Mario Ek Aparicio

Driving and Inhibiting Factors for Intrapreneurship

A Study of Intrapreneurship Teams

NTNU
Norwegian University of
Science and Technology

Abstract

This paper studies driving and inhibiting factors of intrapreneurship with a specific focus of intrapreneurship teams. A 7-factor model of possible drivers and inhibitors is proposed and tested using in depth interviews and a quantitative team dynamic survey called SPGR. Also other characteristics of team based intrapreneurship are explored, such as how they are organized in their organization, what types of innovation typically created by such teams and their overall process of working. 12 individuals participated in the interviews while 30 intrapreneurs across 5 intrapreneur teams participated in the team survey. The study covered 6 different Norwegian companies in a variety of industries.

The research finds relevance for all seven factors but uncovers that *individuals* is considered the most important driving factor by the intrapreneurs. Also, *team dynamic*, *strategic focus* and *informal structures* (culture) are considered very important factors. Some of these factors are both drivers and inhibitors of intrapreneurship. In addition, the research shows that intrapreneurship teams typically manage to create product innovation and most try to apply effectual thinking in their work. Finally, intrapreneurship initiatives should be multi purposed, and aim for learning and training in innovation work in addition to creating business opportunities.

Keywords: Intrapreneurship, corporate entrepreneurship, corporate venturing, teams, effectual thinking, innovation, teams

Acknowledgments

Revision Notice

This is a revised version of the thesis where a few errors from the first version have been corrected. The "Method" section that used to be a part of chapter 2 (section 2.4 and out) is now chapter 3. In addition, an error in the citations was corrected.

Table of Contents

1 Introduction & Background

1.1 Background

According to a 2013 Forbes article, between 1993 and 2003 60% of fortune 1000 companies were new, and this trend is expected to grow. The article's author claims this is because established companies fail to be entrepreneurial (Furr, 2011). It seems that the entrepreneurial companies cause so much innovation in their industries that most large and established companies find themselves unable to keep up. Consequently these established companies must become more entrepreneurial if they are going to survive on the long term.

Being entrepreneurial in the context of established companies was in 1978 given the term intrapreneurship by Gifford and Elizabeth Pinchot (Pinchot & Pinchot, 1978). Intrapreneurship is entrepreneurial behavior in large organizations, or how Pinchot puts it; it is a method of using the entrepreneurial spirit where many of the best people are located: in large organizations. According to Wikipedia intrapreneurship can be classified as a corporate management style that mimics entrepreneurship through risk orientation, innovation and reward policies (Wikipedia.org, 2016b).

Companies that have success with intrapreneurship are able to keep their entrepreneurial spirit and agility even though they have become huge corporations. Companies, such as Google, have embraced the concept of intrapreneurship and are actively pushing their employees to work on their own projects and they regularly reward employees for their entrepreneurial ideas (Groysberg, Thomas, & Wagonfeld, 2011). Other companies create break-out units with almost complete autonomy from their parent company. The archetypal example of this is Lockheed Martin's Skunk Works group, which was established in 1943 to create a jet fighter. The group still exists (Lockheed Martin, 2016).

The idea of intrapreneurship, having employees work like entrepreneurs, is becoming increasingly popular. There is also evidence that suggests a positive impact on performance of companies that have intrapreneurship programs (Marcus & Zimmerer, 2003; Zahra, 1991). Therefore, intrapreneurship seems like a good way to increase innovation and improve chances of long-term survival. In fact, Pinchot points out that intrapreneurs are essential for new product development projects. He refers to a study where <u>all</u> failed product initiatives lacked a intrapreneurial individuals (Pinchot, 1985). Thus, cultivating intrapreneurship amongst one's employees seems extremely important.

But how easy is it to cultivate an entrepreneurial spirit in established corporations and inspire employees to become intrapreneurs? According to Beth Altringer at Harvard University, between 70% and 90% of projects to stimulate intrapreneurship fail, which is not a particularly uplifting statistic(Altringer, 2013).

Is intrapreneurship entirely dependent on extraordinary individuals that already have entrepreneurial mindsets? Also, why does intrapreneurship fail in most large organizations? Is it that the entrepreneurs' threat of extinction constantly keeps them on the edge? Or maybe these extraordinary entrepreneurial individuals are unwilling to work inside large corporations? According to Govindarajan and Desai, entrepreneurial individuals are often unable to pursue ideas from within their current position and consequently quit to become entrepreneurs (Govindarajan & Desai, 2013). This results in a drain of excellence from old to new companies. Is intrapreneurship, and lack thereof, a management issue, an organizational issue and what can companies do, if anything, to cultivate it?

How does the organizational environment affect intrapreneurship and the ability to produce innovation? There is much research both on how organizational elements such as structure and process affect companies' innovative capabilities. Benner and Tushman claims that focusing excessively on process impedes exploratory efforts to create more radical innovation (Benner & Tushman, 2001, 2015). This is contrary to the belief that innovation needs to be formally driven through processes such as innovation funnels, stage gate processes and information systems for capturing ideas. Leonard-Barton explains that informal structures such as norms and values contribute to cement the modus operandi and creates so called core rigidities (Leonard-Barton, 1992). Such core rigidities surely affect intrapreneurship efforts and the chance of producing innovation adversely.

There is consensus around the idea that organizations must be able to create radical innovation and simultaneously provide incremental improvements on current business. Some suggest building capabilities to enable the organization to switching back and forth between the exploitation and exploratory mode based on the industry context(Starbuck, Hedberg, Nystrom, & Starbuck, 1976; Teece, Pisano, & Shuen, 1997). Other research suggests that non-continuous innovation must be "buffered" from the rest of the organization. Clayton Christensen suggests completely separating units charged with creating radical innovation (C. M. Christensen, 1997). O'Reilly and Tushman suggest that organizations establish a separate organizational division to take care of innovation of the more radical kind. The new

organization should only share top management with the "old" organization, and otherwise be loosely coupled. This organizational pattern is called the Ambidextrous Organization, and has grown very popular (O'Reilly & Tushman, 2004; Tushman & O'Reilly, 1999). Both Christensen's idea about separating exploratory units and the Ambidextrous Organization resonate well with the concept of intrapreneurship. Both are attempts to crate environments for intrapreneurship on the side of the established environment. O'Reilly & Tushman even refers to the archetypal intrapreneurship initiative, Skunk Works in their 1999 article "Building ambidextrous organizations. Forming your own skunk works" (Tushman & O'Reilly, 1999).

Of course, just performing organizational changes such as splitting up the company is no universal solution either. Creating particular organizational structures won't automatically cause intrapreneurs to produce radical innovation. Succeeding with intrapreneurship is subtle; it requires the existence of beneficial factors and antecedents. But it also requires that adverse factors and inhibitors are kept out of the way of the intrapreneurs.

1.2 Research question

In this thesis I explore the contingencies that cultivate successful intrapreneurship with a specific focus on intrapreneurs working in teams. I propose that it is not enough to muster together a group of people and charging them with creating innovation for their business. As with entrepreneurs, the success of intrapreneurs relies on their ability to both develop <u>and</u> execute ideas. They need to be able to create new tangible benefits for the organization, such as business opportunities or process improvements. At the same time, they should integrate discoveries and opportunities into their organization. Consequently innovation through intrapreneurship can only succeed when certain conditions exist, i.e. favorable factors are present and inhibiting factors are minimized. I propose that the following factors prevent and/or drive success in intrapreneurship:

1. **Individuals with intrapreneurial mindsets and skills**
2. **Team dynamic and efficiency of intrapreneur teams**
3. **Formal structures such as organization, process and incentives**
4. **Informal structures such as culture, norms and values**
5. **Strategic focus of management**
6. **Situational context of the company and/or the industry**
7. **Innovation programs and processes**

The research question is: How these factors affect intrapreneurship and what factors, if any, are more important than others? Do they drive or prevent success? Are there any factors that are absolutely mandatory and form a prerequisite for the other factors to have positive effects?

Through qualitative and quantitative studies of 6 organizations with intrapreneurship initiatives, this research question is explored.

In addition to exploring the aforementioned factors for intrapreneurship, other characteristics of intrapreneur teams are also studied in order to gain more insight into team-based intrapreneurship. Such characteristics include companies' success criteria for intrapreneurship initiatives, organization and behavior of the intrapreneur teams, and finally, what types of innovation typically produced by the teams.

The research includes semi structured interviews of 12 team members in addition to a quantitative analysis of team dynamic using 6 different teams.

2   Theoretical Context and Focus

The theoretical context of this paper is intrapreneurship and innovation. There is an abundance of literature and theories bordering the concept of innovation, entrepreneurship and intrapreneurship. Since this theoretical landscape is relative complex, I've created a simple theoretical framework or taxonomy where I show the topics I cover in this paper, and how these topics relate to one another (see Figure 1). I've created this taxonomy to simplify and understand the theoretical context, and to create a holistic model of the concepts revolving the main context, intrapreneurship and innovation. The main purpose of this synthesis is to create a clear cut framework to use for the research. During the case studies it was useful to use a consistent model in order to control for interviewees varying understanding of pertinent topics, terms and definitions.

As seen the core of the taxonomy constitutes intrapreneurship and innovation. Innovation in addition to sources, causes, types and levels of innovation are explained in chapter 2.1.

Intrapreneurship and the factors that affect its success is discussed in chapter 2.2
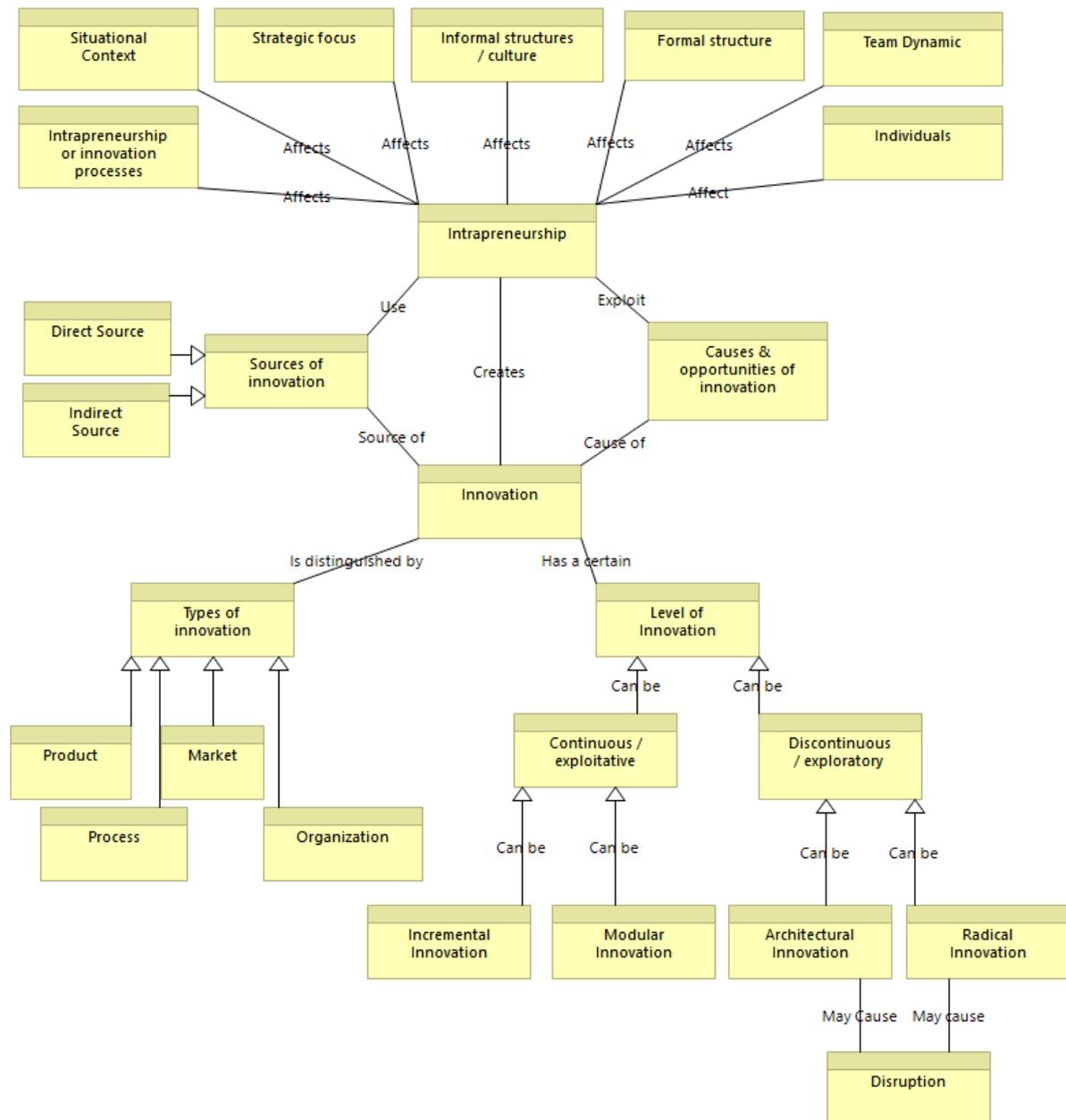
Figure 1 Theoretical Context Taxonomy

.

2.1 Anatomy of innovation

As mentioned the topic of innovation is highly popular in academia and business press so there is an abundance of literature. There are also numerous definitions of innovation. Merriam-Webster defines innovation as either "the introduction of something new" or "new idea, device or method" (Merriam-Webster.com, n.d.). But this definition is very basic and not particularly nuanced. The following two examples are somewhat more specific:

- Innovation is when a product satisfies new market needs or existing market needs in a new way (Maranville, 1992)
- Innovation really means something new with high-level of originality, in whatever area that also breaks in to (or obtains a foothold in) society, often via the market, and mean something revolutionary for people. An innovative process has not been fulfilled until customers or others for whom it may be of benefit have acknowledged and accepted a new thing (Frankelius, 2009).

Although the above definitions have different levels of detail, they usually revolve around the concept that an innovation is about more than creative ideas and invention. Or as Frankelius puts it; "…innovation is about action and results. Creativity may certainly be part of innovation, but it is never enough for a complete fulfillment of the innovation phenomenon" (Frankelius, 2009).

Since some of my theoretical framework is adopted from OECD's Oslo Manual, a standardized guide for working with innovation research, I will use their definition of innovation:

"An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations" (OCDE, 2005)

OECD shares the view that innovation requires that the idea or improvement is <u>implemented</u>, meaning that an idea has to be put into the market or brought into actual use in organizations in order to go from idea to innovation.

2.1.1 Sources, causes and opportunities of innovation

Where does innovation come from? How does it appear? Drucker claims that although some innovation stem from a "flash of genius", most innovations come from purposeful search of opportunities associated with certain situations such as unexpected occurrences, incongruities, process needs, and changes in the world (in industry, markets demographics or perception). Last but not least, new knowledge is also an opportunity for innovation. Innovation based on new scientific, technical or social knowledge is what most people associate with innovation, but Drucker observes that innovations based on new knowledge have long lead time. On other words there is a long time span between the emergence of knowledge until it is developed into usable technology available (and possibly successful) in the market(Drucker, 1998). The

concept of long lead times in technology lifecycles and the fact that it is very challenging to transform technological invention into market success is the theme of Moore's best-selling book "Crossing the Chasm"(Moore, 1991). This reinforces Drucker's notion that knowledge based innovation rarely happens instantaneously.

When Drucker discusses where innovation comes from he talks about sources of innovation. But I would call this **causes**[1] and opportunities of innovation. From an organization's perspective there are two **sources**[2] innovation. (1) Organizations can attempt to develop innovations themselves and in cooperation with partners. Alternatively, (2) they can adopt innovations developed elsewhere and adjust them to their organization and business(OCDE, 2005).

Even though something is not entirely new in a global perspective, it may be very new and innovative in an industry or organizational perspective. It is also a point that adoption of innovation from elsewhere requires adjustment, adaptation and execution which is also associated with innovation.

I call the two alternatives direct and indirect sources of innovation and these alternatives are seen in the taxonomy model (Figure 1).

With relation to the concept of intrapreneurship, intrapreneurship can be considered as a process or vehicle for creating, finding and realizing innovation in established organization, using direct or indirect sources and Drucker's causes and opportunities of innovation.

2.1.2 Types of Innovation

Several frameworks try to describe types of innovation. In this paper I apply the Oslo Manual's framework(OCDE, 2005) which consist of 4 types of innovation. I use this model is to cater for more structured discussion in the case studies and pinpoint if some types of innovation occur more often within the context of team-based intrapreneurship. The 4 types of innovation in OCDE's framework are:

Product Innovation: This is the introduction of a good or service[3] that is new or significantly improved with respect to its characteristics or intended uses. This includes:

- New products and services with significantly different characteristics or intended use.

---

[1] Cause: A person or thing that gives rise to an action, phenomenon, or condition (Oxford, 2016a).
[2] Source: A place, person, or thing from which something originates or can be obtained (Oxford, 2016b).
[3] Product Innovation covers both goods and services.

- New use of existing products with minor technical changes.
- Significant improvements to existing products or services through changes in components, materials or how services are provided.

