is responsible for the CE projects. The unit consists of six people and they have the overall responsibility. When a project arises they scout for personnel in all the different divisions. The company used to have a more explicit structure surrounding CE, but due to a streamlining of its business the current structure is more ad hoc. It is also group R&D that finance the CE projects, and the money that could be used for this kind of research is carefully labeled. In company B group R&D, which is a centralized unit, is responsible for the work with CE. For instance, the unit promotes and facilitate workshops regarding the subject and support the different projects. The funding allocated to the CE projects comes from the group R&D's budget. In company C the group that works with corporate R&D has the main responsibility for managing the CE projects. There is also another group that works with finding synergies across the organization, and another unit that works with ventures. The CE projects are financed on a corporate level, and are controlled on a central level. In company D there is a centralized unit responsible for the company's work with CE, and the projects are financed through a central budget that is relatively small. In company E the advanced R&D is centralized and the funding for CE projects is also centralized, i.e. through the budget the research units receive. In company F the internal R&D department were responsible for the more internal CE projects while the venture company is responsible for CE projects that arise in collaboration with the venture companies. The venture company is a profit center and is responsible for its own budgets, profits, balance sheet and so on. Hence, they finance their own CE projects. The internal CE projects were financed by a budget from the R&D department.

To summarize, all the investigated companies have several traits in common in regards to the organizational ownership and resource authority. Overall there is a central unit responsible for the organization's work with CE that helps promote and support CE initiatives. The CE initiatives in the different companies could come from many places, but it is these central units that organize the initiatives and evaluate which ones to develop further. Hence, these units have the organizational ownership over the CE projects. Overall these projects are also funded by a central R&D budget. The pot of money is to be used for R&D and then the R&D department decides to support CE projects with a part of their budget. According to Wolcott and Lippitz (2007) companies that have dedicated funding and focused organizational ownership, as the investigated companies, belong to the producer model of CE.

Typical success factors for the producer model are knowledge in building new businesses, a respected leadership with authority over decisions, and to pay attention to CE executive career incentives. Typical challenges, on the other hand, are how to successfully reintegrate the projects back to the core business, leadership succession, and a lack of support from the business units (Wolcott and Lippitz, 2007). Regarding the investigated companies, they state different challenges regarding how to manage the coexistence of CE and the core business. Company A, D, and E state that the biggest challenge lies in the implementation of a CE project, i.e. the reintegration. Company E further state that the issue of “not invented here” often is raised from the business units. Hence, lack of support from business units could also be a challenge, as stated by Wolcott and Lippitz (2007). Company B, C, and D state that the limited resources in terms of employees is the biggest challenge. They try to solve this problem with dialogues and collaborations with the line managers. Company F also states that the biggest challenge is the friction that could arise between different units, i.e. questions such as “why do they get to work with this?” and “who is responsible for this?” arises. It is also a great risk involved, and according to company F managers need to be able to handle that. Further, company F also states lack of resources as problem and the difficulty to find the right balance between the small company and the large one. The difficulty in finding employees that have time for CE projects could be seen as a lack of support from the business units, also stated by Wolcott and Lippitz (2007). Hence, the typical problems described by Wolcott and Lippitz (2007) could to some extent be seen in these companies as well.

To mitigate the tensions all of the investigated companies mention that the support of top management is important, and the dialogues with the middle management. According to Wolcott and Lippitz (2007), leadership is an important success factor in companies with this kind of model for CE. This could also be seen in the investigated companies.

5.2.2 ACHIEVING AMBIDEXTERITY

5.2.2.1 Sequential

In the chapter of achieving ambidexterity different approaches are highlighted on *how* to conduct ambidexterity. The first view suggest a sequential approach, i.e. to shift from exploit to explore during periods of time (Duncan, 1976). In the empirical investigation it is difficult to state whether the companies shift from time to time between explore and exploit, since the study focuses on the current situation, i.e. the situation today. However, both company A and company F state that they used to work more explicitly with CE before. Due to reorganizations and a streamlining of the business they had to change their way of working. Company A state that the previous structure regarding CE is on hold, and the current structure is ad hoc. Chen and Katila (2008) state that sequential ambidexterity is better suited for firms that lack the resources to explore and exploit at the same time, and Tushman and O'Reilly (2013) state that the process of these transitions are not clear. Hence, it could be such a shift for company A, and it could be that they are downsizing their ability to explore due to constraints in resources. However, it should be mentioned that company A still works with CE but much more ad hoc than before.

Company F has also changed their internal structure for CE. Currently, in contrast to company A, company F is not working with internal CE projects per se. Due to a reorganization and an increased focus on cutting costs the CE projects and the developing of CE were not prioritized. Company F however, continues to work with external ventures, but these ventures are more focused on financial returns than the internal ones were. Hence, today company F has to a great extent decreased its work with CE. In line with Chen and Katila (2008), it could be a response to lack of resources. Hence, it could be a better approach than to simultaneously trying to achieve ambidexterity when there are few resources in place.

5.2.2.2 Structural

Tushman and O'Reilly (1996) argue for an approach of achieving ambidexterity by simultaneously exploring and exploiting. It is accomplished by establishing structural separate and autonomous units for exploration and exploitation. Each unit has its own processes, but they have a targeted integration (Tushman and O'Reilly, 1996). O'Reilly and Tushman (2004) exemplifies that this could be done by having the units structurally separated but integrated at the senior management level. By doing so, the units are held together by common values and strategic goals, and shared assets (O'Reilly and Tushman, 2004).

The majority of the investigated firms simultaneously explore and exploit. Company B has increased its focus on CE lately and therefore it is hard to determine if it is a sequential shift or a structural approach. Yet, today they are currently working with exploration and exploitation at the same time. Company C also work with CE and the core business simultaneously, and tries to keep the two separated as much as possible. Company C used to have a special unit within their company which acted as an incubator but now these tasks are more divided into the entire company and its R&D. By doing so it is easier for company C to separate the CE ideas from the core business. Company D has also worked with CE for many years and it is ongoing. Today there is a unit responsible for the company's work with CE projects. When putting together a CE project, the projects themselves are kept as autonomous as possible. The employees working with the projects work simultaneously with the core business. Company E could also be classified as having a structural approach to their work with CE. They work with CE today, and state that what differs over time is the question of a centralized or decentralized R&D responsibility.

Company B state that there are challenges with exploring and exploiting simultaneously, mainly due to the competition for resources within the company. CE and the core business compete for the same employees and often the core business has too much workload and hence, there is no time to work with CE projects. As in the case with company A and F, company B also has some divisions that due to low financial results not have the time or resources to focus on CE. Company C has similar challenges with the simultaneous work of both explore and exploit. Company C states that the biggest challenge is the limited resources, and thus how to prioritize. When the resources are limited it is almost always that the core business that gets the resources. Company D states, in line with the other companies, that the downside of working simultaneously with CE projects is that they often get a lower priority, when the resources are limited. Company D also mentions advantages with this way of working. When employees work with both exploitation and exploration, the CE projects connects with "the real world" and it is therefore easier to hand over the projects to other parts of the organization when the time is right. Company D states that the reintegration of the separated CE projects could be difficult. In contrast to the other firms, company E does not mention the competition for resources as one of the biggest challenges. Instead, company E states that the biggest challenge of managing the coexistence of CE with the core business lies in the implementation part. It is difficult to implement a project in a department, and the topic of "not invented here" is raised. To solve this problem, which is related to separated units, company E is trying to build a structure where various organizational units are being developed that are supposed to act as a bridge between the core business and the CE projects.