Process Innovation: This is the implementation of a new or significantly improved production or delivery method. Changes in techniques, equipment and/or software are process innovation. This includes:

- Innovation that decreases unit cost, increase quality or enable significantly improved products or services.
- New methods to source inputs, allocate resources and deliver the final product or service.
- New or significantly improved methods for creation and provisioning of services.

Market Innovation: This is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing. Marketing innovations are aimed at better addressing customer needs, opening up new markets, or newly positioning a firm's product on the market. This includes:

- Implementation of a new marketing method in a company.
- Significant changes in product design that do not change the functional characteristics. This could be associated with packaging.
- New methods for product placement and new sales channels (e.g. franchise system, direct sales or licensing models).
- New methods for product promotion such as branding or loyalty programs
- New methods for pricing or innovation in pricing strategies

Organizational Innovation: This is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations. Organizational innovations can reduce cost of supplies or administrative and transaction costs. It can improve workplace satisfaction and labor productivity. It can also give access to non-tradeable assets such as external knowledge. This includes:

- New business practices that involve new ways of organizing routines and procedures of work.

- New workplace organization that implements new methods for distributing responsibilities, decision-making or division of work.

- New external relations that implement new ways of organizing relations with other organizations. This includes new types of collaborations, new supplier integrations and sourcing practices.

The detailed definitions are available in the Oslo Manual, chapter 3 (OCDE, 2005).

2.1.3 Level of Innovation

OCDE is not unique in creating classification frameworks for innovation. Many different theoretical frameworks try to typify innovation. Unlike OCDE's framework many of them focus on the strength or degree of innovation. I see the concepts of innovation strength versus types of innovation as multi-dimensional. One dimension is concerned with where or in what elements innovation happens (type). The other dimension is concerned with how strong the implications of the innovation are. The first dimension is, as already explained, **types of innovation**, the second I will call **levels of innovation**.

The most basic framework for levels of innovation is the continuum between incremental vs. radical innovation. Although there are several definitions of these two concepts there is a common notion that they represent the degree of departure from existing practices or technology. Radicalness is associated with more *newness* or *differentness.* In general to call innovations radical they are usually new in a global perspective and imply exceptionally different practices, products or services (Schilling, 2013).

Another popular concept is the two opposite approaches for organizational learning, namely exploitation vs. exploration. Exploitation involves using current certainties to create improvement and refinements. The opposite is exploration, which is associated with experimentation, risk-taking and looking for new possibilities (March, 1991). Basically the discussion is about whether one should exploit existing organizational capabilities by incremental improvement, or abandon existing capabilities and build new ones through exploration. Benner and Tushman explain that incremental innovations that meets the need of existing customers are exploitative, while radical innovations are exploratory (Benner & Tushman, 2001). I've taken this into account in my taxonomy model within the concept of level of innovation; continuous and exploitative innovation vs. discontinuous and explorative innovation.

However, since I wanted a more nuanced model for level of innovation, I've adopted Henderson and Clark's four-level framework, which includes the concepts of modular innovation and architectural innovation in addition to incremental and radical innovation(Henderson & Clark, 1990). This gives me a more flexible framework to work with because these two new concepts are well defined by Henderson and Clark. Note though that their framework does not put the four levels of innovation on a one-dimensional scale. Rather it is a two dimensional model as shown in the figure below:
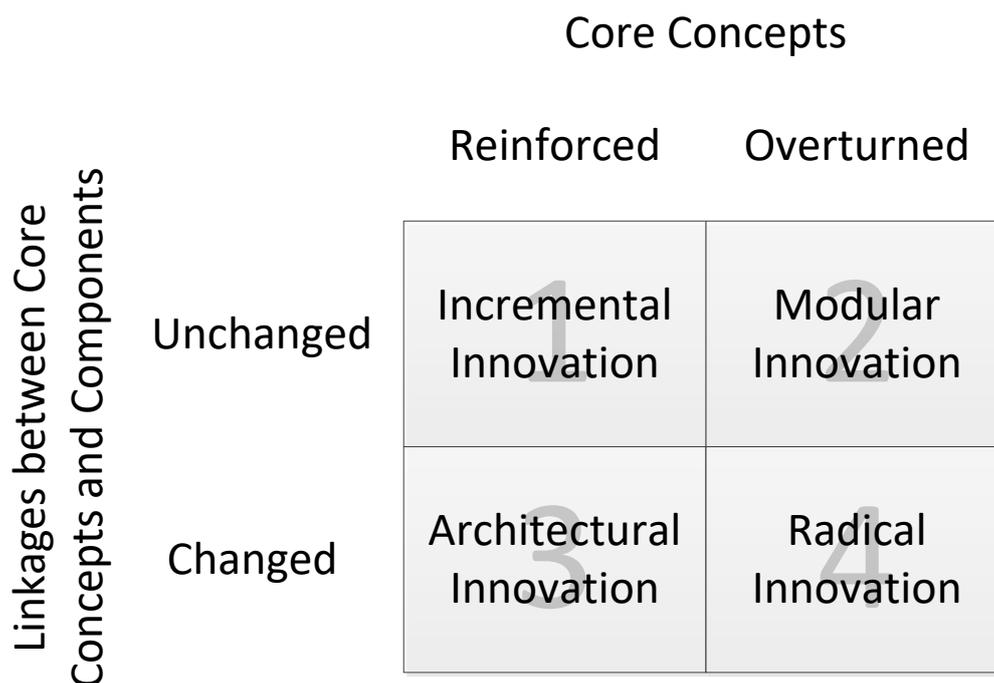
Core Concepts

Figure 2 Levels of innovation

Modular innovation involves major changes in core concepts or components in the existing technology or business practice, while architectural innovation involves changes in the structure or linkages i.e. the architecture of the business practice or technology. The model does not directly imply that architectural innovation is stronger than modular innovation. However, architectural innovation creates more subtle difficulties for competitors because it renders some knowledge and organizational capabilities related to component linkages unusable and even harmful for future performance. Modular innovation on the other hand only renders capabilities related to specific core concepts unusable, so it is easier for competitors to know what they need to change in order to compete (Henderson & Clark, 1990; Schilling, 2013). Consequently, I enumerate these concepts from level 1 to level 4:

Level 1 - Incremental Innovation: Moderate improvements of existing products, services or practices without changes to either components or the linkages between them. The whole notion of continuous improvement is related to this. Typical examples are %-wise improvements of performance characteristics of a product such as increasing the range of an electric car through improvement of battery and drive train technology. The underlying core design concepts (drive train and battery) and the linkage between them are the same.

Level 2 – Modular Innovation: Significant improvements to specific components or parts of a technology, process or value chain without changing the overall value creation logic or the overall technological configuration of the product. An example of this is going from analog to digital dialing service. A second example is the automation a specific part of a value chain, such as automated packaging, but keeping the value chain more or less identical.

Level 3 – Architectural Innovation: Significant improvements on how modules or components interact with each other. A strictly architectural innovation will only change the linkages between components without changing the components themselves. A novel example of this is going from the high-wheel bicycle to the contemporary bicycle with gears to regulate torque (Schilling, 2013). Another example is the movement from a ceiling-mounted fan to a portable table top fan. The table top fan has a smaller size and introduces new interactions between the basic components, fan blade, housing and motor(Henderson & Clark, 1990).

Level 4 – Radical Innovation: This is associated with entirely and exceptionally different products, technologies and processes. The introduction of the cell phone illustrates a significantly new technology that required new manufacturing and service processes (Schilling, 2013). Radical innovation has the highest chance of becoming competence destroying because it may render organizational capabilities of competitors useless.

This model of levels of innovation is used to accommodate more controlled and discussions during interviews

2.1.4 Disruption and disruptive innovation

The concept of disruption and disruptive innovation is often used interchangeably with **radical innovation.** However, the two concepts are not the same. Radical innovation is associated with the change in the product, service or organizational practice while disruption is the end effect it has in the industry or market. However, the distinction between radical and

disruptive innovation is subtle. In his book "The innovator's dilemma" Clayton Christensen makes a clear distinction between radical and disruptive innovation. Innovation can be radial and discontinuous in nature, but still be what he calls *sustaining* meaning that it improves performance existing products or services in established markets. On the other hand, disruptive technology is associated with completely different products with different value propositions and markets (C. M. Christensen, 1997). Further it is straight forward to interpret Christensen's disruptive technology as analogous with discontinuous technology, which is associated with the establishing of a new dominant design (Schilling, 2013; Suarez & Ulterback, 1995).

On the other hand Henderson and Clark claim that radical innovation establishes a new dominant design. This would contradict Christensen's theory (Henderson & Clark, 1990). I believe the best way to integrate disruption and disruptive technology to my theoretical framework is to say that disruption is an effect or outcome of innovation. Consequently, I claim that **innovation may cause disruption**, and further that architectural and radical innovation are the levels of innovation that are most likely to cause disruption.

2.2   Anatomy of intrapreneurship

As mentioned in the introduction of this paper, intrapreneurship is entrepreneurial behavior in large organizations. Gifford & Elizabeth Pinchot are credited as the creators of the term intrapreneurship because of a 1978 paper called "Intra-Corporate Entrepreneurship"(Pinchot & Pinchot, 1978). In Gifford Pinchot's 1985 book "Intrapreneuring" he writes extensively about the concepts of intrapreneuring, intrapreneurship and intrapreneurs. In this book intrapreneurship is defined as follows:

"Intrapreneurship is a method of using the entrepreneurial spirit where many of our best people and resources are: in large organizations" (Pinchot, 1985)

He points out that although small companies cannot handle the complex tasks of modern society, such as making automobiles or building space shuttles, the advantages of large companies is greatly overestimated. To get the advantages of both scale and smallness, he proposes the use of Joint Ventures and partnerships based on trust and cooperation. Pinchot rejects the belief that carefully planned new-product processes can replace entrepreneurial passion, and claims that failed new-product initiatives are closely related to a lack of intrapreneurs (Pinchot, 1985).

Pinchot's first example of an organization that embraces intrapreneurship is 3M that has a tradition of encouraging employees to create their own projects to realize their ideas. But the archetypal example of intrapreneurship initiatives is Lockheed Martin's Skunk Works which was founded long before the term intrapreneurship was coined (Lockheed Martin, 2016). Of the more contemporary companies, Google is well-known for its focus on intrapreneurship by expecting and encouraging employees (especially engineers) to devote 20% of their time exploring new opportunities through their own projects. This is in addition to various idea contests (Groysberg et al., 2011).

It is clear that intrapreneurship can take very many forms and is definitely not an exact or well-defined activity; rather it is a situation where employees in established organizations behave like entrepreneurs to various degrees.

2.2.1 Why is intrapreneurship important?

Referring back to the taxonomy model (Figure 1) in the introduction of chapter 1 **intrapreneurship is a method or vehicle for creating innovation**. So the motivation for cultivating intrapreneurship is to create innovation.

Note that intrapreneurship is one of many ways to create innovation. But as Pinchot puts it; "Innovation almost never happens in large organizations without an individual or small group passionately dedicated to making it happen", and these individuals or small groups are the intrapreneurs (Pinchot, 1985). This is a rather strong claim since it rejects the usefulness of planned, non-intrapreneur driven initiatives to create innovation. But noting Benner & Tushman's claims that process management and corporate control regimes impede exploratory/discontinuous innovation (Benner & Tushman, 2001, 2015) I'm inclined to at least partially agree with Pinchot if one seeks to achieve discontinuous innovation (see: 2.1.3 and 2.1.4). This is further reinforced by studies that indicate a positive relationship between intrapreneurship and corporate performance (Antoncic & Hisrich, 2004; Marcus & Zimmerer, 2003).

Consequently, intrapreneurship is a good and possible necessary means to achieve higher levels of innovation.

2.2.2 Organizing team based intrapreneurship

As mentioned intrapreneurship can have many different forms since it is associated with certain behavioral patterns and values, not specific activities. Everything from idea

competitions, hackathons (Wikipedia.org, 2016a) or employee driven projects (Groysberg et al., 2011) are artifacts that may cultivate intrapreneurial behavior in organizations. However, this paper focuses on intrapreneurship organized in teams or in specific organizational units. When intrapreneurship is organized in teams or units there are some recurring patterns of how to structurally organize people in order to foster intrapreneurship.

One idea is to structurally distance intrapreneurs from the rest of the organization in order to buffer away bureaucracy and cultural aspects that would hinder the intrapreneurs. Clayton Christensen argues that experimenting units (eg. the intrapreneurs) must be completely separated from exploiting units (Benner & Tushman, 2001; C. M. Christensen, 1997). Two common ways to do this are called the Ambidextrous Organization and the Break-out / unsupported team.

The Ambidextrous organization: The ambidextrous organization is commonly associated with an organizational structure or architecture where one creates distinct business units that are tightly integrated at the senior executive level (Benner & Tushman, 2001; O'Reilly & Tushman, 2004). In practice this involves creating a new business unit that is buffered from the rest of the organization. The new business unit is the intrapreneurship organization of the corporation and the idea is to avoid that this unit gets affected by the bureaucratic structures or culture of the old organization.

However, many authors emphasize that ambidexterity is not just about organizational structure, but about creating the capability to both handle exploitation and exploration in the organization. Structure is not a sufficient condition to create ambidexterity. It is necessary to have an overarching vision in addition to good culture and values(Benner & Tushman, 2015; O'Reilly & Tushman, 2004). Also Jansen et al. found that cross-functional interfaces for knowledge exchange (such as liaisons or teams) between the two units are beneficial (Jansen, Tempelaar, van den Bosch, & Volberda, 2009). Consequently one does not automatically succeed with intrapreneurship by merely creating a certain organizational structure. O'Reilly & Tushman notes:

"A clear and compelling vision, relentlessly communicated by a company's senior team, is crucial in building ambidextrous designs" (O'Reilly & Tushman, 2004)

An ambidextrous organization typically takes the form shown in Figure 3.
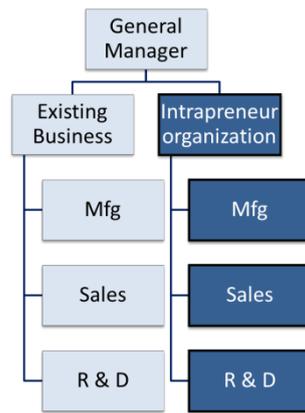
Figure 3 The Ambidextrous Organization

The break-out or unsupported team: Another well-known way of organizing intrapreneurship is the use of a break-out or unsupported team. This involves creating an autonomous and self-organizing team or unit outside the existing organization. The unit is not a part of existing management hierarchies but is usually integrated in the existing organization through senior management. This unit is supposed to mimic an entrepreneur team and should be held back as little as possible by the formal and informal elements of the existing organization.

The main distinction between the ambidextrous organization and this pattern is the size of the new unit. Break-out teams are usually teams and not complete organizations with several functional departments.

This pattern has been used successfully by many companies throughout history. Lockheed Martin's Skunk Works is a famous example (Lockheed Martin, 2016) of creating autonomous teams outside the existing organization[4]. IBM also frequently used what they called IBM (Independent Business Units) when they needed higher levels of innovation. The IBM PC was created by such a team consisting of 12 engineers and a division vice-president. This team managed to create the immensely successful IBM PC in just 12 months, a feat unthinkable within the existing organization's bureaucracy (Camenker, 1983).

However, there is one important caveat associated with the success examples. Both in the case of IBM and Lockheed Martin the goal was quite clear and specific. Skunk Works was initially created to develop a jet fighter plane (The XP-80) (Wikipedia, 2016), while IBM created

---

[4] Although Skunk Works started out like a breakout teams, it may actually be more like the Ambidextrous Organization today.

Estridge's team specifically to develop a personal computer. The fact that these teams were unencumbered with organizational bureaucracy let them reach their goals rapidly. But would this effort have succeeded if these teams were created with a more open ended and vague goal? Additionally, a successfully developed product is not enough create commercial success or market penetration. So in the case of IBM, was it factors outside Estridge's team, such as luck or good marketing that caused the success of the IBM PC? O'Reilly and Tushman claim that the ambidextrous organization pattern is superior in causing exploratory capabilities compared to the unsupported team.

This type of organization takes the form shown in Figure 4.
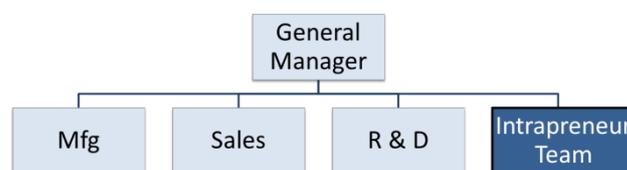
Figure 4 Break-out or unsupported team

There are other less radical ways of organizing intrapreneurship with less emphasis on organizational structure.

The cross-functional team: This is often seen as a way to create self-directed teams with a high degree of autonomy and self-sufficiency because they include difference functional expertise. Much research point out that cross-functional teams have a favorable effect on innovation, which implies that this may be a good way of organizing intrapreneur teams (Love & Roper, 2009; Song, XM; Montoya-Weiss, M; Schmidt, 1997). The cross pollination between different expertise and practices, such as marketing, finance and software development, provides the team with a broad set of complimentary capabilities. A broader set of capabilities in the team gives the team more means to achieve its goal and allows it to rely less on external resources.

Cross-functional teams may be both formal and informal, but are detached from the management hierarchy. However cross-functional teams are not buffered from the rest of the organization and may be exposed to the adverse effects of bureaucracy and culture to a much higher degree than the ambidextrous organization and the break-out team.

The cross-functional team may be illustrated like this:
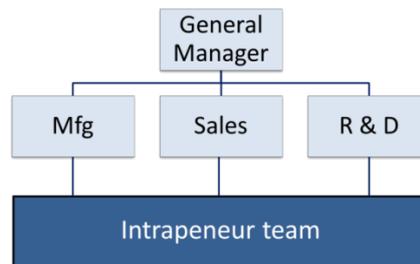
Figure 5 Cross-functional team

Functional design: This is when intrapreneurship efforts are led by the functional units where the intrapreneurs are employed. The intrapreneurs are completely integrated into the regular organizational and management structure. The marketing department may have an intrapreneur team or it may be organized under R&D. Note that even though intrapreneur teams are organized and controlled by one business function, they may be staffed with people with different backgrounds, possibly from the other departments thus forming a cross-functional team. In one of the case organizations in this paper, the intrapreneurs were organized as cross-functional teams within the company's R&D function.

The functional design may be illustrated like this:
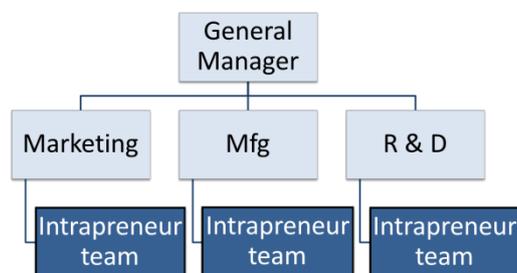
Figure 6 Functional design

2.3 Factors that drive or inhibit successful intrapreneurship

The core of this paper's research question is factors that drive or inhibit team-based intrapreneurship. This is a topic that has been research by other scholars. Through both literature studies and empirical research scholars Hornsby and Kuratko (in cooperation with other authors) have created a 5 factor model (Hornsby, Kuratko, & Zahra, 2002; Kuratko, Montagno, & Hornsby, 1990). This model is based on how the company internal environment

influences middle managers' initiative to perform corporate entrepreneurship activities (aka. intrapreneurship). This model consists of these elements:

1. Management support
2. Resource availability
3. Organizational Structure
4. Risk-taking
5. Reward

However, in the 1990 study Kuratko et al. only find empirical support for the top three factors. They note that the reward factor(5) is integrated into resource availability (2) while risk-taking(4) is integrated into management support (1)(Kuratko et al., 1990).

In a qualitative study of Danfoss Drives, a Danish engineering company, Christensen builds upon Hornsby and Kuratko's factors. However, due to the context of Danfoss Drives as a knowledge-intensive and complex company she proposes to expands the model with thee additional factors (K. S. Christensen, 2005);

6. Communication
7. Culture
8. Process

In a 1991 study Zahra found that expansive corporate strategies have an intensifying effect of intrapreneurship. The author also found that the external environment of the organization, such as dynamism and hostility, are factors that affect intrapreneurship (Zahra, 1991). Similar observations were made by Antoncic & Hisrich and Covin & Slevin, adding industry life cycle stage and product demand as external environmental factors(Antoncic & Hisrich, 2004; Covin & Slevin, 1991). Thus corporate strategy and external environments seem to be important factors.

In my 7 factor model I incorporate the elements proposed by of the aforementioned scholars. But since this paper revolves around team based intrapreneurship the team dynamic and efficiency and the team's constituents, individuals, need to be taken into account also. In fact the aforementioned research seems to indicate that teams and individuals are not particularly popular perspectives in this context. Therefore it is very interesting to explore these two factors.

I have also added a factor that represents the existence of formal innovation initiatives, processes or programs. I add this factor because I observe that innovation or intrapreneurship programs are becoming very popular in large organizations in order to defend their competitive positions against entrepreneurs and highly innovative corporations such as Google and Facebook. Marcus and Zimmerer observed positive effects of intrapreneurship programs in 9 Fortune 500 companies(Marcus & Zimmerer, 2003). I would like to reassess this factor in my studies in order to see whether there are antecedents or prerequisites for these programs to be effective.

The factors proposed above by Christensen, Kuratko and Hornsby are integrated into my model in the following ways:

Organizational structure (3), Reward (5) and Process (8) are all formal elements of an organization and thus are integrated into the factor **Formal Structures**.

Communication (6) and Culture (7) are all informal elements integrated into the **Informal Structures** factor alongside values and norms.

Management Support (1) and Resources Availability (2) are integrated into the factor **Strategic focus.** Management support and resource availability are contingent of strategic focus of all levels of management in the organization.

The remaining element, Risk-taking (4) is associated with several factors in my model since risk-seeking behavior is an individual trait, a management propensity and a cultural trait (both on team and organizational level). Thus, in my view multiple factors lead to risk-taking by intrapreneurs.

This paper	Hornsby & Kuratko	Christensen	Zahra	Marcus & Zimmer	Covin & Slevin
Individuals	Risk-taking	-	-	-	Competency
Teams	Risk-taking	-	-	-	-
Formal structures	Organizational structure, Reward	Process	Organizational structures	-	Organizational Structure Business practices Organizational Resources
Informal structures	Risk-taking	Communication, Culture	Values	-	Organizational Culture
Strategic focus	Management support, Resource availability, Risk-taking	-	Growth-oriented strategy	-	Mission Strategy, Competitive tactics, Top management values & philosophy
Situational context and environment	-	-	Environmental dynamism, hostility, and heterogeneity	-	External environment: technological sophistication, dynamism, hostility, industry life cycle stage
Intrapreneurship programs	-	-	-	Intrapreneurship programs	

Table 1 Other authors' factors for intrapreneurship compared with this paper

I summarize these factors in the following illustration:
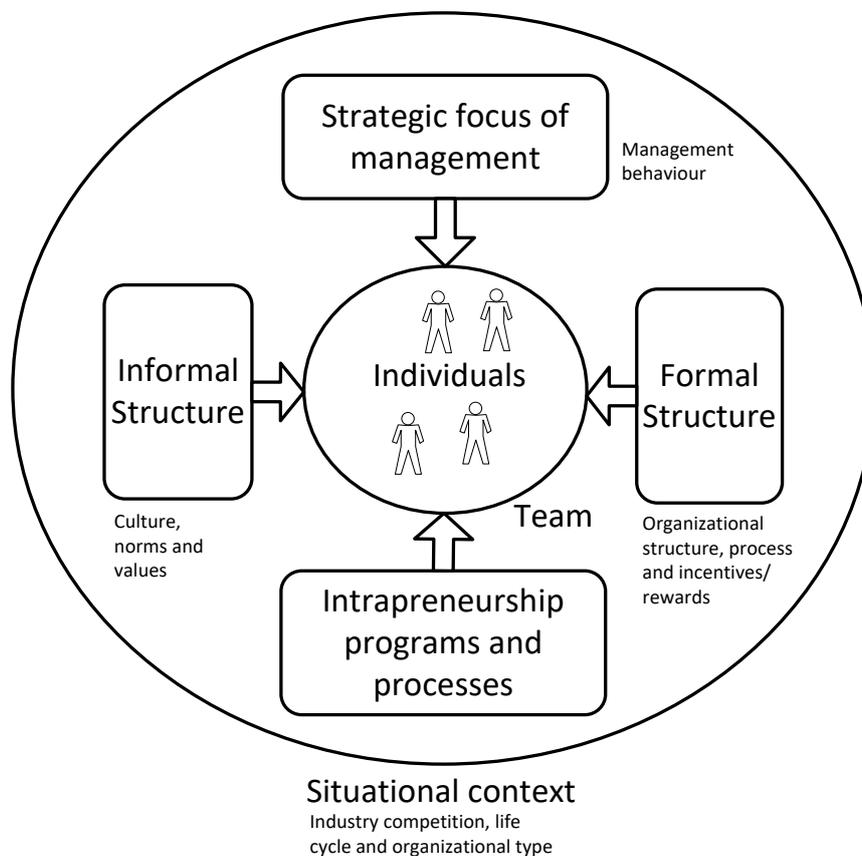
Figure 7 Factors that drive or prevent successful intrapreneurship

In the following sub sections, I will dig deeper into each of the 7 factors.

2.3.1 Individuals

According to Pinchot innovation almost never happens without the existence of passionate individuals (or groups of them). The individuals in question would be the entrepreneurs outside the corporation, and the intrapreneurs on the inside. Consequently having these individuals is crucial according to Pinchot, and not having them may cause innovation efforts to fail (Pinchot, 1985).

But who are these individuals and how can established organizations find them? What are the behavioral and cognitive factors that characterize these individuals? Baron explains that entrepreneurial individuals are persons who take action to pursue opportunities. These individual have certain cognitive abilities that make them superior in innovation related processes. They are good at generating ideas through the expansion and combination of

cognitive concepts. They are good at identifying viable business opportunities because they are good at cognitive pattern matching. They are good at acquiring resources because they have good social skills and manage to build wide social networks. Finally, they have a mood or emotional affect that helps them in many ways, e.g. they have contagious enthusiasm(Baron, 2007).

According to Sarasvathy (Sarasvathy, 2001a, 2001b), the classic entrepreneur has a different reasoning than what is common in established organizations. Sarasvathy calls this concept "Effectual Reasoning" or "Effectuation". This is a more means-oriented reasoning than classical managerial thinking called "Causal Reasoning". Summarized, effectual thinkers have no single set goal but imagine several effects and outcomes based on the means available to them. Read (Read, 2011) calls this the "bird-in-hand" principle where you start with what you have and look for business opportunities based on this. The opposite, causal reasoning, is the more academically "correct" way of thinking. It is the goal-oriented approach where one tries to plan how to apply available means in order to achieve a set goal. Figure 8 illustrates the two alternative models of reasoning.
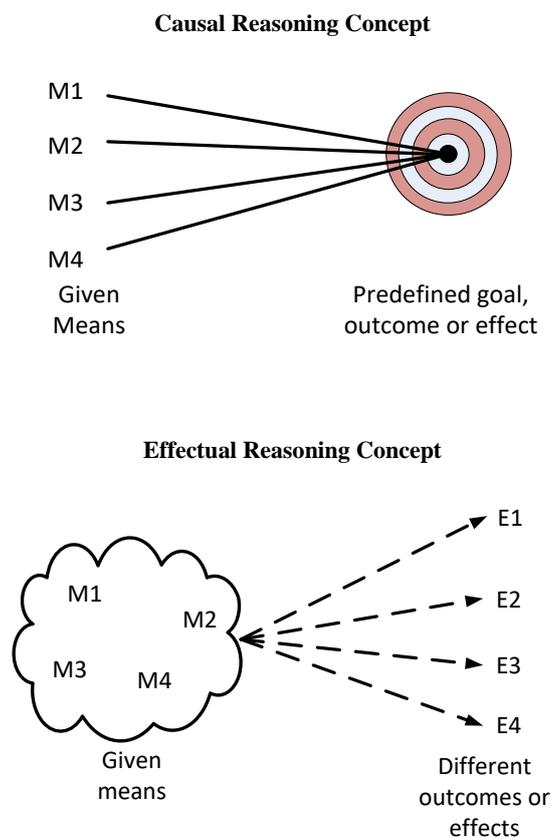
Figure 8 Causal reasoning vs. effectual reasoning

A common distinction between causal and effectual thinkers is their reliance on planning and future prediction. Causal thinkers try to gather data in order to predict the future and then execute according to a plan. Effectual thinkers work in a more dynamic and experimental fashion so to speak. They attempt to control the future instead of predicting it, thus changing the rules of the game to their favor. They are also more aligned towards using the network around them and forming partnerships.

In the context of entrepreneurship, the cognitive skills presented by Baron and the concept of effectuation seem to greatly drive success. But do intrapreneurs benefit from the same elements and to which extent? Also, the corporate environment may affect and effectively inhibit action even though the intrapreneur individuals have these cognitive skill sets. Thus it may not always be straight-forward to find the right individuals within your organization because the corporate environment may hide their entrepreneurial behavior.

In this paper the question is how important of a factor individuals are in order to succeed with intrapreneurship. Additionally, these leading individuals, do they have Baron's entrepreneurial characteristics and/or are they effectuators?

Note that the behavior associated with effectuation should also be looked at in the team context. A team's behavior and thought process can be either effectuation, causal or possibly both (see: 2.3.2). This is one of the topics in the in depth interviews.

2.3.2 Team dynamic and efficiency

Although entrepreneurship is associated with special individuals, they tend to surround themselves with skilled individuals, and form high-performing teams. When solving complex tasks, especially in dynamic environments where decisions need to be made quickly based on imperfect information, a team should be more than just a sum of individuals and individual capabilities. According to Sjøvold, teams have certain levels of maturity, based on team dynamic. A very mature team is completely self-organized and has an outstanding flexibility in changing functions between *task orientation, group nurturing, loyalty to decisions and the ability to challenge*. A team that masters all these functions in a flexible manner is in a state of "innovation" according to Sjøvolds framework (Sjovold, 2007; E Sjøvold, 2014). Although very few teams achieve this level, this is the ideal situation for very hard problems, such as when one attempts to achieve higher levels of innovation and the task at hand is very unclear.

This premise suggests that success in intrapreneurship hinges on the team's maturity and ability to work effectively. There are two main questions here; firstly, how important is the team dynamic succeeding in intrapreneurship? Secondly is the team's efficiency the main source of success or are the individuals and their capabilities more crucial? Maybe intrapreneur teams need strong leaders in order to succeed. But then again, teams in the highest maturity state (innovation) should be self-organizing and should not have one strong leadership figure; everyone should be leaders.

In this research, Sjøvold's methodology for measuring team dynamic, SPGR, is used to explore any connections between the team's achievements and the team dynamic. This will indicate whether the intrapreneurship effort is led by certain individuals, or if the group as a whole contributes equally.

As mentioned in the previous section, teams and not only individuals may show behavior associated with either causal thinking or effectuation(Read, 2011; Sarasvathy, 2001a, 2001b). If we assume that effectuation is more effective when seeking higher levels of innovation, one would prefer to have a team that shows this behavior. Some aspects of effectuation, such as quickly changing course in order to change the rules of the game to the effectuator's advantage, may be coupled with the behavior of high maturity groups since they are able to quickly change course when the environment changes. Following this, one would suggest that intrapreneur teams that want to work as effectuators should aim against a high level of team maturity.

2.3.3 Formal structures – organizational structure, process and incentives

Formal structures such as organizational structure, processes and specific incentives have great effect on employees' behavior. Over time formal artifacts affect communication, cognition and assumptions; thus, formal structures are internalized into the culture. But how do formal structures affect intrapreneurs?

Benner and Tushman find that process, procedure and standards oriented organizations become unable to cultivate non-continuous (explorative) innovations, which results in weak long term performance (Benner & Tushman, 2001, 2015). Further Leonard-Barton explores the concept of core rigidities defined as core capabilities that inhibit innovation. Leonard-Barton claims that capabilities consist of four dimensions with both formal and informal properties such as (1) knowledge and skills, (2) technical systems (3) managerial systems and (4) values and norms. The second and fourth dimension contain formal elements such as

information systems, procedures, incentive systems and educational systems. These elements are both possible assets and inhibitors for innovation (Leonard-Barton, 1992). Finally, the popularity of the ambidextrous organization can be seen as a sign that one has given up on changing organizations to cater for intrapreneurship and innovation. Rather, the solution is to create a new, separate organizational unit to handle higher levels of innovation (O'Reilly & Tushman, 2004) (see: 2.2.2).

This research suggests that formal structures greatly affect what levels of innovation the company is able to achieve. In the context of intrapreneurship, this is also true. Looking at Table 1 in section 2.3, we see that a range of scholars have variations of formal structure as factors that affect intrapreneurship(K. S. Christensen, 2005; Covin & Slevin, 1991; Hornsby et al., 2002; Kuratko et al., 1990; Zahra, 1991). For example, both Zahra and Covin & Slevin find that formalized control and structure are inhibitors of intrapreneurship.

But can intrapreneurs succeed in a hierarchal, bureaucratic and process oriented organization where incentive structures favor stability and not variability? In the in-depth interviews of intrapreneurs in this research, interview subjects were asked about the effect and importance of this factor. In addition, the organizational structure of the intrapreneurship initiatives is specifically explored.

2.3.4 Informal structures – values, norms and culture

As with formal structures, informal ones such as values, norms and culture affect behavior. According to Baer and Frese, an environment of sanctioned personal initiative and psychological safety is associated with higher learning, higher performance and better application of employees' creativity. However, peers or managers may perceive personal initiative as negative and threatening, since it disrupts the status quo such as routines(Baer & Frese, 2003).

According to Leonard-Barton's discussion of core capabilities and core rigidities(also discussed in 2.3.3), capabilities have a fourth dimension, namely values and norms associated with the organizational modus operandi. The two elements, empowerment of individuals and high status for those that support the dominant discipline, may enhance the company's development in some cases. However, these elements may also hamper development. Empowerment may create conflict between individuals and the desired strategic direction of the company. In addition, individuals within non-dominant disciplines may get low status in the company, even though these individuals have skills and knowledge required for new

development and innovation. In this case, norms and values constitute parts of core rigidities (Leonard-Barton, 1992).