To simultaneously conduct exploration and exploitation could be seen as a question of leadership as well. It requires managers that can manage the possible tensions with multiple organizational alignments (O'Reilly and Tushman, 2013). Company B state that on senior executive level there are few tensions. Rather, the question of management arise on middle management levels. In order to get the resources needed company B has to reason with the middle managers. According to the interviewee, this is not efficient. It is time consuming to explain to them why innovation is important for the company. For company C the key to solving the question of the limited resources also becomes a leadership question. In order to solve the problem of limited resources they communicate with the managers involved.

Kauppila (2010) also states that internal and external approaches to achieve the ability to explore and exploit at the same time are complements rather than substitutes. This could be seen in several of the companies investigated. Company B combines its internal work with CE with an external incubator. The two ways of working with CE are seen as complements, since not all projects are appropriate to be developed internally or externally. Company C also state that they have collaborations with various science parks and startups. In addition to this, they also have a business area called venture, where ideas that are not suited for the company itself can grow. Hence, the two aspects are complements rather than substitutes.

5.2.2.3 Contextual

Other researchers argue for a more contextual approach to ambidexterity. Gibson and Birkinshaw (2004) explained the ability to balance exploration and exploitation as a function of an organizational context that is characterized by stretch, discipline, and trust. Khazanchi et al (2007) also see alignment and adaptability as a function of an organizational culture that promotes both flexibility and control within a unit; where control is needed for the execution, and flexibility promotes creativity. This requires a supportive organizational context that encourage individuals to divide their time between alignment and adaptability, i.e. exploration and exploitation. The individuals are also encouraged to make their own judgements on how to divide their time (Gibson and Birkinshaw, 2004). All of the investigated firms has, or have had, a clear separation of its CE projects from the core business. However, as stated by Kauppila (2010), it is not uncommon that a firm shifts or uses all the different approaches over time to achieve ambidexterity. Looking at the investigated companies, several of them state that they rely on innovative environments in the organization and hence trust the employees to come up with new ideas for CE projects. However, since the projects are clearly separated from the core business it could be troublesome to call it for a contextual approach.

Kauppila (2010) states that a shortcoming with contextual ambidexterity is that it assumes that the knowledge for how to exploit and explore exists in the company and is available to use. Company D states that before they did not have any clear structure or organization surrounding CE. Hence, they relied on the efforts of the individuals to come up with these ideas; i.e. it could be said that they assumed that the knowledge existed within the company already. However, they noticed the need to develop a more explicit organization regarding CE. It could be seen as a shift from a more contextual approach to a structural approach.

Kauppila (2010) argues for the possibility for contextual ambidexterity to function within a given project. However, Burton et al (2012) found that it is more beneficial to separate exploration and exploitation on a project level as well. As stated above, the investigated companies do separate exploration and exploitation on project levels.

According to Markides (2008) firms should develop an organizational environment for the desired behaviour, i.e. for ambidexterity. Established firms have a set of skills and attitudes that make them good at exploitation their existing business. The skills and attitudes that are needed for exploration are different, hence the company should develop an organizational environment that encourage these behaviours as well (Markides, 2008). Amongst the investigated firms it could be seen that they discuss the importance of CE, and the importance of making this accepted and legitimate. In order for CE to gain legitimacy the investigated firms all mention the importance and involvement of top management. Yet, it is difficult to say whether this creates an organizational environment that support ambidexterity. According to Markides (2008) the organizational environment consists of: culture and values; measurements and incentives; structures and processes; and people, skills, mindsets, and attitudes. In the investigated companies it is difficult to determine if these different factors actually creates an environment that supports and promote ambidexterity. All of the companies do have mechanisms in place within the different variables to support ambidexterity and CE, but if it is enough to constitute an organizational environment for ambidexterity is hard to determine.

To recapitulate, company A and F could be said to have a more sequential approach to achieving ambidexterity since both have decreased its work with it substantially. Yet, they continue to work with it to some extent and that approach is more structural. The other companies seem to have a structural approach to achieving ambidexterity, i.e. separated units for exploration and exploitation with integrated mechanisms. The integrated mechanism could be in terms of connections on top management level or sharing resources. Further, the contextual approach suggests an organizational environment that supports ambidexterity. The investigated companies do have mechanisms in place to support ambidexterity, yet it is difficult to say whether they actually create a context or environment for ambidexterity.

5.2.3 LEVEL OF AUTONOMY

A commonly discussed topic in the literature of ambidextrous organizations, is how autonomous or integrated the different units for exploration and exploitation should be. O'Reilly and Tushman (2004) state that companies that are successful at exploration and exploitation at the same time allows the different units to have different processes, structures and culture. But at the same time they have a tight connection across the unit at a senior executive level (O'Reilly and Tushman, 2004). Hence, O'Reilly and Tushman (2004) suggest that the business units should be separated but with integrating mechanisms. Amongst the investigated companies, all of them have integrating mechanisms involved in the management of CE. Company A however states that they are not able to give the CE projects enough autonomy, due to the current structure of the organization. The projects are rather controlled, and are not autonomous in relation to its steering committee. However, the projects are autonomous in relation to the highest executives. The steering committees contains internal staff members, which could be seen as a bridge between the exploration unit and the exploitation. Further, the steering committee reports back to their line-operation and a portfolio team, such as Group R&D. It is the portfolio team that has the overall responsibility for the CE projects, but the steering committee acts independently. This could also be seen as integrating mechanisms, the steering committee reports both to Group R&D and to its line-operation. Hence, there are connections between the units responsible for exploration and exploitation.

Company B states that during the process the CE projects act autonomous but receive guidelines from a steering committee. The projects are in that meaning autonomous and separated from the core business. The people involved in the steering committee varies from project to project, depending on what competences that are required. Yet, the steering committees still have connections to the core business and could be seen as an integrated mechanism for the otherwise autonomous and separated projects. Company C also tries to make the CE projects as autonomous as possible. How autonomous they become however depends on how much they depend on other unit's resources. The project managers are free to manage the projects autonomously, but the R&D group follows up every project quarterly. The CE projects also reports to a steering committee. Hence, there are connections on a higher management level. Further, company C continuously does external environment analysis, in order to find interesting areas where there could be business possibilities. If they find something, they create a contemporary separate organization which explores the idea with fundings from corporate level. Hence, the projects are separated but have integrated mechanisms, such as shared resources.

Company D, in line with the previous stated companies, also state that their CE projects act more or less autonomously. Some project managers wants to have clear directions from the CE department while others wants to act more independently. Hence, the project managers are free to decide how autonomous they want to be. The projects are separated from the core business, but are centralized in terms of the CE department being centralized. The CE department reports to a cross functional team of top managers and the employees involved in the project often reports to their line managers as well. Hence, there are integrating mechanisms even though the projects are separated from the core business. Company E also has a flexible structure for CE. The company tries to ensure that the projects have the right competences by making use of their employees. The projects are also assigned a steering committee, and the group involved with developing CE projects report to group managers. Hence, there are separated projects with management from different parts of the organization which acts as an integrating mechanism. Today company E is also trying to find a balance between how centralized the advanced research should be, including CE. They do not want it to be too centralized since it could kill the creativity, it is all about finding the right balance states the company. However, there is no easy way to find this balance and the company have to experiment. But to have an open dialogue and to create an understanding and united vision facilitates change. A united vision is another example of integrating mechanism that aims to bring the CE projects closer to the core business.