Organizational culture is a very strong driver of organizational cognition on all levels. Schein defines culture as a pattern of shared basic assumptions that is built up over time in an organization, and taught to new members as the "correct" way of thinking(Schein, 1985). Norms and values are closely related with culture (Tripsas & Gavetti, 2000), and an organizational culture can both drive and inhibit innovation, thus affecting the intrapreneurs' chance of succeeding. Lucas & Goh suggest that organizations where security is valued over risk-taking and status quo is valued over change will be less likely to create innovation. They also point out that organizational culture was an important culprit in Kodak's demise because the company's culture and hierarchal structure prevented it from responding to the digital photography disruption. Despite Kodak having access to digital photography capabilities, the dominant assumption was that Kodak meant film (Lucas & Goh, 2009). The story of Polaroid is very similar. Even when pioneering the digital photography field, the company could not part with its razor/blade business model, ending in its demise (Tripsas & Gavetti, 2000).

The question is how much values, norms and culture affect intrapreneurship initiatives. Of course, intrapreneur teams must have an effective team culture but this is closely associated with team dynamic as discussed earlier (see: 2.3.2). Covin and Slevin claim that culture is a key determinant of and the first step in fostering intrapreneurship (Covin & Slevin, 1991) and the issue at hand is how these elements affect intrapreneur teams from the outside. Baer and Frese claim that an organizational climate of initiative and psychological safety is favorable for innovation (Baer & Frese, 2003). This is supported by Covin & Slevin and Zahra(Covin & Slevin, 1991; Zahra, 1991). But what if the organization's culture does not have these favorable properties? Does structural buffering between the intrapreneurs and the rest of the organization (as explained in 2.2.2) suffice? What if the intrapreneurs require resources from their organization? May values, norms and culture prevent access to those resources? What if the intrapreneurs are creating process innovations that need to be integrated into the rest of the organization?

The role and importance of informal structures, e.g. values, norms and culture, are explored as part of the in depth interviews.

2.3.5 Strategic focus

As mentioned in section 2.3, Zahra claims that expansive corporate strategies drive intrapreneurship. This indicates that certain types of corporate strategies are favorable when attempting intrapreneurship. But the strategic focus of an organization includes both the official corporate strategy and the strategic focus of management on all levels. The latter is associated with management cognition and behavior with relations intrapreneurship. Much research has demonstrated that management affects the firm's performance outcomes (Castanias & Helfat, 2001; Holcomb, Holmes, & Connelly, 2009; Lucas & Goh, 2009), including the ability to drive intrapreneurship (K. S. Christensen, 2005; Hornsby et al., 2002; Kuratko et al., 1990). As mentioned in section 2.3, Hornsby and Kuratko (et al.) created a 5-factor model for intrapreneurship where the first factor is management support (Hornsby et al., 2002). Management controls resources that intrapreneurs may rely on to succeed. This means that management's long-term propensities towards risk taking and organizational change vs. conservation of status quo will be an important constituent of the strategic focus. As Lucas and Goh explain, management propensities will determine the outcome of the battle between dynamic capabilities and core rigidities when the organization faces disruption (Lucas & Goh, 2009).

All levels of management will affect an organization's strategic focus. Evidence suggests that discrepancies between top-level and middle-level management's behavior cause major problems. In the case of Kodak, top-level management was unable to overcome middle-level management's resistance to digital photography (Lucas & Goh, 2009). In the case of Polaroid, members of the Electronic Imaging Division were unable to convince top-level management to abandon the razor/blade business model (Tripsas & Gavetti, 2000). Both these situations contributed to the failure of their respective companies. I.e. the misaligned strategic focus prevented these monumental companies from detaching themselves from existing business models.

Strategic focus probably affects intrapreneurship in some way, but the question is how strong this factor is compared to others. Is intrapreneurship possible without an aligned strategic focus of management? What if strategic focus is highly aligned across managers? In this thesis, this is explored as part of the in-depth interviews.

2.3.6 Situational context and environment

The situational context of an organization can include all external environmental factors that affect the company. The effect of such factors on intrapreneurship has been studied by several scholars, resulting in several suggested drivers and/or inhibitors such as: dynamism, technological opportunities, product demand, hostility and industry life cycle (Antoncic & Hisrich, 2004; Covin & Slevin, 1991; Zahra, 1991). In this paper, all factors that can be classified as situational context and environmental factors are considered as long as the research subjects deem them important.

In this research, interview subjects were asked about the importance and effect of situational context as part of the in depth interviews.

2.3.7 Innovation programs and processes

This factor is defined as all formally endorsed and sponsored programs, projects, processes and information systems in place to drive innovation and/or intrapreneurship. Of course, these can be identified as *formal structures* and one could very well argue that they belong under that category (2.3.3). However, this factor is particularly important and very contemporary. In my professional career I frequently observe discussions and sales pitches of normative or prescriptive practices for achieving higher levels of innovations. This could be stage gate processes for planning innovation projects, information systems for gathering and developing ideas or formally endorsed intrapreneurship initiatives. There is evidence that intrapreneurship programs have a favorable effect on corporate performance (Marcus & Zimmerer, 2003), but it is interesting to gauge how important the research subjects deem these programs, and what the antecedents are (if any).

A 2013 literature study of innovation processes points out that many of the practices used to manage innovation are simple linear models designed to control and manage complexity. But practices such as stage-gate models or liner project planning methodologies are simplifications of inherently complex problems, and deploying linear models on this problem may inhibit innovation instead of drive it. The authors point out that practitioners of innovation must find arrangements that harness complexity as a generative force, not try to lower it. Innovation happens in spite of (and not because of) organizing structures (Garud, Tuertscher, & Van de Ven, 2013). This is in line with Benner and Tushman's finding that process management effectively reduces variation and consequently reduces chances of explorative (higher level) innovation, resulting in a worse long term financial performance

(Benner & Tushman, 2001, 2015). The implication of this is that the formal processes might do more harm than good, at least in some incarnations. But it is important to note that a formalized innovation process may be fundamentally different than a management-sponsored intrapreneurship initiative. The first may be a prescriptive methodology, while the latter may be a mandate for a team to "do whatever they want".

In this paper the factor of innovation programs is included in the in-depth interview to gauge the interviewees' opinion on this subject, and to see how they rank this factor in comparison to the aforementioned ones. In addition, interviewees were asked which such programs or processes are present in their organization.

3 Method

3.1 Design of Study

As mentioned in chapter 1.2, the purpose of this paper is to study team-based intrapreneurship and find how the aforementioned factors (see: 1.2 and 2.3) drive or inhibit the intrapreneurship effort. The research method is aimed at investigating the existence of the proposed factors and which ones appear as antecedents or prerequisites. It is also of interest to study other aspects such as the teams' innovation process (e.g. causal or effectual thinking), the organizational structure and what types and levels of innovation typically are achieved. Since the goal was to gather as much information and subtleties about the research subjects as possible, a qualitative method was deemed suitable. This enabled me to capture more detail and insight to cast more light on unexpected causes of success or failure in addition to opportunities for new learning.

However, in order to get a deeper understanding of the factor number two; team and team dynamics, it was also necessary to use a quantitative approach since doing interviews of entire teams would be too time-consuming. Also, since the context of this paper is team based intrapreneurship, it was of particular interest to capture more insight into the team dynamic of such teams. Therefore, the overall research method for this paper is both qualitative and quantitative.

The study consists of the following elements:

1. Qualitative study in the form of interviews of managers and team members. The goal was to assess the driving and inhibiting factors of intrapreneurship in addition to other

processes and current achievements (level and type of innovation).

2. Quantitative study of team dynamics of intrapreneur teams

3.2 Choice of research subjects

To make sure that the research could uncover some kinds of consistent patterns across the various organizations it was necessary to find a sufficiently large population of subjects. But at the same time, due to time and resource constraints, it was necessary to limit the scale of the study. Each organization under investigation was quite time consuming because it involved both interviews and surveys that required extensive after work and follow-up. In addition, participants in SPGR surveys were offered a walkthrough of the results as a compensation for their participation[5].

It was challenging to find organizations that were both interesting subjects and at the same time willing to share their time for this study. The study involved interaction with several managers, some of which were C-level executives. Consequently, it was sometimes difficult to schedule appointments. Therefore, the selection of subjects was partly based on convenience. Subjects were found and approached using personal and professional networks. Here are the factors used to choose research subjects:

1. **Convenience:** Based on personal and professional network, organizations that would yield a good chance of cooperation were chosen as leads. The criterion was connection to individuals in intrapreneur teams or their managers.

2. **Industry or sector:** Intrapreneurship is inevitably different across different industries. In digitally dependent industries such as media publishing, finance, telecommunications, and public administration, information technology has accommodated a lot of radical innovation and disruption, especially with regards to new business models. Therefore, intrapreneurship in these contexts often involves software development. Software development demands very little capital resources, so this context fits well with an independent team based approach for intrapreneurship. Furthermore, my professional network has a good reach for digitally dependent types of organizations[6].

---

[5] It's a good principle to give something in return for the participators' time

[6] The author works in an IT consultancy

3. **Existence of intrapreneurship initiatives:** To study intrapreneurship it is necessary to find subject organizations that are actually attempting to create innovation through intrapreneurship. In many cases this is not public information, so it was necessary to use connections within the organizations to retrieve this information.

4. **Geographic location:** Since it was preferable to face to face interviews instead of teleconferencing or telephone interviews, there was a preference for organizations with intrapreneur teams located in the vicinity of Oslo.

3.3 Case study design

Since the research focus of this paper is intrapreneurship teams, the research design was oriented towards teams of intrapreneurs. However, in most cases managers, both middle-level and executives, were instrumental in the organization's intrapreneurship initiatives. Therefore, capturing insight from managers, not just intrapreneur team members, was deemed as very important.

The design of the research effort was as follows: A manager (middle-level or executive) closely associated with the intrapreneur team was interviewed along with at least one member of the intrapreneur team. In addition, SPGR team dynamic analysis was done on the intrapreneur team. This design gave good insight both from within the team and from the outside through the manager.
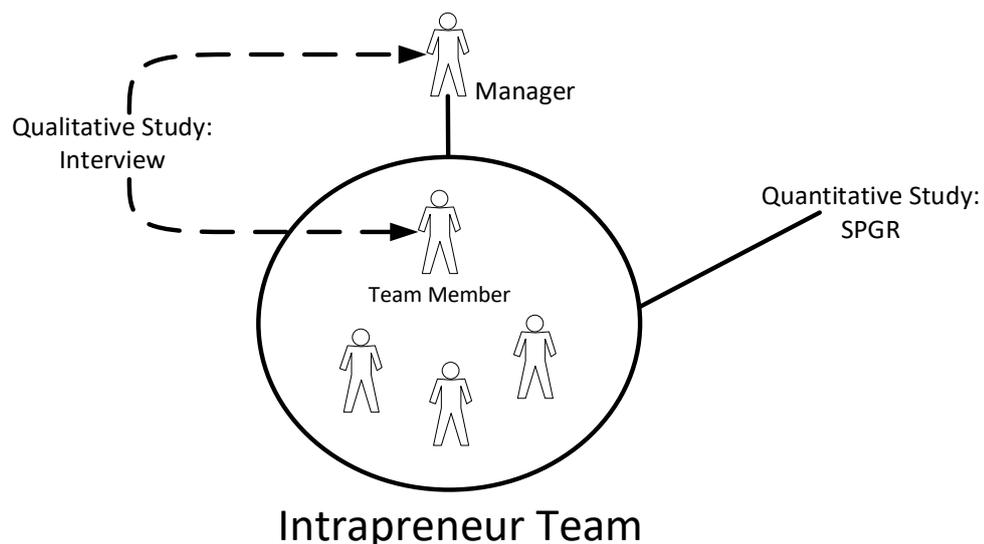
Figure 9 General case study design

However, in a few (2) cases it was not possible to interview both the manager and a team member. Consequently, there were some variations of this design where only a manager or a

team member was interviewed. In addition, in one case it was not possible to perform the team dynamic analysis. However, all case studies gave good and nuanced insight into their respective organizations.

3.3.1 Qualitative study – in depth interviews

This investigation consisted of in-depth semi structured interviews and involved one to three individuals in the subject organizations. Interview subjects included:

- Executive managers
- Middle level managers
- Team leaders (part of team)
- Thought leaders (part of team)
- Team members

The main purpose of this study was to investigate the effect of the aforementioned driving and/or inhibiting factors of intrapreneurship. However, this research gave the opportunity to seek other insight related to intrapreneurship, such as:

- Purpose of intrapreneurship initiatives
- What were common types of innovation(see: 2.1.2) created by the organizations
- What levels of innovation(see: 2.1.3) typically achieved by the organizations
- Intrapreneurial thought process (effectuation vs. causal thinking, see: 2.3.1)
- Organization of intrapreneurship (see: 2.2.2)
- Description of existing formal intrapreneurship initiatives

An interview guide was developed for the interviews. It has 8 sections with discussion topics. The guide was written in Norwegian and is attached as an appendix. The 8 sections are the following:

1. **What is intrapreneurship and how is successful intrapreneurship defined:** This section contains discussion questions where the interviewees were asked about their perception of what intrapreneurship is and how they would define successful intrapreneurship. The main purpose of this question was to set the context and to get a common understanding of what intrapreneurship is across interviews. The question also triggered many interesting discussions that shed light on subtler and less obvious motivations for intrapreneurship initiatives.

2. **Current success in intrapreneurship and innovation:** This section's purpose was to gauge how successful organizations have been in creating benefits for their organizations through intrapreneurship. In order to get less biased opinions, interviewees were asked to name examples. This gave insight into the organizations' perception of their own level of success and gave comparative information in order to rate the success of various organizations against each other.

3. **Types and levels of innovation:**
   a. **Types of Innovation:** This section asked the interviewees about what types and levels of innovation they have achieved both in general and specifically through their intrapreneurship initiative. The purpose of querying about types of innovation is to investigate whether any types of innovation are more common amongst the organizations in question and for team-based intrapreneurship. This section also spurred thought processes where research subjects were able to point out more examples of innovation because they were only thinking about specific types of innovation (e.g. product innovation).

   b. **Levels of Innovation:** Levels of innovation is investigated to control for varying understanding of the concept of innovation, i.e. some organizations could consider themselves innovative because they were very good at continuously improving their products while others would deem themselves very little innovative since the had not produced radical innovation.

4. **Factors that drive and inhibit success in intrapreneurship:** Interviewees were presented with all seven factors (see: 2.3). They were asked how these factors affect the intrapreneurship work and in general if and how these factors affect innovation in general in the organization. They were also asked which factors were deemed most important.

5. **Description of thought process and behavior of individuals and teams (Effectual vs. causal thinking):** This topic aimed to assess the cognitive and working process of the intrapreneur teams (and individuals) with relation to Sarasvathy's framework of causal thinking versus effectuation (Sarasvathy, 2001a, 2001b). This was a way to see if they were trying to work according to a specific plan or if they only had an overall vision and no specific goals. The interviewees were shown two figures (see Figure 8 in section 2.3.1) representing the two styles and given some explanation. They were told that one alternative (causal thinking) was based on "using your means to fulfill given goal" while the other (effectual thinking) was to "see separate outcomes for your

various means". This topic created very interesting discussions where the subjects gave a deeper explanation of the process of their intrapreneurship efforts.

6. **Organization of intrapreneurship:** The interviewees were shown the various organizational patterns explained in 2.2.2 and asked to choose which structure corresponded the most with their actual organization. The purpose of this was to see how the intrapreneurship initiative is organized and to attempt to correlate success (and other characteristics) with organizational structure.

7. **Specific measures taken to cultivate intrapreneurship:** Interviewees were asked what measures and initiatives their organization had taken in order to cultivate intrapreneurship. The purpose of this topic was to gauge the intrapreneurial spirit of the organization and to see if the initiative associated with the intrapreneur teams was the only initiative present.

8. **Other comments:** Interviewees were given the opportunity to share other comments and reflections.

The study consisted of 12 interviews across 6 different organizations. All interviews except one were done on the organization's office locations. One interview was done using teleconferencing. Interviews lasted roughly 1 hour.

3.3.2 Quantitative study of team dynamic

As mentioned, the context of this paper was team-based intrapreneurship, i.e. individuals working together in a team to produce innovation. Therefore it was of interest to focus particularly on these teams. Since team dynamic and efficiency is one of the seven proposed factors (see: 2.3) for intrapreneurship, it was of high interest do a specific analysis of the teams in addition to the interviews.

SPGR (short for "Systematizing the Person-Group Relation") was chosen as the quantitative instrument to conduct this analysis. The SPGR framework is an integrated set of methods and tools for quantitative measuring of organizational aspects. The SPGR framework has various tools or modes that correspond to three levels in the organization; the organization, the team and the individual(SPGR Institute, 2016). Although all levels could be applied to this research, due to time constraints only team level analysis was done. This is also the strongest area of SPGR.

SPGR is an operationalization of the Spin-theory of Small Groups which is a theory that builds on more than 70 years of research. The basis of this theory is that small groups have a set of basic group functions and maturity stages. The basic group functions are:

- Control (and task orientation)
- Dependency and loyalty
- Nurturing
- Opposition

The maturity stages are:

- Retraction (lowest)
- Team spirit
- Production
- Innovation(highest)

A team with low maturity masters only few of the basic group functions while a high maturity group manages to dynamically balance all four functions through all individuals (no fixed roles or function). In the context of Spin-theory, team-development is the process of moving teams to higher maturity stages(Sjovold, 2007; E Sjøvold, 2014; SPGR Institute, 2016).

Thus for challenging tasks such as creating innovation, where the team needs to be able to flexibly apply the collective abilities of the team members, high maturity teams are beneficial. On the other hand, low maturity teams will find their team dynamic an important inhibitor of their work.

The SPGR method has been developed in the course of the last 35 years and is a tool for measuring how well teams and their individuals master the four basic group functions, and consequently the team's maturity. Measurements are taken through a semantic differential scale, where adjectives are used to gauge team member's opinion about each other's behavior (Hill, Osgood, Suci, & Tannenbaum, 1958; Osgood, May, & Miron, 1975; Snider & Osgood, 1969). Data is gathered using electronic surveys.

Each participant (team member) evaluates all team members (including themselves) by rating them based on 25 questions[7]. Participants are asked to rate how often subjects show behavior

---

[7] Only 24 questions are actually used for the analysis but a 25th question is used in order to introduce new phrasings and adjectives to the method up to date with development in languages.

that conforms to a proposition containing three adjectives. A 3 point scale is used where 1 means never, 2 means sometimes and 3 means often. The propositions have the following form:

#	Proposed behavior
1	Committed, determined, makes constructive contribution to cooperative efforts
2	Principled, detail-oriented, stubborn
3	Non-committal, impulsive, demands attention
…	…
23	Reserved, distant, withdrawn
24	Faithful, friendly, shows respect to everyone
25	Self-motivated, know best, a loner

Table 2 Example questions or propositions from the SPGR survey

Based on the answers of the team members, SPGR will expose numerical statistics of following characteristics of the team such as;

- Basic functions: The strength and frequency of each basic function.
- Polarization: Fragmentation and the forming of sub groups
- Mental models: Variation in the team members' mental models, which means that the team members do not agree on the current situation of the team.
- Influence: Difference in influence between the most and least dominant individuals

The SPGR tooling will produce something called an SPGR-field diagram where each individual is plotted. Location in the field diagram, circle size and color of individual elements decide the characteristic of each team member. Averaging all participants' evaluations gives an average diagram which is the most commonly used output (E Sjøvold, 2014).

The following image is an example of an SPGR average field diagram from one of the teams in this work:
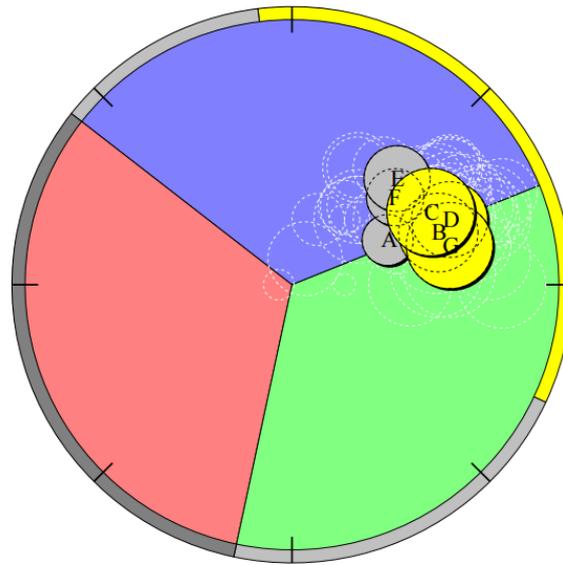
Figure 10 SPGR field diagram example

The field's colors represent the functions opposition (red), nurturing (green) and control (blue). Each bubble is a team member and as mentioned location, size and color of each bubble represents various characteristics. Yellow bubbles are individuals that are balanced in their usage of the basic functions whereas gray bubbles represent more retracted but loyal individuals. Note that bubbles can take the colors of the specific group functions (red, green or blue) if the individuals use one basic function consistently. Bigger bubbles are the most dominant individuals, and vice versa.

In this example we see two clusters of individuals which represent two sub-groups. One sub-group of influential and engaged individuals and one sub-group with more retracted but loyal individuals.

The white dotted circles around the diagram show each individual reply. A wider spread of the dotted circles represents higher variance and consequently a higher variety in mental models. In addition to the field diagram statistical indexes of the group's characteristics are also produced (see above). In this specific example the indexes are as follows:

Index / characteristic	Value	Comment
Control	4.47	Control and nurturing are relatively balanced. Loyalty is very high (max =9) and opposition is low. This implies slight imbalance
Nurturing	3.53	
Loyalty	6.10	
Opposition	2.02	
Polarization	3.09	Typical range is 1 – 5 where lower is better. We see relatively high levels on these indexes.
Mental models	2.82	
Influence	3.27	

Table 3 Example showing indexes from an SPGR survey

Note that SPGR may also provide a detailed profile of team member's behavioral patterns (as observed by the peers) but this information was not used in this research.

SPGR was chosen as a tool in this study for several reasons:

- The tool has a great fit for the purpose of this analysis
- The method has favorable statistical characteristics(Endre Sjøvold, 2002):
  - Close to 100% face validity
  - Up to 80% predictive validity[8]
  - Cronbach's alpha between 0.78 and 0.92
- The method has readily available IT-tools for conducting surveys that greatly simplify the process
- The author was familiar with the method and its benefits
- The author had easy access to the method and tools through the author's advisor

---

[8] Predictions of future outcomes in teams when no actions is taken by the observers.

4   Results and empirical findings

In this chapter results from both the qualitative (see: 3.3.1) and quantitative (see: 3.3.2) study are summarized. Each subsection contains a brief description of the studied organizations. Since most organizations wanted to anonymity, all information that enables direct identification is not reproduced. Therefore, name, exact size[9] and other contextual information that simplifies identification of each organization is omitted. However, the desire for anonymity did not inhibit the research in any way since almost all gathered information is insightful even though general in nature.

Interviews were conducted in Norwegian but each subsection contains summaries of the most relevant statements, translated to English. The summaries are grouped by the sections of the interview guide (see: 3.3.1). The role of the interviewee is used as placeholder for each individual when it is necessary to point out "who said what" e.g. *executive*, *manager, team member.*

Findings from the quantitative team dynamic study are presented in a separate sub section. SPGR-field diagrams along with key indexes (mental models, group fragmentation, influence, loyalty) are shown and followed by an analysis of the result.

At the end of this chapter, after summarizing all case studies, key points of all cases are summarized in a table.

4.1   Organization A

This organization is a large public administration company. The company's processes are very dependent on IT and like very many public sector organizations; this company is going through a large digitalization transformation.

In this case study, the intrapreneur initiative is very informal; it consists of a team of software developers and IT-operations technicians that have been able to work in a more autonomous manner by distancing themselves from the official processes and structure. The result is a team with an entrepreneurial mindset that develops new software tools to improve the organization's IT-related processes and practices.

---

[9] Instead of exact size a size model based on employees is used. Small is <50 employees, medium is <500 employees and large is >500 employees.

In this case study, 3 individuals were interviewed and the team went through an SPGR-analysis. One of the interviewees was the team's manager. The other two were members of the team.

4.1.1 Interview summaries

4.1.1.1 Section 1: What is intrapreneurship and successful intraprenurship

Interviewees agree that intrapreneurship is about creating business opportunities and user adoption of new products and services. The manager points out that Intrapreneurship and innovation is not research; it is about creating lasting value, not just knowledge.

Both team members talk about intrapreneurship as personal engagement outside everyday tasks. It is associated with independence, a start-up feeling, a "we"-feeling. It needs trust and psychological safety.

Success is to create lasting value for the organization and user adoption of new products. It requires trust from management and protection from bureaucracy. Management must share the team's vision.

> *"Intrapreneurship is like a dandelion that grows through asphalt."*
> *-Team member*

Key points

- Intrapreneurship is about creating business
- Success is when one creates lasting value and user adoption
- Intrapreneurship is about value, not just knowledge
- Intrapreneurship is personal engagement and a startup feeling
- It requires trust, psychological safety and shared vision with management

---

4.1.1.2 Section 2: Success of intrapreneurship and innovation

This team has succeeded in creating a new platform for software development with a much higher degree of automation. It is a service that helps others be more efficient in their work. Lots of time and resources are saved because of this. This creates value for the organization. Furthermore, after automating tasks the team has now time to do more innovative work. The sign of their success is user adoption of their tools.

The manager claims that the organization is very bureaucratic. It is very process and control-oriented and spends too much resources gaining control when they need flexibility and change. Initiatives to create innovation that have to cross organizational units are less likely to succeed. This team succeeded because they had isolated problems could be solved with few people and little dependency. The team is self-sufficient and does not have a customer or product owner that mandates their direction.

A team member claims that success was contingent on the manager's trust in the team's direction and decisions.

> *"They don't have a customer or "product owner" that mandates their action or direction. In fact, it is the opposite; they tell their "customers" what they should be doing"*
>
> *-Manager*

Key points

- Team improved efficiency in internal processes through automation. This enabled more functionality cheaper. They alleviate pain in internal processes
- User adoption is proof of this team's success
- Organization mostly unsuccessful in creating innovation outside team
- Bureaucratic organization that attempts to increase control when they actually need flexibility and change
- Autonomy, self-sufficiency and few dependencies help success
- Trust from manager and lax control cause of success

4.1.1.3 Section 3a: Types of innovation[10]

The team creates some innovation of all four types but their main contribution is in **product** and **process** innovation. They develop new tools that improve the process of the rest of the organization.

The team is organized as a self-sufficient and independent team, with a rapidly changing process. This constitutes some kind of organization and process innovation associated directly with the team.

---

[10] See section 2.1.2 for definitions of the types of innovation.

Although they create tools for internal use, they claim they have some **market** innovation because they relating to their customers in an innovative way. They listen to several stakeholders and try to make products for (internal) marked demand, not by specification.

"The team tries out new technology continuously in order to create tools that can help the team work better, but these tools also become products for users outside the team."

-Team lead

Key points

- The team creates process innovation in their organization through software tools (product and process innovation)

- The team's way of organizing and working is new to the organization (organization innovation)

- The team relates to their customer in an innovative (market-driven way) even though their customers are internal (market innovation)

4.1.1.4 Section 3b: Levels of innovation[11]

All interviewees agree that higher levels of innovation are an effect of long term work and consequently a long series of lower level innovation (mostly level 1). But the team's work has enabled level 2 or 3 process innovation, because they have fundamentally changed IT processes in their organization.

A team member points out that one of the products they have developed may even reach level 4 innovation. It enables the business side to work in an entirely new fashion with IT development. They can work much more data driven and perform experiments instead of developing products speculatively. It also enables cooperation between business and IT on an entirely different level.

"We have managed to fundamentally change some of the processes associated with IT development and operation. But this happens rarely. Most of the innovation is at level 1 and 2."

-Team member

---

[11] See section 2.1.3 for definition of different levels of innovation

> **Key points**
> - Most (80-90%) of innovation is either level 1 or 2
> - Team has enabled up to level 3 process innovation (improved IT processes)
> - Level 4 on one particular case where product development can be done in a radically new manner

4.1.1.5 Section 4: Factors that affect intrapreneurship

Every interviewee agrees that a set of skilled, senior and "unafraid" **individuals** is one of the most important assets for an intrapreneurship team. According to the manager, innovation is a swarming process and the more independent and crafty individuals you have, the more innovative you are. This is associated with the **team dynamic**. The team is a psychologically safe environment with personal warmth. One team member claims that the mix of individuals in the team creates an innovative team.

Further the manager claims that a decentralized **culture** where individuals agree on a common vision and goal across teams is important. According to a team member, the culture is also a hindrance because people can behave conservatively because they are used to very stringent control regimes. This is very difficult to change and they believe they would have come further if this was different.

The manager is skeptical of formal **innovation programs** as long as they are centralized and top-down. He claims that such programs must be decentralized and based on "swarming". However, such programs may provide resources. A team member points out that such programs will only work if the organization has the right **culture**.

The manager talks about **strategic focus** and vision. He says that this is very important since everyone must understand why innovation is important. The organization has a new CIO/CTO who has changed **focus** and it is now much easier to be more agile and deliver faster. According to the team lead, this is one of the most significant single factors that may enable innovation for the rest of the organization.

Formal structures such as stringent process and request-oriented processes causes rigidity and slows innovation according to the team lead. He claims that if they were forced to follow corporate processes, they would not have succeeded.

"The culture in the team is like a sourdough. It can spread and grow, but if you dilute it too much you will kill it"

-Team member

Key points

- Senior, unafraid and crafty individuals one of the most important factors
- Team dynamic and culture in team also very important (for this team's success).
- Intrapreneurship programs cannot succeed without the right culture in the organization
- Strategic focus (which was changed with new CTO) most important enabler for innovation in the rest of the organization

---

4.1.1.6 Section 5: What is the thought process of the intrapreneurs?

The team is both goal-oriented and means-oriented. They have a persistent overall vision and strategic goals they try to follow. But in everyday work they have a much more effectual way of working. The manager points out that they are good at exploiting their skills and competency (means-oriented) to "do more of what they are good at". The team members claim that they throw away failed attempts promptly and try again with something different.

"The road map towards the vision changes constantly based on the opinions of the team members and the users of their products."

-Team member

Key points

- Both causal and effectual
- Have an overall vision and strategic goals
- But work in an effectual manner in their everyday work
- The team tries to "do more of what they are good at", and throws away failed attempts. This is typical effectual behavior.

4.1.1.7 Section 6: How is their intrapreneurship effort organized

Two out of three interviewees claim that they are organized as a functional team. They have the same manager formally, but the team consists of people from various parts of the organization. The team is self-sufficient, meaning they have all necessary capabilities to solve all their tasks themselves.

The team member claims they are functionally organized, but want to be cross-functional. He also points out that he does not think innovation depends on organizational structure.

It is relevant to point out that all team members are part of the IT department so one would call this a functional organization. However, since the IT department is very big, a team with individuals from several sub-units could be called cross functional, especially since the team is self-sufficient.

> *"They are a full stack team meaning that they can perform all necessary work themselves.*
> *-Manager*

Key points

- 2/3 claim that they are cross-functional within the IT department
- One claims that they are functionally organized.
- All team members part of IT department but the team is self-sufficient (one of the properties of cross-functional teams)

4.1.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

The manager explains that due to the team's success the organization is now trying to duplicate this team structure and create more cross-functional teams. The organization is steering towards fewer silos and more flexible teams. They want fewer formal and persistent roles and more focus on ownership of what you're working with (e.g. products).

The manager's specific measure to help the intrapreneur team is to protect it against the corporate culture. The team's measure was building trust in the team and with outside stakeholders. A specific action to build trust was to co-locate the team close to the most important stakeholders.

> *"Process is not king, product owners are. Give more responsibilities to teams."*
> *- Manager*

Key points

- Cultivate intrapreneurship by duplicating team structure of the current team
- Protect the team against the corporate culture
- Co-locate team with most important stakeholders

4.1.1.9 Section 8: Other comments

The manager explains that the team's biggest weakness is that their relationship to their creations and its history is too close. The team lacks a competent customer and has all the power, which causes its members to become introverted.

One of the team members comments that without their manager, their success would not have been possible.

> *"The team has all the power which may cause them to become too much introverted…"*
>
> *-Manager*

Key points

- Lack of competent customer external of team inhibits them
- Manager was instrumental in team's success

4.1.2 Team survey summary

The survey was sent out to 7 participants where all 7 responded. The SPGR field diagram for this team is as follows:
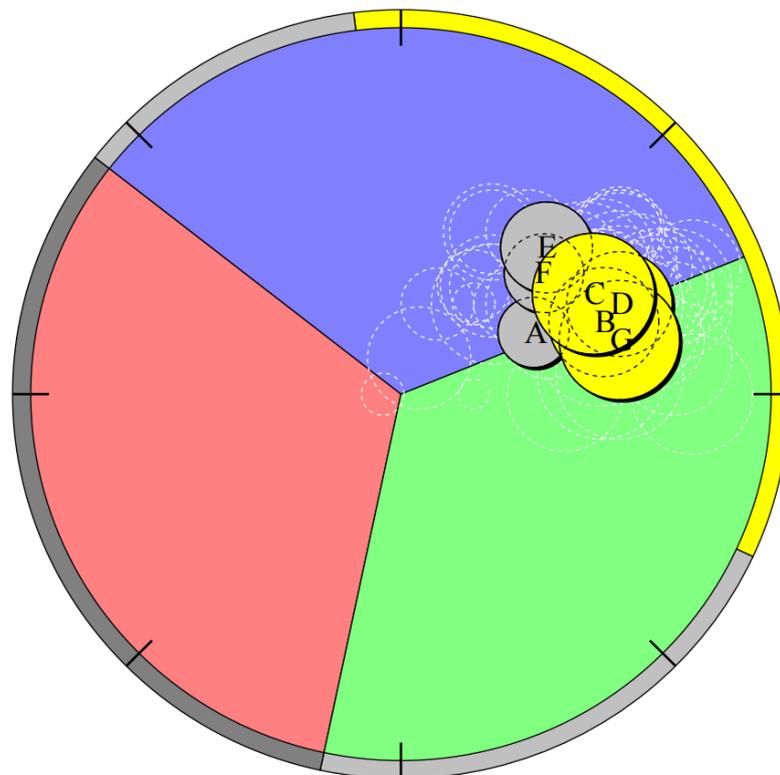
Figure 11 SPGR Field Diagram for Organization A's team

The following table shows the statistical indexes for the team.