Internally company F did give their CE project much autonomy, the R&D department were only there to support them. The projects did also have a steering committee, and the project managers decided themselves how often they wanted to meet with the committee. Further, the structure for CE was flexible. Hence, in company F the CE projects were also separated from the core business and they acted autonomously with integrating mechanisms, i.e. steering committees. The company did not want to mix CE projects with the core business until the CE projects were more developed and could operate independently. The external projects are also given much autonomy. However, company F states that it is a balancing act between giving the projects enough autonomy and at the same time making them fit in with the company.

To conclude, all of the investigated companies have their units for exploration and exploitation separated. However, they do have integrating mechanisms, in forms of steering committees with managers from different business units. It is in line with what O'Reilly and Tushman (2004) suggest, that the units should be separated but integrated on senior executive level.

5.2.3.1 Problems with autonomy and integrating mechanisms

Not all researchers agree with Tushman and O'Reilly (2004) and their view on autonomy. For instance, Porter (1996) states that a firm should not compete with different strategic positions. Since the firm gains competitive advantages by focusing on its chosen strategic position and unique position, it is not beneficial to mix different strategies. By competing with two different strategies at the same time the firm risks to harm the existing business (Porter, 1996). Bower and Christensen (1995) also suggests that in order to mitigate these potential conflicts the different units should be kept strictly separated. In that way the new business is protected from being suffocated by the old one and conflicts, such as resource competition, are avoided (Bower and Christiansen, 1995).

Several of the investigated companies did state problems regarding the autonomy and partly integrated CE projects. Company A states difficulties regarding CE projects that become new companies. Then the companies are not controlled by company A but they still have to fit in with the organization and its administrative systems. Since new companies often have more simple structures problems tend to arise when they are being integrated into a larger organization with more complex structures. Hence, problems that are referred to by Bower and Christensen (1995) do arise with having the companies or units partly integrated. Further, company A states that there is not a lot of tension between CE and the core business. Mostly due to the fact that the financial resources used for CE does not come from the core business. The company has made a clear distinction between the financial resources used in the day-to-day business and the resources used for long term business, such as CE. Hence, it is the Group R&D that finance the CE projects. Here company A has a separation between the new and the old business, in order to mitigate tensions, which is in line with what Porter (1996) and Bower and Christiansen (1995) suggest.

Company B states that the managers are an important link in order for CE to gain legitimacy. Hence, it is important that top managers and middle managers promote this kind of work. However, it is not without tension. Since the CE projects and the core business share resources in terms of employees the middle managers have to approve that their employees spend time on CE projects. Therefore, the R&D department spend a lot of time reasoning with the middle managers. According to the interviewee this work is not efficient, i.e. it is time consuming and not effective. Hence, according to Bower and Christensen (1995) conflicts do arise in terms of competition of resources. Company C state that they experience the same problems, i.e. that the relationship between CE and the core business is competitive. In some cases the two parts compete for the same resources. It could be in terms of key individuals that held specific knowledge. In these cases when the resources cannot be split up it is always the core business that gets the resources.

Company D also state similar challenges related to making the employees allocate their time to the CE projects. In order to make it more prioritized the company tries to include entrepreneurship as a factor in the evaluation process on an individual basis for the employees. However, not all managers appreciate this behaviour. Hence, there are conflicts regarding the resources as stated by Bower and Christensen (1995) before. Further, the company states that another challenge is the reintegration of CE projects back into the organization. According to Tushman and O'Reilly (2004) the integrating mechanisms are there to facilitate this transition. Company E also stresses the difficulty with trying to build a bridge between the CE projects and product and product manufacturing. It is difficult to integrate a process or a product into the daily business. Sometimes discussions regarding "not invented here" arises. This is one of the problems with not having enough integrating mechanisms according to Tushman and O'Reilly (2004). However, company E is trying to build a structure within the organization that can handle these tensions. For instance, they are developing different organizational units which are going to act as a bridge between the core business and the R&D.

Company F did see tensions when they integrated CE projects back to the organization. Some units did not want to have CE projects they had not invented. Also, company F states that they tried to have the CE projects as separated form the core business as possible. This could be seen as one of the downsides with having too few integrating mechanisms, i.e. that it was difficult to reintegrate the CE projects (Tushman and O'Reilly, 2004). Further, one of the interviewees in company F explains that to be able to manage two parallel strategies at the same time the acceptance from top management is important. Without the acceptance it is difficult to implement the parallel channels in the organization. Hence, in line with Tushman and O'Reilly (2004) the top management acted as a bridge between the new and old in order to mitigate tensions and make the CE projects gain legitimacy. Also, other challenges were the friction between different segments and the risk involved with these radical projects. The interviewee states that the top management were also important to mitigate these tensions, and that a CEO needs to be able to manage both the large organization and the smaller projects with characteristics of a small firm. In regards to the external part of the CE projects, tensions arise between the small venture companies and the large company F. Both are used to different ways of working, and to mitigate tensions a mutual understanding is crucial and to find the right balance. Further, as stated by other investigated companies, company F also find it challenging to make the employees involved in both the CE projects and the core business to prioritize the CE projects. Hence, it could be a conflict about the resources involved in CE projects as stated by Bower and Christensen (1995).

To summarize, all of the investigated companies have experienced problems and challenges with having the units for exploration and exploitation partly integrated. Company B, C, D, and F mention that one problem is the competition for resources, i.e. the employees do not have enough time to work simultaneously with the day-to-day business and the CE projects. Hence, as stated by Bower and Christensen (1995) the units compete for the same resources if they are not completely separated. Further, company D, E, and F state that the problem lies in the reintegration of the CE projects that have been separated from the core business. Markides (2008) state that there are benefits and drawbacks from both integration and separation, and the company should thus not adopt an either or perspective. The decision of separation or integration should be looked upon on the level of conflict between the new and old business, and how strategically similar the new and old markets are (Markides, 2008). All of the investigated companies state that they try to keep the CE projects separated from the other business units, but they do not mention the characteristics of the new market. Yet, the projects are seldom completely separated, as stated in the section above. The integrated mechanisms could be looked upon in the light of phased separation or phased integration, discussed by Markides (2008). Since the companies do not state the characteristics of the markets for their CE projects it is difficult to investigate each CE project on its own, as suggested by Markides (2008).

5.3 MANAGEMENT

5.3.1 BALANCING ACTS

In the theoretical framework a substantial amount of the literature emphasized the importance of balance in order to succeed with CE (Tushman and O´Reilly, 2004; Garvin and Levesque, 2006; Grant 2010). In this section the empirical data will be analyzed with the help of the presented theoretical framework. The analysis of balancing acts will start with operational matters, then continue with organization, and finally conclude with strategy.

5.3.1.1 Operation

Garvin and Levesque (2006) stated that companies should assign *mature turks* to CE projects instead of young mavericks. Garvin and Levesque (2006) continue by saying that these experienced individuals are better equipped since they have knowledge of what corporate resources are available and that they also are willing to challenge convention. Company A search through their own organization to find a suitable individual to lead CE-projects. When someone with certain competence is not available in-house they search externally. Companies B, C, D and F usually let the idea-generator lead the project themselves. Even though these companies have different strategies for how to assign the project leaders, they all act in the same way when assigning the other team members for the CE-projects. All of the companies scout for key individuals which they believe hold the right competence and are key to including in the projects. These key individuals could be seen as the mature turks that Garvin and Levesque (2006) mention. All the companies also guide the project leaders and projects.

Another important matter in terms of organizational matters in the subject of balancing acts is to gain the understanding and commitment of veterans in an organization. Garvin and Levesque (2006) believes that the involvement of top management personnel will eventually create acceptance of CE-projects within an organization. The included case companies all state that top management is involved in their companies´ CE efforts. Top management usually constitute the boards evaluating ideas. For instance the interviewee from company D explicitly states that top managers are important and that they create acceptance.

According to the authors Garvin and Levesque (2006) only some organizational capabilities should be developed, others should be purchased. They suggest that those skills that cannot be developed in-house should be acquired. The empirical findings show that all the companies, except for company E, collaborate with external partners in order to develop CE-projects. There are various reasons behind the collaborations, one of them is connected to the fact that they want to attain special competence. The empirical findings give the following examples of external collaborators: institutions, companies, universities, external innovation incubators, startups and science parks. No company collaborates with all of these actors simultaneously, just a few of them. For instance, company B collaborates with institutes, other companies, universities and an external innovation incubator. Whereas, company C collaborates with science parks and startups and company F collaborates with universities.

According to the theoretical framework the responsibility of CE-projects should be shared between new and old management. This approach also allows the CE-project to get used to both established practices as well as leveraging existing strengths (Garvin and Levesque, 2006). In all of the companies included in the research, all the CE projects recruit personnel from the core business. It is individuals from the core business which constitutes the CE projects. According to the empirical data all of the CE projects act autonomously except for one company. Company A is the only case which expresses that their projects can be more autonomous. However, the CE projects in all companies still have to report to a steering committee which consists of either those in charge of CE in that company or top management. If the project leaders in the projects are considered as new and the committees they report to as old management, then this coincides with literature presented in the theoretical framework.

To summarize, in this particular topic of operation the case companies seem to match the literature quite well, with only one or two exceptions. The analysis shows that the majority of the case companies´ operational structure tries to incorporate a mix of characteristics, both new and old traits, in their management of an ambidextrous organization. And this is precisely the type of management Garvin and Levesque (2006) advocate, a balanced management. For instance a majority of the case companies tries to assign the most competent individuals, i e mature turks instead of young mavericks, to either lead or be part of CE projects. The case companies also take advantage of senior managers in order to achieve an ambidextrous organization. In the following section of balancing acts, the focus will shift to organization.

5.3.1.2 Organization

The theoretical framework highlight the fact that executives, which act as sponsors, bring credibility and power to CE projects. And that operating sponsors contribute with knowledge (Garvin and Levesque, 2006). As mentioned in the previous page the companies included in the research all make use of top management. Top management are involved in the sense that they are on the boards evaluating CE projects. This means that they are sharing their knowledge with these new startups. They are also involved in the sense that they openly support CE, such as in company F, this brings credibility to the operations.

Another suggestion which will simplify a good balance between identity and integration is the use of innovative organizational structures. According to Garvin and Levesque (2006) these innovative structures can take many shapes. However, most of them combine formal authority with informal oversight (Garvin and Levesque, 2006). The companies´ effort to create an ambidextrous organization, i e an organization that tries to create a new path strictly for CE, can be viewed as innovative. These companies´ organizational structure, consisting of a structure for the core business and one for CE, would probably fit what Garvin and Levesque (2006) calls a hybrid organizational form. For instance, the employees involved in the CE projects work parallel with the core business and the CE projects. Company D states that it facilitates the integrations of the CE projects later on. Further, to combine formal authority with informal oversight could be seen in several of the companies. There are formal structures, such as steering committees. Yet, the project leaders for the CE projects could themselves decide how often they want to meet with the committee. This could be seen in company C, for instance. The CE projects decide together with the steering committee when they should meet and there are no clear guidelines on what the projects should report to the committee. Instead, the projects report what they have done so far and what the next step is. This could be seen as an informal oversight, and the structure of the steering committees as more formal authority. Company A´s organizational structure for CE is ad hoc. This could be an indication of that they use both formal and informal structures.

To conclude, this section shows that the case companies also try to achieve a successful management of CE on an organizational level by combining both new and old organizational traits. This coincides well with the theoretical framework (Garvin and Levesque, 2006). For instance, the companies all use sponsors in order to bring credibility and contribute with knowledge to the CE business. Another example is that the companies all have some sort of a hybrid organization.

5.3.1.3 Strategy

Garvin and Levesque (2006) suggest that companies establish criteria in order to increase the efficiency of their search. Since finding new ideas is difficult an unguided search is a waste of both time and resources. Garvin and Levesque (2006) mean that the use of criteria will help companies judge whether or not an idea has technology or market that is desirable. The companies´ criteria used to guide their CE search varies more compared to the previous efforts in the field of CE.

Company A stresses the fact that evaluating ideas or projects which are far from the core business is difficult. The regular models, templates and balanced scorecards are not as useful as they are when evaluating ideas in the core business. The farther the ideas and projects are from the core business, the less relevant the models and templates become. Company A uses economic variables such as IRR and return on capital employed, to help them narrow down their search. In some cases company A includes gut feelings to help them find new ideas.

Company B has three criteria, i e balanced scorecards, on which it judges the ideas presented in their dragons den. The first criteria is to investigate how mature an idea is, if it is more developed or if it just is an idea; the second criteria is that they look at the business of the idea, if it has potential customers; and the last criteria is that the idea has to fit the company and to fit in with its overall strategy.

Company C also uses a template such as company A. It contains a number of questions to aid them in their search for new ideas and projects. Two criteria included on this template are overall benefits to company C and financial returns. Key criteria to company C is that the ideas are related to the company´s strengths, customers and industry. Company D did not reveal much about their search criteria. The empirical data does however show that they try to find ideas they think are more radical and new.

Just like the other companies, company E uses a number of variables in order to measure the potential of new projects. For instance they use commercial success and technological success. A third variable they include is how much funds that are necessary in order to reach the project’s goal. In the company’s dragons den other criteria are: gut feelings and the plausibility of an idea. In the dragons den company E does not rely on financial measurements, since they believe it risks killing an idea too quickly.

Company F uses two ways to guide their search for new ideas. When the internal R&D department were still working with CE they used four different criteria to assess the ideas in the dragons den. The first criteria was innovation, how new the idea actual was; the second criteria was business value, if the idea could generate money; the third criteria was about seeing if the idea was feasible, and the last criteria was the “fire in the entrepreneur’s eyes”. Like company A, company F also express the difficulties of choosing the right criteria. The venture company in company F has other criteria when searching for new ideas compared to the internal efforts. The venture company has a strong financial focus and consequently measure return on invested capital, evaluate how much the venture company will be worth in the future, and when they could sell it off. The venture company in company F also included strategic benefits the CE projects could have for their company, just like company B and C.

The previous paragraphs show that these six companies all include various elements when trying to narrow down their search for new ideas that possess desirable traits. For instance companies A, B, and C use some sort of economic criteria when evaluating an idea, whereas companies D and E does not. The companies B, C, E, and F all use the concept dragons den in order to evaluate ideas.

In the theoretical framework it is stated that the progress of CE projects should be measured through nonfinancial goals. That due to the ambiguity involved with these projects, goals are better expressed in the form of project based milestones. And that these targets must be expressed in a measurable manner (Garvin and Levesque, 2006). On the previous page details concerning all companies search criteria and measurements were discussed. Those criteria indicate that both company A and B uses a combination of both financial and nonfinancial measurements in order to rate the progress of the ambiguous cases. Company C has adopted a similar strategy and also uses both financial and nonfinancial measures to track progress. They also use a project chart in order to monitor the progress of CE projects. The chart allows company C to see if the projects are following the predestined plan, the time schedule and what they are trying to achieve. Company D has three different teams which consists of individuals with insight into each focus area. For instance one team focuses on the market, one towards customer and one is more business plan oriented. This indicates that company D is no different from the first three companies and also uses both financial and nonfinancial measures. Company E is no exception to the previous companies and also uses a mix of both financial and nonfinancial measures. However, company E is the only company that says that in the dragons den they exclude financial measurements, since they believe that it risks killing an idea too quickly. This means that they screen ideas in different ways and that in one of these development paths, they have excluded financial measures as recommended by the theoretical framework. The empirical data reveals that company F is no exception and that they also use both financial and nonfinancial measures.