Index / characteristic	Value	Comments
Control	4.47	Control and nurturing are relatively balanced. Loyalty is quite high (max =9) and opposition is low. This implies slight imbalance between loyalty and opposition.
Nurturing	3.53	
Loyalty	6.10	
Opposition	2.02	
Polarization	3.09	Polarization is quite high, indicating subgroups.
Mental models	2.82	Mental models are relatively high indicating a discrepancy in perception of the situation.
Influence	3.27	Influence is quite high, indicating a big difference between the most and least influential individuals in the group.

Table 4 Statistical indexes for Organization A's team

We see clearly from the SPGR diagram that this team has two sub-groups; one group consisting of individuals B, C, D and G and another consisting of individuals A, E and F. This is backed up by the *polarization index* which is quite high. Also, seeing that the sub-groups have yellow vs. gray circles in addition to big differences in circle sizes shows us that this team is generally being led by about half the team. The rest are more or less loyal followers. This is backed up by the *influence index*. In addition, a high *mental models* index shows that there is relatively high variation between the different participant's perceptions of how the team dynamic is. The imbalance between *loyalty* and *opposition* indicates that the team lacks the ability to criticize decisions.

Going back to the interviews, we see that the manager confirms the imbalance between loyalty and opposition. In section 8 of the interview, he claims that the team's biggest weakness is their strong connection to their creations. They lack a clear external stakeholder and consequently the team has become introverted.

During the interviews with the team members, psychological safety and the culture of the team was emphasized. However, the survey shows that not all members find themselves able to challenge the team.

This team has achieved a lot, but it would seem that most of the team's direction is steered by half the team. In sum, the maturity of the team is limited and it would benefit from team development and engaging the "grey" individuals. However, the sub-group of yellow circles is a group with very good team dynamic and the rest can be seen as loyal followers or doers.

Note that the team members interviewed were individual D and G.

4.2 Organization B

This organization is a medium-sized company in the digital content publishing industry. They rely on a digital business model driven by information and insight (e.g. customer information) and consequently meet the threat of digital juggernauts like Google and Facebook as well as smaller startups. The company has a strong focus on innovation and intrapreneurship and has several initiatives to nurture an innovation spirit among their employees. The case study is based on an intrapreneur team participating in a program for employee driven intrapreneurship. This is a program where employees are sponsored by management and given access to corporate resources to work on their own idea on their own time. Teams typically get access to IT assets/server resources, office spaces, advertising, human resources, coaching and access to data.

The intrapreneur team has been working on their idea for almost two years and has managed to launch a totally new product in the market. However, they have had limited success in gaining user adoption and are considering taking the idea in another direction.

In this case study three subjects were interviewed: An executive manager who sponsors and advises the intrapreneur team and two members of the team. In addition, the intrapreneur team participated in an SPGR-analysis in order to assess the team dynamic.

4.2.1 Interview summaries

4.2.1.1 Section 1: What is intrapreneurship and successful intrapreneurship

Team members explain intrapreneurship as employees developing something new within the frame of and with support from the company. Success is when the product serves its purpose and provides value. According to one team member, an intrapreneurship initiative is successful when the intrapreneurs manage to break out of the parent company.

Access to resources is a factor for success.

The manager points out that intrapreneurship is a way to practice being more innovative and improving the organization's innovation capabilities. Success is when all employees can contribute to create innovation and prove the viability of their ideas. Intrapreneurship programs are about helping this happen.

"Employees should not only be able to share ideas. Through the organization's intrapreneurship program, they should also be able to prove that their ideas are viable."

-Executive

Key points

- Intrapreneurship is about skill, practice and improvements. It is about letting employees test their ideas.
- Planned initiatives may be innovative, but they are not intrapreneurship
- Successful intrapreneurship is when all employees can contribute to innovation and prove the viability of their ideas.
- Success is when one creates something new that serves it purpose and provides value

---

4.2.1.2 Section 2: Success of intrapreneurship and innovation

According to the manager, the intrapreneurship program has given about 10% of employees the opportunity to work as entrepreneurs. The intrapreneurship program has created 7 product concepts whereof 4 are still viable. 40 employees have been involved since 2012. This has strengthened the employer's brand and kept employees from leaving.

One team member points out that there is great willingness to create innovation through intrapreneurship in the company. They want intrapreneurship to be part of their DNA. But the current initiative has not yet succeeded in attracting a user base.

The team members think the intrapreneurship program is still relatively new and immature. It is necessary to learn more. The intrapreneurship program has not produced any radical opportunities yet.

"Intrapreneurship efforts have given about 10% of their employees the opportunity to learn how it is to work as entrepreneurs. This has also resulted in a strengthening of the employer brand which has kept employees from leaving the company."

-Executive

Key points

- Current initiative (of team) has not succeeded in attracting a user base

- Intrapreneurship program has created several concepts where 4 are still viable. It has also strengthened employer brand

- The intrapreneurship program has not produced any radical opportunities yet.

4.2.1.3 Section 3a: Types of innovation[12]

All interviewees agree that innovations created in the organization are mostly **product** and **market** innovations intertwined.

The current intrapreneur team has a new product for a new kind of market:

- The product has new properties compared with existing products in the company.

- It has a totally different brand, pricing model and marketing channels such as social media.

The manager adds that the company has also created very important **process** innovation: Prioritizing on the company level happens continuously which enables them to follow demand without waiting until the next planning cycle. This enables the company to launch new products and features faster.

"Most initiatives create new products but they are tightly connected to innovations in market interaction. Many new products target specific new market segments. In addition, they create new partners in the market to create more successful solutions"

-Executive

Key points

- The organization produces mostly product and market innovation intertwined.

- The current initiative is the same.

- The organization has produced an important process innovation with regards to corporate prioritizing.

---

[12] See section 2.1.2 for definitions of the types of innovation.

4.2.1.4 Section 3b: Levels of innovation[13]

The company started with a level 4 innovation since they disrupted their market. Since then they have only created level 1 through 3. They reach level 3 by augmenting the value chains of services to greatly improve customer experience.

Their intrapreneurship program mainly creates level 1-3 innovations but they have one case now that might create a radical innovation (level 4). An important purpose of the intrapreneurship program is to create direct competitors to the mother company

Team members point out that their initiative mostly creates level 2 and 3 innovations and level 4 to some extent. They have created an entirely new product but the basic concept is the same as previous products. It is not a new business model, but it has the potential to disrupt markets if they succeed.

> *"If the product had succeeded in the marked it would have disrupted the business of the mother company. The product is more polished and the business model is better."*
>
> *-Team member*

Key points

- Company started with a level 4 innovation (disrupted market)
- Since then they have achieved mostly lower levels. Level 3 in cases where they augment and extend value chains
- The current initiative from the team is mostly level 2 and 3. It has the potential to disrupt the market if they succeed.

4.2.1.5 Section 4: Factors that drive and inhibit success in intrapreneurship

All interviewees agree that **individuals** with skills, in-depth knowledge and success in their field are very important. The intrapreneurs are willing to face challenges and create something in spite of organizational obstacles. Without them you cannot do much, but they are not enough. Individuals are also the starting point of good **teams**.

The manager claims that the existence of their **intrapreneurship program** is an obvious factor. He also points out that an innovative **culture** is a given in this organization. It is

---

[13] See section 2.1.3 for definition of different levels of innovation

accepted to challenge the establishment. This is necessary in order to get the right incentive structures, so organizations that lack favorable culture will encounter problems.

The team members agree that a **team** with good cooperation and a shared understanding is very important. The fact that this team is not mature has caused problems. The misalignment of team members results in the team being unable to focus and make fast decisions.

Strategic focus is pointed out as an important asset. According to the manager, ideas must be embraced by the whole company. This relies on the strategic focus of the top management. One of the team members argues that there is a misaligned strategic focus between middle-level and top management with regards to intrapreneurship. They welcome risk-seeking behavior differently. Although there is no direct opposition, there is somewhat less support in some places. The team member believes this is because the company does not really need intrapreneurship (in the short term) seeing as current business is good.

Also, the second team member interviewed noted that the company is getting bigger and somewhat bureaucratic, with several levels of approval (This comment was caught through other comments, see: 4.2.1.9). This is an example of an obstacle formed by **formal structures.**

Both the manager and a team member point out that the **intrapreneurship program** is a way of keeping intrapreneurs inside the parent company. They are able to pursue their idea while still working there. As the manager points out in section 2 (section: 4.2.1.2) of the interview, this helps create an employer brand.

> *"Informally everyone agrees intrapreneurship is important but formally processes and incentives are not tailored to support intrapreneurs…. When the team starts moving fast they get slowed down by air resistance"*
> *-Team member*

> *"The intrapreneurs are the ones who manage to create something in spite of obstacles in the organization. They are willing to face challenges without giving up."*
> *-Executive manager*

Key points

- All agree that individuals are very important

- Manager claims that the intrapreneurship program is an important enabler

- Culture is a given in this organization

- A lack of a mature team has caused problems

- Strategic focus is an important asset, and misaligned focus and incentives cause problems.

4.2.1.6 Section 5: What is the thought process of the intrapreneurs?

The manager states intrapreneurs mostly start with a stated goal (causal thinking). They have a burning engagement to reach this goal. But they eventually realize that the world is more like the other alternative (effectual thinking). They have made radical changes to their ideas through several iterations and have realized that it is better to work effectual.

One of the team members supports this notion. Causal thinking did not work and they eventually learned that they need to work more effectual and test new ideas iteratively.

According to the manager, an iterative approach is a part of the company's culture. Their employees know that even though they might have a clear goal they want to achieve, they have to change course later.

The second team member states that at first the vagueness of the goal was a challenge for some team members. For example, the software developers in the intrapreneur team needed a clear vision to know what to create. Furthermore, they want data to validate their vision, not just gut feeling. This has caused challenges when deciding how to change course when things were not working out.

> *"Intrapreneurs in this organization have a strong iterative culture. Even though they have a clear goal of what they want to achieve at least in the first phase, they know that they can change course later. They are conscious about their goal but they do not hold on to it indefinitely."*
>
> *-Executive manager*

Key points

- Intrapreneurs start with causal thinking but later realize that they need to use effectual thinking to succeed.
- An iterative approach is a part of the company culture
- An unclear vision and lack of real validation data makes it difficult to know how to change.

4.2.1.7 Section 6: How is their intrapreneurship effort organized

The manager states that intrapreneurship is organized as a combination between a cross-functional and unsupported team. One of the team members describes them as an unsupported team while the others describe them as a cross-functional team.

The manager further explains that if you want to create something radically different, it is necessary to structurally separate the intrapreneurs from the rest of the company and only integrate them through the board of directors. This has been practiced several times, either through acquisition of outside companies or break-out of new business.

However, he also explains that idea development and research should be done in the entire organization, not just in a separate department. Some opportunities for innovation are lost when creating separate units for innovation and intrapreneurship. Also, they risk creating A and B teams. Therefore the line organization must also be held responsible for innovation (of lower levels) and all employees should contribute.

> *"But a lot of innovation is lost when creating ambidextrous organization. The line organization must also be held responsible for innovations (of lower levels). Everyone must contribute to create innovation. You cannot define or organize your way out of this."*
>
> *-Executive manager*

Key points

- Unsupported team and/or cross-functional team
- Need to structurally separate intrapreneurs from the company to create radical innovation
- But it is necessary to create innovation in the entire organization and have a shared responsibility across all employees.

4.2.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

The intrapreneurship program is highlighted as a very important measure in this company. They also have innovation days and hackathons (Wikipedia.org, 2016a).

One of the team members points out that there is great focus on this initiative and that it is a returning topic in meetings. There is a goal that >5% of all employees should be engaged in the intrapreneurship program. He also suggests that intrapreneurs should be able to do some of their work during working hours, partly to exploit available corporate resources better. This is especially relevant in terms of human resources because people need to be at work if they are to help the intrapreneurs.

The manager says that in addition to the two aforementioned measures (intrapreneurship program and innovation day) they also have events to spread knowledge and culture such as innovation breakfasts. They arrange knowledge exchange arenas regularly where one shares concrete examples of intrapreneurship; what worked and what went wrong.

But there is also consciousness of the fact that one needs to break out radical business opportunities in separate units (apply ambidextrous organization). The fact that the company is able to have these discussions and make these decisions is an important capability.

"The proof is what counts!"
-Manager

"The parent company wants success stories to share and engage other employees."
-Team member

Key points

- Has the current intrapreneurship program in addition to other initiatives such as innovation days and hackathons.
- Also has other arenas for knowledge and cultural exchange
- The intrapreneurship initiative should let team members work during office hours to better exploit corporate resources

---

4.2.1.9 *Section 8: Other comments*

The manager points out that a culture with willingness to challenge, fail and learn is very important. One needs to get as much learning as possible out of their intrapreneurship programs. The organization needs to support the intrapreneurs when they experience failure. This is necessary to get people to come forward with ideas and try them out. Otherwise only newcomers will dare to try.

The first team member commented that the product they developed was of very a high technical standard. However, the emphasis on quality may have slowed them down.

The second team member also had a few comments regarding the team. He says that the team is its own biggest obstacle. There is very good cooperation between some people but not between everyone. He says that it would be better to have a team where people knew each other a little more and had a clearer common vision. This is an area where intrapreneurs need help. They also need to figure out why people want to work with intrapreneurship. What are their motives? Do they want money? Are they bored and want to be more creative?

Finally he notes that the company is becoming a bigger. Several levels of approval create bureaucracy. Middle-level management lacks incentives and top-level management does not have intrapreneurship high enough on the agenda.

> *"Shame must be avoided! It is important to accept that you can fall on your face".*
>
> *-Executive manager*

Key points

- Willingness to challenge, fail and learn is very important
- Too much emphasis on product quality in an intrapreneurship setting may slow down the team
- The team is its own biggest obstacle
- The company is getting bigger and more bureaucratic

4.2.2 Team survey summary

The survey was sent to 6 individuals where 5 responded (83% response rate). The SPGR field diagram for this team is as follows:
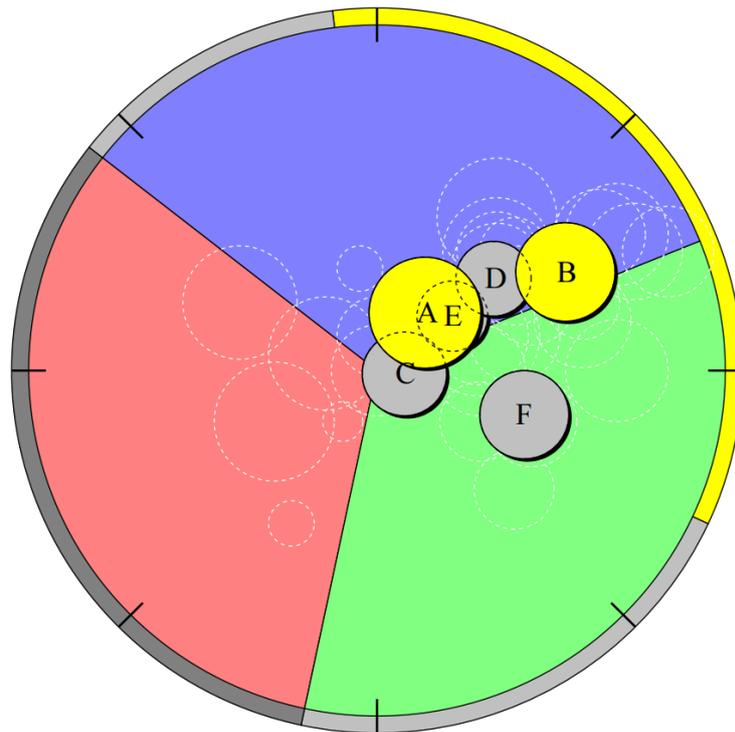
Figure 12 SPGR Field Diagram for Organization B's team

The following table shows the statistical indexes for the team:

Index / characteristic	Value	Comments
Control	3.87	Control and nurturing are very well balanced. Loyalty is a little high and opposition is low. This implies slight imbalance between loyalty and opposition.
Nurturing	4.00	
Loyalty	5.20	
Opposition	2.37	
Polarization	3.63	Polarization is very high, indicating fragmentation of the group.
Mental models	4.45	Mental models are extremely high indicating a very high discrepancy between individuals perception.
Influence	2.69	Influence is a little high, indicating that some individuals have more influence than others.

Table 5 Statistical indexes for Organization B's team

This is a team that has a lot of *polarization* and has become very fragmented. It is also very misaligned since the variation in *mental models* is very high. Only two of the 6 team members, A and B, have a balanced use of the basic functions, the rest are classified as retracted but loyal followers. Since both A and B are also the most influential individuals, it could seem that they are competing for control in the group. Of the two A is more dominating, while B is more engaging.

We see a clear match between comments from the interview and the SPGR result. One of the team members points out that the team is its own biggest obstacle, and it is not difficult to see evidence of this here. The team dynamic must be very challenging for the team, and it should indeed be seen as an important inhibiting factor for this team.

4.3 Organization C

This case is a medium-sized organization that is owned by the state and is under direct control of the Norwegian government. It is not a public administration agency but provides a commercial service to its customers. The company has existed for many years and has developed and renewed itself several times, but now it needs to create more radical innovation in order to engage new customers.

The company has formed an intrapreneur team in an attempt to develop new and innovative products for potential new customers. The team is organized outside the normal organizational hierarchy and the team's leader, who used to be part of the executive management group, now reports directly to the CEO. This team has been at work for about one year.

In this case study, 2 individuals were interviewed; the team's manager and a senior team member. A SPGR survey was done on the team members.

4.3.1 Interview summaries

4.3.1.1 Section 1: What is intrapreneurship and successful intrapreneurship

Both interviewees agree on the overall definition of intrapreneurship; entrepreneurship and innovation work in one's own organization.

The manager further explains that they want a new operating model in order to enable more radical innovation and they needed to form an intrapreneurship team to do so due to the limitations of their organization. The team member calls this "getting back to the original ways of working". He also claims that the topic of intrapreneurship has become very popular since large organizations are struggling to create enough innovation. Innovation happens more frequently in smaller environments and when they grow, focus changes to stability and control.

The manager defines success as when one makes an impact on the customer and at the same time transfers learning back to the organization. A successful intrapreneurship initiative

should also be the organization's spearhead in the way of thinking about innovation. The team member defines success in terms of 3 main things: (1) delivering results for the company (such as creating innovation), (2) changing the culture towards a more innovative one and (3) executing a strategy to become more innovative.

> *"...operational goals of the main organizations do not meet the demand for more radical innovation. The way you operate and measure value in intrapreneurship is different from their normal operating model. Because of this it is important to separate the two."*
>
> *-Manager*

Key points

- Intrapreneurship is entrepreneurship and innovation work in est. organizations.
- Success is delivering results that impact customers
- Success is also associated with transferring something back to the organization (such as culture and learning)

4.3.1.2 Section 2: Success of intrapreneurship and innovation

Both interviewees agree that they have not succeeded yet and still have many challenges. As the manager points out, they are neither satisfied with the results created by the team so far nor with their cooperation with the rest of the organization. There are several challenges such as coordination and cooperation with the organization. But as the team member points out, they have been able to create a culture that is different with less focus on operation and more on playfulness.

The manager claims that management is an important factor. Managers have their own KPIs and their areas of responsibility for which they try to get resources. They may not be positively inclined to intrapreneurship initiatives on the side. The intrapreneur team needs strong support and ownership from executive management in order to overcome these misaligned incentives. This challenge is especially present in relations to middle-level management. The team member has a similar observation. He claims that there is no intrinsic motivation or incentives in the organization to be more innovative even though it is a strategic goal. He also points out that their context (state owned) is an obstacle[14].

---

[14] These comments are relevant in the factors discussion as well and underline the challenges they have with regards to strategic focus.

Finally, with regards to the rest of the organization, the team member points out that the organization is not innovative enough. The focus is on operational efficiency.

> *"There is always a fight for resources. Managers have their own KPIs and areas of responsibility for which they try to get resources. They may not be positively inclined to intrapreneurship initiatives on the side."*
>
> *-Manager*

Key points

- Currently unsuccessful in creating any radical innovations
- Has created a team with a new and more innovation oriented culture
- Management incentives in the organization is one of suggested challenges

---

4.3.1.3 Section 3a: Types of innovation[15]

The manager points out that they create **product innovation** to a large extent, actually too much. They rapidly fall into the same way of thinking and end up developing variants of existing products instead of entirely new ones. The team member also points out that they have not created any innovative new products yet.

Both interviewees agree that the team has been successful in **process innovation**. They have adopted techniques such as Lean Startup and Google Design Sprints (McCue, 2016; Ries, 2011). These practices are entirely new to the organization but they are not radical in a global sense.

However, the manager thinks they need to think even more radical within the area of process innovation. He also points out that they have not been able to transfer this back to the organization.

With regards to **organizational innovation**, the manager mentions the way they have organized their intrapreneur team, because this is new for the organization. The team member points out organizational innovation associated with very successful partner relationships. This was a few years ago.

The manager comments that they are not good enough at **market innovation**, and that this is a field they should work more on. The team member mentions their ongoing CSR initiative as

---

[15] See section 2.1.2 for definitions of the types of innovation.

a field where they have created **market innovation**. They have unique relations to their market with regards to CSR and ethical operations. This is an integral part of the company's mission and they are world-leading in this field. (Note that this innovation was not created by the intrapreneur team).

> *"We have a strong focus on ethics and CSR. We have created very unique relations with the market with regards to CSR / ethical business. In this field we are world leading."*
>
> *-Team member*

Key points

- Much product innovation. Too much focus on this
- They have created process innovation in the team, but have not transferred it back to the organization
- Market innovation is something they should focus on
- The have been very innovative on a global scale with regards to CSR. This is an important market innovation.

4.3.1.4 Section 3b: Levels of innovation[16]

Both interviewees say that they create a lot of level 1 innovation all the time through the whole organization. This is typically associated with improvements of their products and how they are distributed. They are also very successful at increasing revenue through price regulation by improving content, even though the basic products are the same.

The manager mentions a few examples of innovations that reached higher levels (2) such as their early deployment of mobile-based distribution channels, which reached 30%-40% revenue very fast. The team member mentions their CSR and business ethics innovation as something that reached level 2 or 3.

The team is now working on several new concepts that could create architectural or level 3 innovations.

> *"We do mostly incremental innovation (90%). New products and services are already in the market through competitors."*
>
> *-Team member*

---

[16] See section 2.1.3 for definition of different levels of innovation

---

Key points

- 90% incremental innovation in the organization

- Some good examples of level 2/3 associated with distribution channels and CSR

- Working on new level 3 or 4 concepts

4.3.1.5 Section 4: Factors that affect intrapreneurship

The manager points out that all factors are important in their own way, but is quick to point out the importance of **individuals**. The team member also finds many of the factors relevant, but thinks that **strategic focus** and **individuals** are the two most important factors.

The manager explains that **individuals** with entrepreneurial spirit and drive to "walk through brick walls" are very important. The team member adds that these individuals are good at creating good **teams** around themselves.

Both see **effective teams** as something important, but as the team member points out, teams can become inhibitors if they are dysfunctional. The manager claims that it is relatively simple to create good teams with very specific goals. But with vaguer and more open-ended goals, he thinks it is extremely difficult to create good teams. So as long the goals are specific, it is very important to build effective teams but otherwise he is uncertain about the role of teams because of the complexity.

Culture or informal structures is mentioned by both interviewees and both point out that they have a **risk adverse culture** that affects the whole organization. The team member says that the enthusiastic individuals may struggle in such an organization.

According to the manager the intrapreneurship team wants to be independent from the **formal structures** in the organization. However, since they need access to resources (such as IT assets) and attention from management they end up struggling for focus and prioritization. Above, in 4.3.1.2 when successful intrapreneurship is discussed, the manager talks about misaligned **strategic focus** and incentive structures from management (especially middle level management) as a key challenge.

Both mention that the **context of the organization**, a state owned company with a board of directors with very strict control, greatly limits their options for experimenting and creating partnerships.

Finally, the team member claims that companies must be serious about **innovation programs** if they want them to work. One-off events such as an idea competition is not enough.

> *"The risk adverse culture affects the whole organization. Do things right, instead of doing the right things... A high-risk project with little predictability, such as the intrapreneurship initiative, always gets low priority. "*
>
> *-Manager*

Key points

- Many / all factors relevant
- Individuals most important. They also form good teams
- Teams important, but unclear about their role when the team's goal is vague
- Culture and misaligned strategic focus form risk adverse incentives and starves intrapreneurs for resources
- Their context is very limiting: state owned company

4.3.1.6 Section 5: What is the thought process of the intrapreneurs?

According to the manager the team follows the effectual model. They have a clear vision, but no specific goal. The rest of the organization is very much oriented around causal thinking.

The team member on the other hand claims that the team is mostly goal oriented (causal thinking) but they want to apply effectual thinking. He continues that they started out working effectually and see the clear advantages of working this way, but they are being pulled towards goal orientation due to reporting requirements. Experimentation does not fit this reporting model.

Both mention creating good partnerships as an important advantage, but they struggle a bit with this for several reasons (e.g. their organizational context, see: 4.3.1.5).

> *"An important obstacle is the requirement to report on goal attainment the same way as the rest of the organization. But since we need to experiment, this does not fit the reporting model"*
>
> *-Team member*

Key points

- The manager claims that they apply effectual thinking. They have a clear vision but not clear goals
- The team member claims that they get pulled towards goal orientation and causal thinking because of reporting
- Both think partnerships are an important advantage. This tactic in effectual thinking.

4.3.1.7 Section 6: How is their intrapreneurship effort organized

Both interviewees say they are organized as an unsupported team, but the manager calls them a light form of ambidextrous organization. The team member says that they wanted to create an ambidextrous organization, totally independent and with their own IT infrastructure. But they are integrated through top management and have to adhere to corporate standards such as reporting, and use common IT infrastructure.

The manager explains that they have had great success with the ambidextrous organization structure in an earlier project. At that time they created a separate unit to realize a specific goal. They had a clear goal and mandate and were able to reach this goal efficiently, but now when they have a much vaguer goal, the complexity is much higher.

> *"We wanted to create an ambidextrous organization. We thought about being totally independent and locating ourselves away from the mother company, having our own IT infrastructure etc. But in the current setup we are integrated through the top management, and have to adhere to some corporate standards…"*
>
> *-Team member*

Key points

- Mainly unsupported team
- Wanted to create an ambidextrous organization structure
- Have created an ambidextrous organization before with success, but then the goal was very clear

---

4.3.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

The intrapreneur team is one important specific measure according to both interviewees. In addition, the manager mentions that they have some HR-driven culture building initiatives

---

that are supposed to break down silos. They want to transform their organization to become less product focused and increase customer focus.

In addition to this the team member mentions other initiatives such as idea pitches by employees and the use of interns to come up with new ideas.

> *"We try to change and become more customer focused. From an IT and product perspective to customer focus."*
>
> *-Manager*

Key points

- The intrapreneurship team important measure
- Some other initiatives such as culture building to break down silos
- Transformation from product to customer focus

4.3.1.9 Section 8: Other comments

The manager points out two important challenges: (1) their strong political control due to the state ownership. (2) Their mission is not just profit. Their goals can be seen as mutually exclusive and difficult to balance.

The team member also mentions their context and ownership model as a key challenge. Additionally, he states that the organization is not hungry for innovation since the current financial situation is too comfortable.

> *"We struggle because we are a state owned company. We are something between a commercial corporation and a public management organization. We are not "hungry" for innovation because the current financial situation is too comfortable. The organization does not see the immediate need to execute change."*
>
> *-Team member*

Key points

- Important challenges are associated with ownership model: state owned.
- They have multifaceted business goal they need to balance (i.e. profit and ethics)
- There is little hunger for innovation in the company

4.3.2 Team survey summary

The survey was sent to 6 individuals where 5 responded (83% response rate). The SPGR field diagram for this team is as follows:
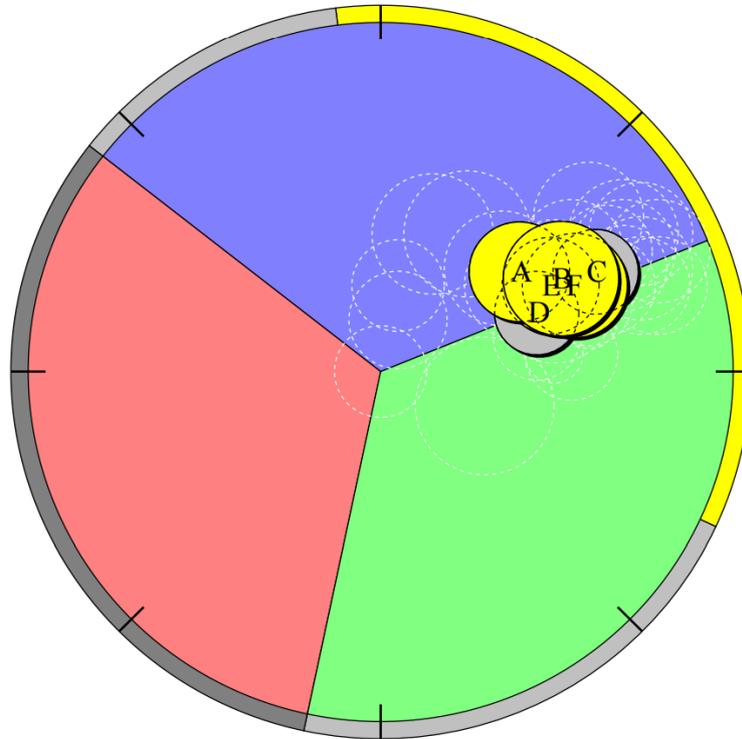

Figure 13 SPGR Field Diagram for Organization C's team

The following table shows the statistical indexes for the team:

Index / characteristic	Value	Comments
Control	5.33	Control is somewhat higher than nurturing, which indicates a slight control and task-oriented focus
Nurturing	4.25	
Loyalty	6.56	Loyalty is very high while Opposition is slightly low and provided by one individual. This implies an imbalance between loyalty and opposition.
Opposition	2.72	
Polarization	1.88	Polarization is low, so the group is quite cohesive.
Mental models	3.11	The Mental models index is quite high indicating a discrepancy between individual's perception and understanding of their situation.
Influence	2.14	Influence is not very high. This indicates a relatively good balance in influence.

Table 6 Statistical indexes for Organization C's team

This team is a control and task oriented, cohesive group that with a slight misalignment. The relatively low *polarization* value indicates good cohesiveness. Even though individual B is clearly the most influential individual, this is the group with the lowest *influence* variance of all groups in this research. But the most important property that challenges this group is the misalignment, which follows from a high *mental models* score. This indicates a lack of common understanding of the group's situation and may be caused by a lack of communication in the group.

As mentioned, the group function of control is quite strong in comparison to nurturing, which indicates more focus on tasks and execution and less on teamwork. This is reinforced by very high *loyalty*. Most members of the group do their job without much question. Further, if we look at the dotted circles in the field diagram, we see that *opposition* is actually provided by one or two individuals. Consequently the group should be good at executing specific tasks with a clear goal. But with their current situation and an expectation of higher level innovations from the team, the team dynamic should be seen as a challenge.

Going back to the interviews we see no direct indications that the team dynamic is perceived as an obstacle by the interviewees. However, interviewees agree that the team was not yet unsuccessful at the time of the interview. Further the team's manager believes that creating intrapreneur teams that can create radical innovation is very complex and challenging, and he expresses uncertainty about how to do this.

4.4 Organization D

This organization is a small but well established company that used to be in the content publishing industry. They used to be a traditional physical print publisher but managed to turn

over their revenue from 85% physical publishing to 85% digital services in just 10 years. The company has gained attention for this feat and is a star example of successful digitalization. They now have much focus on innovation and run projects with bleeding edge technology in order to create radically new services.

In this company I was able to interview one of the executive managers. He is the manager who works closest with new product development and innovation in the company. In this case no team members were interviewed.

The SPGR analysis was done on a product development team that had worked together on a recent project. In addition, I was able to analyze the executive team.

4.4.1 Interview summaries

4.4.1.1 Section 1: What is intrapreneurship and successful intrapreneurship

The interviewee states that intrapreneurship is letting organizational units foster their own culture and work independently. It is also associated with product development in completely new technological areas.

He continues that in order to manage a broad and complex product portfolio it is necessary to find creative ways of working. He thinks that companies that create independent teams are more likely to succeed with intrapreneurship.

> *"Companies that manage to create autonomous units that work independently are likely to succeed."*
>
> *-Executive manager*

Key points

- Intrapreneurship is allowing teams to foster their own culture and work independently
- It is also working in technologically new areas
- Companies that create independent teams are more likely to succeed

---

4.4.1.2 Section 2: Success of intrapreneurship and innovation

As the executive explains, the company has created about 50 software products in about 10 years. They have had high focus on helping their clients digitalize and have consequently

changed their business model towards this. They have about 55% of the total market in Norway.

They have managed this due to a very strong focus on product development, where all employees have contributed. They are also good at attracting good partners and maintain an efficient project constellation continuously.

They understand that they need to innovate continuously because they cannot survive on the long term on old products. Further, they are not afraid of failing and scrapping failed or outdated products.