Due to the high risk of failure involved with new business creation, organizations must establish when and how they will shut down a project, in order to prevent an unnecessarily long life time (Garvin and Levesque, 2006). In company A there is a portfolio team overseeing the steering committees actions. It is the portfolio team which decide when a project ends. In company B they have a steering committee that helps with the supervision of projects. Company C states that due to difficulties with deciding goals in the beginning of a project, their R&D group follow up projects every quarter and checks if the project need help with anything. Company C also reexamines the potential of each project every six months. In company D the autonomy of CE projects varies. The majority of the project act freely and only a few ask the CE department for assistance in certain matters. This leads to the conclusion that the CE department are involved in the process of when to terminate a project. In company E there is a steering committee that has been appointed, just as in company B, which decides whether or not to continue with a project. Company F is no exception and also uses steering committees to advise the projects.

All of the included companies uses some sort of steering committee or group to monitor CE projects. None of these companies explicitly mention any conditions that needs to be fulfilled in order to be terminated. However, all of the companies continuously evaluate and follow up their CE projects. For instance, company D states that they evaluate the projects carefully in order to track their progress. If they do not see any progress the projects cannot continue.

To summarize, this final part stresses the importance of strategy in terms of managing an ambidextrous organization. The analysis shows that there are similarities between the theoretical framework presented and the case companies. However, the similarity between the companies are not as clear as in the two previous areas, i e operation and organization. For instance, the case companies try to establish criteria in order to narrow down their search and the examples provided show that there are quite a few variations between them.

5.3.2 MANAGEMENT IN AN AMBIDEXTROUS ORGANIZATION

According to Tushman and O´Reilly (2004) ambidextrous senior teams and managers are crucial for the success of an ambidextrous organization. Executives need to be able to deal with both cost cutting and entrepreneurial thinking. If ambidextrous management is achieved then it can effectively deal with organizational inertia (Kollmann and Stöckmann, 2008). Companies also need to deal with resistance immediately, especially at the top levels of an organization. Organizations need to communicate a clear and convincing story with the help of senior executives. General Managers need to be able to explore new opportunities and at the same time exploit existing capabilities (Tushman and O´Reilly, 2004; Grant, 2010)

Turner et al (2013) have identified three mechanisms that are important to consider when managing in order to achieve ambidexterity; organizational, group and individuals. They also identified the resources needed for each mechanism; organizational capital, social capital and human capital. Since the focus of this thesis lies on the organizational level and not on the individual. This analysis will exclude the third mechanism, i e individuals. Organizational capital involves processes and structures within the firm; social capital is knowledge within the networks of relationships; and human capital are the individual skills. Turner et al (2013) explain that these mechanisms are connected and that they reinforce each other.

Organizational capital structure is implemented with the help of both internal and external tools. Managers can externally use wide networks and supply chains. Internally managers need to consider the complex context of separation of exploitation and exploration. At the group level, structure is implemented by reinforcing routines of formal and informal mechanisms and incentives (Turner et al, 2013).

Regarding social capital, relationships can help promote ambidexterity. Through networks groups can more easily access knowledge. Active management of these networks can facilitate both exploration and exploitation (Turner et al, 2013).

In the following section all the companies will be analyzed separately. The analysis will first start off with examining what each company’s senior teams and managers are doing in terms of management, in order to promote and facilitate an ambidextrous organization. It will then continue by reviewing how each company is managing their organization on an organizational- and group level in order to achieve ambidexterity.

5.3.2.1 Company A

Like the theoretical framework suggests company A uses executives which divides their focus between core business activities and entrepreneurship activities. In company A executives from all the business areas are members of a steering committee. This committee is involved with making decisions about CE and CE projects. Another similarity to the theory is that company A, communicates a clear message from an organizational level regarding for instance funding. The decision to manage two separated funds aimed for; core business activities and CE projects, creates an environment which is less prone to evoke resistance in the organization.

Organizational level

In company A group research manages the work with CE. Group research works with external partners and in some cases even jointly come to a conclusion regarding the development of projects. This means that company A uses some of the tools included in the mechanism, organizational capital, like Turner et al (2013) suggests. The managers use external networks in order to find competence which they want to include in CE projects. Since company A has an ad hoc structure governing CE, this could be seen as they have both formal and informal structures in place.

Company A also uses the tools included in social capital. For instance, since the individuals in group research are veterans and have extensive knowledge and networks, which covers all business areas in the company, these individuals can easily access knowledge. Depending on group research´s active management of these networks they can facilitate both exploration and exploitation.

Group level

Regarding what Turner et al (2013) calls the group level, company A used to have reward systems in place to support the project candidates' success. However, that system was difficult and sensitive so they abandoned that model. According to the empirical data they do not have any other reward system in place to support ambidexterity.

In terms of social capital on a group level, the core business and CE business in the company do share similar values and goals. In terms of human capital, the fact that individuals are recruited from all the various divisions in the company enables a form of cross-functional interface which according to Turner et al (2013) enables organizational ambidexterity.

5.3.2.2 Company B

As in company A´s case, the executives in company B also help manage CE projects. For instance, in company B managers from the various business units are involved in dragons den and review the potential of ideas. Another example of this is company B´s top management initiatives concerning creating approval for CE. Group R&D works a lot with management. Their goal is to gain the support of not only top managers but also middle managers. This is done in order to facilitate the use of employees from the various business units. This is in other words a strategy for dealing with future resistance. The top management's involvement in CE increases the chances for company B to succeed with an ambidextrous organization.

Organizational level
With regards to organizational capital, the unit responsible for CE has also developed inter-organizational relationships just as company A. They currently collaborate with institutions, companies, and universities. The company makes use of its wide network to find competence which they can include in their CE projects. Even though company B has no clear system for its work with CE, it still has some formal structures combined with the informal ones.

In terms of social capital company B has established some knowledge-sharing relationships with external parties. For instance, it co-develops research and CE projects with an open innovation incubator. By tapping into external wide networks, company B can facilitate the use of external knowledge for their own employees involved with CE. The employees can both exploit and explore.

Group level
Company B does not have reward systems in place to support ambidexterity, other than the option to work with the idea one presents themselves.

In terms of social capital, company B does have a network in place which enables knowledge-sharing which are supported through both formal and informal means. Even though the company is working with trying to establish relationships that are supportive of ambidexterity, the empirical findings reveal that the current work is not efficient. They are currently struggling with convincing middle managers of the use of for instance innovation and CE.

Since the company recruits employees from all the business units in the company except for one, they have managed to almost create a fully cross-functional interface.

5.3.2.3 Company C
Company C also uses the help of top management in order to achieve an ambidextrous organization. Since it is hard to create understanding and attention for efforts directed towards CE, top management work with communication in order to solve this. For instance they try to communicate that innovation is a part of the company's culture. This could be seen as a tool against organizational inertia. These facts also shows that company C works actively against resistance, since they are both aware of difficulties and try to communicate a clear and convincing story with the help of senior managers. The company has reported that today it is more and more accepted that people work simultaneously with projects form the core business and CE.

Organizational level
Company C works with CE in a variety of ways. One way of organizing their work with CE is to collaborate with external actors, such as science parks and startups. Company C has also restructured their organizational structure for CE. Today the management of CE is more closely tied to corporate level and more separated to the core business. Turner et al (2013) advocates precisely this: a connection on a higher level, yet separated units.

As previously mentioned, company C has set up many different channels for CE. One of these channels allows employees to work with external partners. Another channel focuses entirely on connecting individuals from all the business units. This shows that company C is actively working with creating and managing knowledge-sharing relationships, both internally and externally. The company seems to have practices in place supportive of ambidexterity.

Group level

Unlike what Turner et al (2013) says, company C does not have an extensive reward system, it has no monetary incentives at all. The only reward they have for employees in CE is the possibility to develop their own idea.

On the group level, company C manages the CE structure by implementing both formal and informal channels. Company C has many examples of their formal structure in place; for instance individuals can approach R&D, gather funds and get a specific organization linked to their idea. Examples of informal mechanisms are for instance the fact that those working with assigning individuals to CE projects search through their own networks for special competence.

Company C is working with communicating a compelling vision for its employees. It also partakes creating cross-functional interfaces for its human capital, just as Turner et al (2013) suggests.

5.3.2.4 Company D

Company D state that top management are important for the development of CE. The empirical findings show that senior managers in company D openly says that it is important and accepted to work with CE. These actions from top management facilitates the creation of an ambidextrous organization according to Tushman and O'Reilly (2004). In company D they sometimes encounter resistance amongst middle managers, and in those cases the situation is managed by contacting the manager's manager and deal with it immediately. This shows that the senior managers in the company are interested in both exploring new opportunities and at the same time exploiting existing capabilities, since they support both organizations.

Organizational level

Company D also collaborate with external partners in terms of their CE business. The company has previously managed CE without any formal structure in place. The company has today realized that it needs to incorporate formal structures. Organizational capital includes both inter-organizational relationships and the coexistence of formal and informal structures (Turner et al, 2013). Hence, company D currently have both informal and formal structures in place to manage the process.

In terms of social capital, company D is currently developing their knowledge-sharing relationships with external parties.

Group level

Company D does not have any monetary reward system in place for the employees involved with CE projects. They do however have a ceremony where they congratulate project members for their efforts.

Even though company D does not engage in external networks for effective knowledge sharing, they do however have a developed internal network for the exact same purpose. The CE projects can take advantage of these networks in order to access knowledge more easily. The department of CE also closely collaborates with another unit within the company. These sorts of relationships acts as supporters for ambidexterity. Collaborating with another unit which has similar goals further strengthens the prospects of an ambidextrous organization.

Company D has the same goals for the core business and CE. They also take advantage of cross-functional collaborations. Company D uses some of the mechanisms suggested by Turner et al (2013) in order to manage an ambidextrous organization.

5.3.2.5 Company E

In the company top managers are involved with CE in the sense that they are involved with the steering committees and dragons den. This is an indication that the senior managers in the company supports CE and an ambidextrous organization. However, the managers of the company does not seem to go to the same strengths as the managers in the other companies.

Organizational level

Company E does not engage in inter-organizational relationships in order to develop its CE projects, unlike what Turner et al (2013) suggests. The company currently has some formal structures in place. However, they are working on implementing some more flexibility to the current system. They are aware of the advantages and disadvantages related to a coexistence of a formal and informal structure. However, they state that a good balance is not easily implemented.

Group level

The company does not use reward systems in order to support ambidexterity. The company is not involved in an external complex network in order to facilitate the management of a knowledge-sharing ambidextrous organization. They do however take advantage of their R&D centers and employees that are scattered all over the world. In terms of human capital the company manages an internal cross-functional interface.

5.3.2.6 Company F

In company F senior managers also try to manage the organization in an ambidextrous way. Even though the internal department currently does not work with CE personally, they still co-develop CE projects to some extent with the venture company. These managers divide their attention between the core business and CE. Senior managers partake in steering committees and openly supports CE projects. These acts from top management in company F helps create acceptance for CE and minimizes resistance. Just like Tushman and O´Reilly (2004) suggests, company F communicates a clear vision.

Organizational level

Company F has developed what Turner et al (2013) calls an inter-organizational relationship, for instance the company collaborates with universities. The company manages their CE processes by incorporating both formal and informal structures. One example of the formal structures in place is related to how CE is organized, and an example of informal structures is how the venture company promotes CE projects for the organization.

In terms of social capital, company F uses relationships with external parties in order to both explore and exploit knowledge. This also coincides with Turner et al´s (2013) presented theory.

Group level

The company does not use reward systems in order to support ambidexterity. Company F helps their CE projects access knowledge through the involved individuals' networks. An active management of these sort of networks facilitates exploration and exploitation, which is key to managing an ambidextrous organization.

According to Turner et al (2013) it is important to communicate a strong and clear vision. Company F tries to convey this by for instance having the same goals for CE projects and the core business and having top management openly expressing acceptance of CE projects. Just like all the other case companies, company F also incorporates a cross-functional interface, i e creating projects that contain members from all the divisions of a company.

To conclude, this section of the thesis has analyzed how the companies are managing their operations related to CE, with the help of the theoretical framework. The analysis shows that the case companies all facilitate the management of CE with the help of top management. It also shows that the investigated companies on an organizational level make use of both formal and informal structures to manage CE projects. It is further discussed that the case companies uses similar tactics to those mentioned in the theoretical framework. For instance, the companies use a variety of the tools which Turner et al (2013) recommends for an ambidextrous organization.

6. Discussion

In this section the differences and similarities between the investigated companies will be discussed and compared to the theoretical framework in order to understand how large Swedish companies manage the coexistence of CE and the core business. Further, the theoretical implications of our study will also be discussed.

The analysis chapter addressed how companies are managing operations of the CE process. Thus, it could be argued that the sub-questions have already been answered. However, in order to get a clearer overview, the following discussion shall examine the differences and similarities not only between theory and companies, but also between company and company. This discussion will complement the analysis and provide enough material in order to answer the research question in a more thorough manner.

In order to analyze, discuss, and hence answer the research question the following section is divided in two sections: organization and management. The organization section involves theories about how a company could organize itself for CE, i.e. the different models of CE and the theories about ambidexterity. The different models of CE provides different ways for a company to organize itself in order to conduct CE. Ambidexterity describes how a company could organize itself in order to be able to explore and exploit at the same time. The management section involves theories about how a company could manage the operations of the CE processes, i.e. how to manage ambidexterity and what tools and practices that could be used.

6.1 ORGANIZATION

Wolcott and Lippitz (2007) suggest four different models for companies to organize themselves in the pursuit of CE. Which model that is suitable depends on two dimensions: organizational ownership and resource authority (Wolcott and Lippitz, 2007). The case companies are all organized in the same way, i.e. follow the same model. The analysis shows that the companies are organized as the producer model with a dedicated resource authority and focused organizational ownership over the CE projects. According to theory this implies several challenges and success factors (Wolcott and Lippitz, 2007). In the analysis it is found that a success factor for all of the investigated companies is a leadership that accepts and promotes CE. However, the companies state different challenges in regards to the CE projects. Company A, D, and E state that the biggest challenge is the implementation of the CE projects. Company B, D, and D state that the biggest challenge is the limited resources in terms of employees. Company F argues that the biggest challenges is the friction between business units and how to find the right balance. All of the investigated companies try to solve and mitigate these different challenges with help of management. Both the problem of implementation, i.e. lack of support from business units, and the competition of resources in terms of employees could be seen as problems due to a lack of support from the managers on different levels in the organization. The managers could be unwilling to let their employees work simultaneously with the day-to-day business and CE projects to a greater extent, hence the lack of resources.

The theoretical framework states that an ambidextrous organization is an organization that simultaneously can conduct both exploration and exploitation (Tushman and O'Reilly, 2004:

Tushman and O'Reilly, 1996). All of the investigated firms do explore and exploit at the same time, though to different extents. Further, in order to achieve ambidexterity a firm could build its organization surrounding it in different ways. Duncan (1976) suggest a sequential approach to ambidexterity, while Tushman and O'Reilly (2004) argue for a structural approach to achieve ambidexterity. In the analysis it is found that the case companies have a structural approach to achieving ambidexterity, with the exception of company A and F due to a streamlining of their organizations. Hence, the majority of the companies seem to organize themselves in the same way in this matter, i.e. separated units for exploration and exploitation but with integrating mechanisms between them. Often the integrating mechanisms are connections on top management level between the different units and shared resources. Again the organizational structure are to a certain extent built upon the managers and their willingness to engage in CE. Further, in regards to the contextual approach to achieve ambidexterity (Gibson and Birkinshaw, 2004; Kauppila, 2010) and how a company should build an organizational environment that promotes the desired behaviour (Markides, 2008), it has shown to be difficult to apply to the investigated firms. The case companies all have mechanisms in place to support ambidexterity, yet it is difficult to determine whether they actually help create a context or environment in the organization for ambidexterity.

Another dimension of an ambidextrous organization is how autonomous or integrated the units for exploration and exploitation should be (O'Reilly and Tushman, 2004). All of the case companies have their CE projects separated from the core business but with integrating mechanisms. Integrating mechanisms could be that the steering committee for the CE projects involves managers from different units within the company that are connected both to the exploration and to the exploitation. This way of organizing indicates certain tensions according to the theoretical framework (Porter, 1996; Bower and Christensen, 1995). Company B, C, D, and F state that the problem with separated units is the competition for resources in terms of employees. Company D, E, and F state that the problem with separation lies in the reintegration of the CE projects. Even though the integrating mechanisms mitigate tension there are still problems and challenges regarding the level of autonomy and integration. All of the companies struggle with the dilemma and none of them seem to have found a way without problems.

The analysis suggest that these different challenges the companies experience could be due to a lack of acceptance for CE and ambidexterity. CE projects compete for resources, and there is an unwillingness amongst the other business units to implement a CE project in their unit that is not invented there. Hence, CE could be troublesome and difficult, and its success depend to a great extent on the managers involved. Further, it is difficult to build an organizational environment that fully supports and promotes ambidexterity.

6.2 MANAGEMENT

In terms of differences and similarities between the companies and the theoretical framework there are more similarities than differences. For instance in the section on how to manage ambidexterity through balancing acts (Garvin and Levesque, 2006), it shows that most companies´ management are very similar to both each other and the theoretical framework. There is always one or two companies that manage the CE process in a different way compared to the theory (Garvin and Levesque, 2006). An interesting observation is that in many of the cases where one or two companies differentiate, it is never the exact same company/companies. This might be an indication of that CE is a complicated area where many companies are experimenting in order to find a right solution, or simply a solution that fits their organization. For instance, the companies have differences in how they manage the organizational structure for the CE process. Company A now have an ad hoc structure, while company E wants the opposite thing, i.e. to make it more centralized. Company C does not even have a particular organization for CE. Yet, it still has a variety of ways in terms of how ideas can be generated and how projects can get started.

The differences between the theoretical framework and the companies become more apparent in the strategy section of how to manage balancing acts. For instance Garvin and Leveque (2006) advocate that companies avoid using financial goals in order to measure CE projects. However, the empirical findings shows that all companies include both financial and nonfinancial measurements. Company E is the only company that restricts the use of financial measurements and has decided to exclude them in their dragons den. The investigated companies state that it is difficult to find suitable criteria, and perhaps that is why the companies use financial measurements. Due to the fact that they are familiar to this type of measurement.

The analysis also reveals a difference between the companies and what criteria they use in order to narrow down the search criteria. The theoretical framework does not suggest any specific criteria (Garvin and Levesque, 2006). It only states that organizations need to establish a guided and not an unguided search. This could be an explanation to the discrepancy that exist between the companies' search criteria. Perhaps the discrepancy between the companies indicate that the companies are experimenting with finding criteria that are suitable for them. Despite the differences there are still some similarities between the companies´ search criteria. For instance companies B, C and F wants to both develop ideas related to their overall strategy and investigate the potential business value of an idea.

The analysis also shows that the companies manage their CE process in an identical manner, as recommended by Tushman and O´Reilly´s (2004). For instance the companies all use senior managers that are ambidextrous. The theoretical framework's suggestion to use managers that are able to explore new opportunities and at the same time exploit existing capabilities (Tushman and O´Reilly, 2004; Grant, 2010) is actually applied in "the real world" as shown by the case companies.

After a close examination of the three mechanisms identified by Turner et al (2013) we can identify both similarities and differences between the companies' use of ambidextrous mechanisms in its management. Some resources are used by the case companies in order to successfully manage and achieve an ambidextrous organization. Whereas other resources are used to a lesser extent. On the organizational level there are many similarities between the case companies and the theoretical framework (Turner et al 2013). For instance all the case companies make use of formal and informal structures in order to manage CE. An example of a resource on group level which is barely used, is the reward systems to support ambidexterity. None of the case companies uses reward systems, except for company D which uses a ceremony to recognize the efforts of the CE project groups. Another similarity between the case companies on a group level, is that they engage in cross-functional interfaces.

The analysis and the discussion above shows that the companies´ management of CE are very similar to the suggestions made by Garvin and Levesque (2006), Grant (2010), and Turner et al (2013). And since there are so many similarities between the companies´ actual work and the theoretical framework presented on management, it suggests that companies need ambidextrous traits in order to manage operations of the CE process.

6.3 THEORETICAL IMPLICATIONS

The study is to a great extent built on the framework for ambidextrous organizations. Ambidexterity is seen as a way to both organize the company, and also as a means to manage the processes for CE. Ambidextrous organizations is defined as organizations that can explore and exploit simultaneously (Tushman and O'Reilly, 2004). Exploration involves the activities involved in the search, risk taking, variation, flexibility, experimentation, discovery, and innovation. Exploitation involves the activities in refinement, selection, production, efficiency, implementation, and execution (March, 1991). The study shows that the case companies do explore and exploit at the same time, and that they constitute ambidextrous organizations. However, the level of ambidexterity could be discussed. If a few units within the organization could explore and exploit simultaneously it does not indicate that the whole organization would be ambidextrous, and to what extent the organization would be ambidextrous. Even though the case companies match the criteria, it is not stated to what extent. Hence, in practice it is not clear what should be considered as an ambidextrous organization.

To continue, the theoretical framework state different roads to achieving ambidexterity: sequential-, structural-, and contextual approach (Duncan, 1976; Tushman and O'Reilly, 2004; Gibson and Birkinshaw, 2004). In the theory it is stated as different approaches with clear distinction. Yet, the approaches seem to coincide within the case companies. For instance, it is argued that the company A and F have characteristics of both sequential and structural, and company D might have shifted from contextual to a more structural approach. This confirms what is stated by Kauppila (2010), that firms shift during time between the different approaches. Further, it also indicates that it is difficult to separate the different approaches.

Regarding the level of autonomy and integration between exploration and exploitation within an ambidextrous organization the case companies all have their CE projects separated from the exploitation but with integrated mechanisms, as suggested by Tushman and O'Reilly (2004). Further, the companies seem to experience the potential problems regarding these areas as mentioned in the theoretical framework (Porter, 1996; Gibson and Birkinshaw, 2004). Yet, it is suggested that these tensions are mitigated with the help of management. Hence the question about how to organize the company could also be a question of leadership, as suggested by Tushman and O'Reilly (2004) in regards to the structural approach to ambidexterity. Here the theoretical implications supports the theoretical framework. Markides (2008) argues for the importance of creating an organizational environment in order to achieve ambidexterity. This has proven to be difficult to apply to the investigated firms; they all have mechanisms in place to support ambidexterity yet it is difficult to determine whether they actually help to create an ambidextrous environment or context. Therefore, it could be discussed if it is more a question of the right leadership.

In regards to how the investigated companies manage their operations for CE, the theoretical framework provides different management tools used on different levels of analysis (Turner et al, 2013) and a number of balancing acts that the company should conduct (Garvin and Levesque, 2006). The study shows that the investigated firms make use of the different tools suggested and perform balancing acts in order to manage their CE projects. Yet, the companies seem to conduct different kinds of balancing acts. This could imply that the suggested balancing acts need to be adjusted to a company's specific situation.

7. Conclusion

The aim of this chapter is to answer the research question by summarizing and discussing the conclusions drawn from our analysis and discussion. This chapter will end with recommendations for future research.

The objective of this study was to investigate how large established Swedish companies manage the coexistence of CE with their core business. In order for us to be able to answer this question, we investigated how ambidexterity can be used to achieve and manage CE processes in six large established companies.

The main research question was:

How do large established companies manage the coexistence of the core business with corporate entrepreneurship?

We divided this question into the following two sub-questions:
How can companies organize themselves for corporate entrepreneurship?
How can companies manage operations of the corporate entrepreneurship process?

We answered our main research question by investigating the organizational environment of the case companies. It is the organizational environment that shapes the desired behaviour of a firm (Markides, 2008), i.e. ambidexterity, and therefore this was the base of our empirical investigation.

The investigated firms are all organized in similar ways. The resource authority over CE is dedicated, and the organizational ownership is focused. Hence, the investigated companies all have a group that supports and govern the CE projects. The funding used are from that specific group's centralized budget. Further, it has also been demonstrated that the companies have an ambidextrous organization, i.e. they explore and exploit at the same time. However, it could be discussed to what extent they are ambidextrous. In order to achieve ambidexterity the case companies, expect company A and F, have a structural approach. This means that they have separated units for CE and the exploitation, but explore and exploit at the same time. Company A and F have both downsized their CE operations due to a streamlining of the organization and a reorganization with an increased focus on cutting costs. Hence, their approach could be said to be more of a sequential one with structural features. Thus, it could be argued that in times of financial difficulties companies do not prioritize CE, instead they focus on their exploitation business. To continue, another discussed part of how companies could organize themselves in order to achieve ambidexterity is the level of autonomy for the CE projects. All of the investigated companies have organized their CE projects as separated units, but with integrating mechanisms connecting the projects to the core business. Integrating mechanisms are, for instance, steering committees with managers from the line operations and the fact that employees work simultaneously with CE and the core business. However, there are problems and challenges involved in the separation with integrating mechanisms. We argue that these problems to a great extent depend on a lack of support from the business units, and could be seen as a question of leadership.

This thesis shows that the companies´ way of managing their operations for the CE process are very similar to what Garvin and Levesque (2006) calls *balancing acts*. All the companies manage their CE by combining new and old organizational traits in three areas; strategy, operations and organization. For instance on an organizational level, the companies' senior managers manage the CE-projects by contributing with their reputation and skills. In terms of managing the operations governing the CE process, all the companies have employed various forms of hybrid organizations. Company C does not even have an organizational structure set up particularly for CE, instead it uses a mix of formal and informal structures combined with channels. Company E has decided to continue down another path and is currently centralizing its more and more of its CE structure. These companies are managing their operations of the CE with both formal and informal structures, with both internal and external networks and with both new and old characteristics.

To successfully manage an ambidextrous organization, a set of different tools are required (Turner et al, 2013). The companies show that they make use of these different tools, such as: internal and external relationships, formal and informal structures, shared values and goals, and cross-functional collaborations internally on an organizational and group level. For instance all the companies, except for company E, manage the development of their CE-projects by engaging in external knowledge sharing relationships.

To recapitulate, the case companies have an ambidextrous organization, i.e. they explore and exploit at the same time. To organize this simultaneous work with CE and the core business, the units for exploration and exploitation are separated but with integrating mechanisms. However, this indicates several challenges and problems. It could be argued that these problems to a great extent depends on, and are solved by a leadership that accept and promote CE. In order to successfully manage their operations of the CE process the case companies incorporate both new and old characteristics, i e they aim to achieve a balance between these two clashing competencies. This balance has to be developed and maintained on a number of different levels within the organization.

7.1 FUTURE RESEARCH

The study investigate how large established Swedish companies manage the coexistence of CE projects and the core business. In doing this, the theory of ambidexterity was mainly used (Tushman and O'Reilly, 2004; 1996). We have found that the companies have ambidextrous organizations that explore and exploit simultaneously. Yet, it was difficult to determine to what extent they are ambidextrous. To go more in depth on how these companies manage the coexistence of CE and the core business we suggest single case studies of the different companies. A single case study could capture more nuances a get a deeper understanding of the topic of ambidexterity. With a single case study it could be easier to determine to what extent the different companies actually are ambidextrous.

Further, the companies seemed to mainly have a structural approach to ambidexterity (Tushman and O'Reilly, 2004). However, some indications of shifts between the different companies were found. Kauppila (2010) states that it is not unusual that companies shift between the different approaches during time, in order to achieve ambidexterity. We realized that these shifts were difficult to determine with a multiple case study approach. Therefore, we suggest that future research conducts a longitudinal study to be able to capture shifts over time, and the potential reasons for the different shifts. It could also be of interest to investigate how these shifts from different structures affect how the companies manage the coexistence of CE projects with the core business.

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9. Appendix

APPENDIX A. INTERVIEW GUIDELINE

Organization:

- What does the organizational structure look like?
  - What is the relationship between them (between CE and core)?
- If a special group is in charge of the CE what is their responsibility, competency and purpose?
- If tension or other types of problems arises between the two, how do you try to mitigate them?

Competences and attitudes:

- The people who work with CE, are they new recruits or have they been with the company for a long time?
- Those who are in charge of/and work with CE do they have similar backgrounds and skills compared to those who work with the core business?
- How do you ensure that a CE initiative gains legitimacy within the organization?
  - How do you build commitment for a new business?
  - What kind of attitude does the staff/organization have towards new businesses?

Measurements and incentives:

- How do you evaluate and monitor new ventures?
  - Could you give examples of some performance measures?
- How are corporate entrepreneurship projects financed?
  - Do you use budgets?
- The efforts of the employees are they evaluated?
  - If so how?
- Do you use incentives?
  - If so what kind of incentives?
- How do you evaluate the potential of a corporate entrepreneurship idea?
  - Who is involved?

Processes and structure:

- Is the corporate entrepreneurship project given much autonomy?
  - Can you specify project characteristics in terms of level of centralization, level of formalization, and level of flexibility?
- How was the project structure, in terms of level of control, hierarchy and delegation of authority?
- How does the reporting structure from the management team to various departments /seniors look like?
- How involved is top management in the projects?

Strategy:

- What are the long-term goals with corporate entrepreneurship?

- Does the core business and corporate entrepreneurship have a common goal(s)?
- Can you give examples of successful/unsuccessful corporate entrepreneurship?
- What are the biggest challenges with managing corporate entrepreneurship alongside the core business?