> *"We have gone from 85% revenue in physical print to 85% revenue digitally in 10 years. We have reached a very large market share with our products in this time."*
>
> *-Executive manager*

Key points

- Has managed a transformation from physical to digital business model
- This is due to strong focus on product development
- They understand the need to innovate continuously

4.4.1.3 Section 3a: Types of innovation[17]

The interviewee states that they create a lot of **product** and **process innovation**.

With regards to **process innovation** they digitalize the client's work processes, in addition to providing business intelligence to improve management's decision-making.

They also create new **products** the customers "did not know they needed". Together with their clients, they identify their clients' unmet needs. One example of this is unit cost for services, which is an area where few clients have sufficient information. The company created software that fulfilled this need. This is innovative because they provide a digital solution to a problem very few actors know to solve. Their cooperation with (the very few) experts on these subject matters creates innovative solutions for the client.

---

[17] See section 2.1.2 for definitions of the types of innovation.

They also create **organization innovation** with relation to how they do product development. They are a small company with a cross-functional organization, and they use their partners to scale.

> *"We create new products the customers did not know they needed."*
> *-Executive manager*

Key points

- Most innovation is related to products and process
- Process innovation is often associated with improving their clients' processes and helping them digitalize
- They try to develop new products the clients did not know they needed.
- They have also created organizational innovations with regards to the organization of product development and usage of strategic partners.

4.4.1.4 Section 3b: Levels of innovation[18]

According to Company D's interviewee, most of their innovation happens on the "lower levels", e.g. incremental (level 1) and modular (level 2) innovation. They have some innovation that reaches level 3 – architectural innovation (roughly 25%). Currently there is very little radical innovation, but they are working on a new concept with 3D and VR – technology that will be radical. No other players in Company D's line of business are applying this technology.

> *"We do radical innovation with 3D /VR technology. No other players apply this technology in their line of business. This is a completely new marked and we plan to break this out as a separate company with a global perspective."*
> *-Executive manager*

Key points

- Most innovation is on level 1 and 2
- They have some level 3 innovations
- One specific product is a radical innovation in a global perspective

---

[18] See section 2.1.3 for definition of different levels of innovation

4.4.1.5 Section 4: Factors that affect intrapreneurship

When asked about the factors that affect intrapreneurship, the interviewee mentions that they have a solid **culture (informal structure)** for innovation. They have created a psychologically safe environment where people are allowed to fail. Management repeatedly asks the board for funding for new ideas, even though some fail. They have a common belief that one HAS to try new things. They also believe in humility towards their clients and realize that they cannot invent new products without help from their market.

He also mentions **good people** as an important factor. They are not focused on getting people with higher education from academia; rather they try to find service-minded **individuals** who create great interactions with their clients.

Management lays the framework for new product development and innovation and somewhat drives the effort. This suggests that **strategic focus** of management is an important factor

With relation to **teams**, they are put together on a project basis by management, but they usually organize work and organize as they wish. The **teams** adhere to some formalized frameworks but they try to work in an agile fashion. They form thigh relationships with their contractor partners. These relationships are very helpful and the importance of their partners is emphasized on several occasions.

The executive expresses skepticism towards **formal intrapreneurship processes**. Stage gate / funnel processes may lower risk but one cannot work after a fixed process. But he thinks it could be useful to have more process if their organization was bigger.

He believes in the organizational ambidexterity model, with totally autonomous units or companies with their own management and ownership to products. They will look into this model in the future (**Formal structure**)[19].

> *"We hire individuals and humans, not degrees or competencies."*
>
> *-Executive manager*

---

[19] The last two paragraphs are based on comments from section 7 of the interview. They fit better in this section of the summary since they are clearly about factors that affect intrapreneurship.

> **Key points**
> - Culture one of the most important factors
> - They look for good and service-minded people. Believes this an important factor
> - Teams that cooperate well with their contractor is also a factor
> - Skepticism towards formal intrapreneurship processes.

4.4.1.6 Section 5: What is the thought process of the intrapreneurs?

Unfortunately I was not able to ask the interviewee this question because it was not added to the interview guide until after this interview was done. However, the interviewee mentions the company's focus on partnerships on very many occasions. In addition they have a culture that revolves around trial and error and they cooperate closely with their market in order to find new products the clients did not know they needed. These points suggest that they have elements of effectual thinking in their behavior. On the other hand they use project management frameworks such as PRINCE2 that are oriented towards goals and planning.

"We use partners to scale"[20]

-Executive manager

> **Key points**
> - They have elements of effectuation such as partnerships to reach scale and a trial and error mentality
> - Some elements of causal thinking such as project management frameworks

4.4.1.7 Section 6: How is their intrapreneurship effort organized

The teams are organized as cross-functional teams.

4.4.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

The interviewee states that they take many measures to cultivate innovation and intrapreneurship. They actively use networks and participate in open innovation through forums and "innovation labs". They have a solid network to exchange ideas. They also try to think long term and avoid exploiting short term trends.

They do not have any formal intrapreneurship or innovation programs. This is partly because they find it difficult to formally incentivize employees to drive intrapreneurship and

---

[20] Quote taken from section 3 of the interview. See: 4.4.1.3.

innovation. He claims that it is difficult to do this in their company because of long product lifecycles and the fact that it often takes long to create business opportunities from ideas.

"A guy from Microsoft is bringing a Microsoft Hololense (VR glasses) kit here and we're going to play around with it during lunch. These are the kind of things we do with our network"

-Executive manager

Key points
- They use their network to participate in open innovation
- They have a long-term strategy and avoid exploiting short term trends
- They do not have any formal intrapreneurship programs

4.4.1.9 Section 8: Other comments

The interviewee comments that innovation is a misused term because it is very often just associated with continuous improvements. He also points out that the previous CEO had a strong competence in digitalization, and thinks this helped them with their transformation.

"Innovation is a misused term because it is very often just associated with continuous improvements"

-Executive manager

Key points
- Innovation is a misused term because it is very often associated with just continuous improvement.

4.4.2 Team survey summary

In this organization both the executive managers and an intrapreneur team were surveyed.

In the executive team 4 out of 4 individuals responded. The SPGR field diagram for this team is as follows:
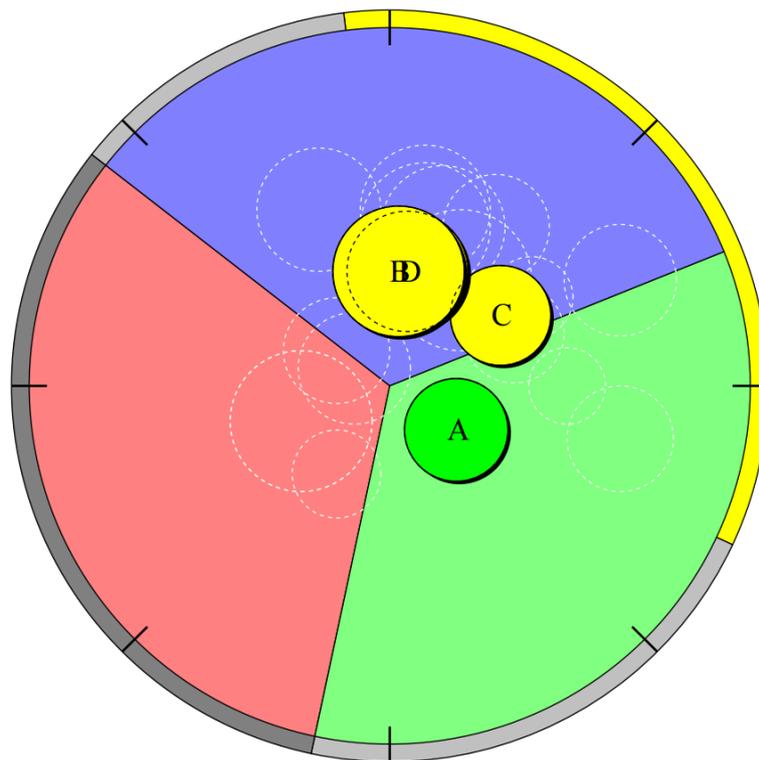
Figure 14 SPGR Field Diagram for Organization D's executive management team

The following table shows the statistical indexes for the executive management team:

Index / characteristic	Value	Comments
Control	4.75	Control is quite high compared to nurturing, which indicates a control and task-oriented focus
Nurturing	3.00	
Loyalty	4.00	Loyalty is relatively low, while opposition is quite high. This implies frequent disagreement between the members of the team.
Opposition	3.75	
Polarization	4.61	Polarization is very high. The group is very fragmented.
Mental models	4.39	The Mental models index is very high indicating a discrepancy between individual's perception and understanding of their situation.
Influence	2.49	Influence is slightly high. This indicates a slight imbalance in influence.

Table 7 Statistical indexes for Organization D's executive management team

The very high *polarization* of this group indicates that it is not cohesive and should be considered a group of individuals reporting to each other instead of a team working together. The very high *mental models* index implies a strong misalignment and a lack of common perception of the team.

Each individual seem to have fixed roles in the group, one individual being in charge of the team spirit (A), one person being engaging and (C), and two individuals are concerned with progress and "getting the job done" (B/D). Note that individual B is in charge of the company's product development and innovation work. This person was also the interview subject.

In the product development team the survey was sent to 4 people. 3 of those answered the survey completely while 1 individual only assessed half of the team. This gives an 88% response rate. The SPGR field diagram for this team is as follows:
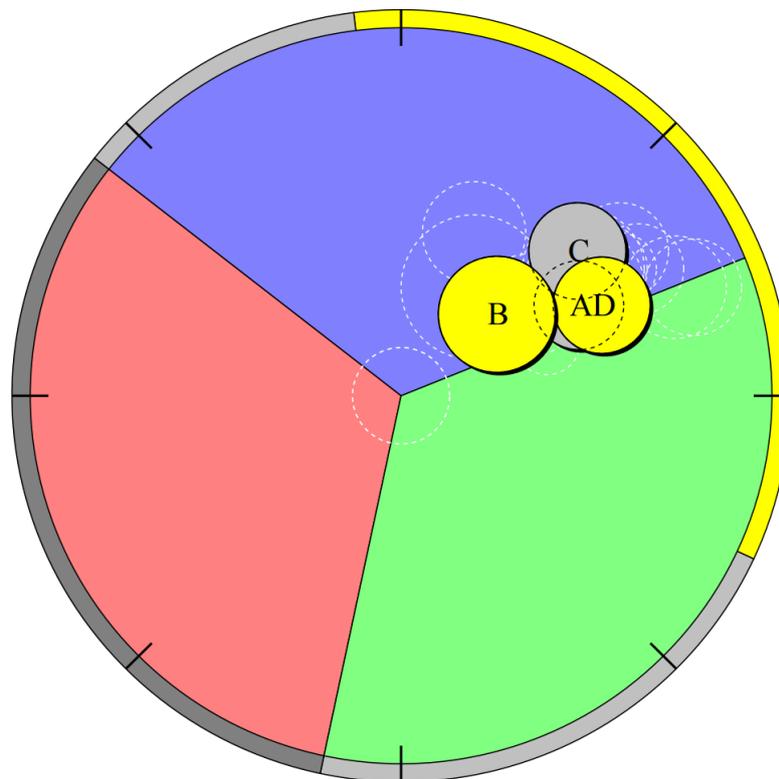
Figure 15 SPGR Field Diagram for Organization D's product development team

The following table shows the statistical indexes for the executive management team:

Index / characteristic	Value	Comments
Control	5.00	Control is high compared to nurturing, which indicates a control and task-oriented focus.
Nurturing	3.81	Loyalty is very high while opposition is slightly low and mostly provided by one individual. This implies that the group is loyal to decisions and does not question them.
Loyalty	6.25	
Opposition	2.69	
Polarization	2.94	Polarization is high. The group is somewhat polarized between B and A,C,D.
Mental models	2.52	The Mental models index is relatively high indicating a discrepancy between each individual's perception and understanding of group's situation.
Influence	2.57	Influence is high. This indicates an imbalance in influence. It seems that one individual is in charge.

Table 8 Statistical indexes for Organization D's product development team

This is a task-oriented team which seems to be led by one individual (B) while the rest are followers (A,D, C). The high *control* and *loyalty* values in addition to a high *polarization* indicate that B steers the team's course. A relatively high mental model implies mixed perception and may be a sign of a lack of communication in the group.

The innovation work in this organization is organized in projects, and is thereby quite structured. This would imply that the team members in the product development team have quite specific tasks and goals to solve. This team has a team dynamic that should handle this pretty well. However, if the team were to work independently to create higher level innovation by itself, the current team dynamic would not suffice.

The executive interviewed is in charge of product development in this company. It did seem that this person was quite hands-on in the context of creating innovation. It could seem that in this case, the executive is the intrapreneur, not the team.

4.5 Organization E

Organization E is a large company in the ICT business. They have a fairly extensive intrapreneurship initiative going where they have several teams working to create new business using new technology. The particular industry segment they are in faces hard competition and pressed economic margins, and there is a great need to build new business models.

In this case I was able to interview one of the teams in the intrapreneurship initiative. The team's manager and one team member agreed to be interviewed. I was also able to do an SPGR analysis on the team.

4.5.1 Interview summaries

4.5.1.1 Section 1: What is intrapreneurship and successful intrapreneurship

The manager defines intrapreneurship as creating new things within the frame of established organizations. The team member describes intrapreneurship as a large company that can profit from behaving like a startup; to have flexibility and quickness.

He continues that it is also about trying out new technology instead of just using safe and proven technology. Intrapreneurship is about testing new things such as processes, tools and practices in a small scale.

The manager believes a key to intrapreneurship is to create new governance mechanisms and set up separate autonomous units.

The manager associates success with new ideas that gain adoption and create profitable business. In order to succeed with intrapreneurship one must manage to leverage the strengths, and avoid the obstacles, associated with working in an established organization.

The team member has a slight different perspective. He believes success is not only connected to commercial success, but also to gaining knowledge and information. Also, success is contingent on being able to integrate the new knowledge into the organization. Failure is also success because it saves the company from making bad investments.

> *"In a previous organization we saw the company growing and we started to feel some growing pain. We had success working in a more autonomous manner. "*
>
> *-Manager*

> *"It is equally valuable to have a failed initiative, as long as there is learning. This saves the company from making bad investments"*
>
> *-Team member*

Key points

- Intrapreneurship is creating new things within the frame of an established organization. It is about working like a startup
- Intrapreneurship is associated with trying out new technology, tools, and practices on a small scale
- Success is to create profitable business
- Success can also be learning through failure. One needs to integrate this learning to the organization

---

4.5.1.2 Section 2: Success of intrapreneurship and innovation

The manager explains that they are on the verge of proving some of the ideas they have been working on for a while. They have been working on several product components based on known customer needs, but have not been able to validate them yet. The manager believes it is very important to get this validation before going further with product development.

The team member believes the company has high ambitions and is trying really hard. He claims they have succeeded in developing new ideas and opportunities in new business areas, but he feels that there is resistance to integrating the new initiatives into the organization.

> *"Lots of energy is spent on politics and clearing up uncertainties"*
>
> *-Team member*

Key points

- The intrapreneurs are on the verge of proving some of the ideas they have been developing
- Have not yet validated the market fit of these ideas
- There is resistance in the organization that makes it difficult to integrate the new initiatives into the organization

---

4.5.1.3 Section 3a: Types of innovation[21]

Both interviewees agree that the main focus of the intrapreneurship initiative is on **product** and **market** innovation. They are developing products for an entirely new business area or industry.

---

[21] See section 2.1.2 for definitions of the types of innovation.

But the team member points out that the intrapreneurship initiative has enabled a lot of **process** and **organization** innovation related to how they work. They have applied Google Design Sprints (McCue, 2016) and are changing their software development practice and hiring developers instead of writing specs and using consultants.

The manager agrees that **process** and **organization** innovation are important. They need to change how they do product development in a pervasive way.

"We try to create innovation in all areas but specifically product innovation. This company is facing two major transformations. The first is that they need to digitalize their own processes. Secondly, one needs to build new business areas."

-Manager

Key points

- Need to innovate in all areas
- Mainly product and market innovation
- The intrapreneurship initiative has created process and organization innovation by altering their software development practices.

4.5.1.4 Section 3b: Levels of innovation[22]

The manager states that they are aiming for radical innovation (level 4) partly because of the nature of the technological area they are working on. Both interviewees explain that the vision is to create a platform and a toolbox instead of being just a service provider. But they are not there yet.

They also agree that most things they are working on are modular (level 2) or maybe architectural (level 3) innovations based on new technology in existing value chains. But for the they create totally new services.

"The technology will create a big shift for the industry. Our task is to enable this shift in this company. We need to enable our customers to leverage the new possibilities of the technology and through this we build new business."

-Manager

---

[22] See section 2.1.3 for definition of different levels of innovation

---

Key points

- The vision is to create radical innovation (level 4)
- They are working on a transforming a service into a platform
- But most things they work on are lower levels of innovation (level 2/3)

4.5.1.5 Section 4: Factors that affect intrapreneurship

The manager opens the discussion by stating that **formal structures** are a strong inhibitor. She continues that there is a **culture** to follow different processes than what she thinks is necessary in order to succeed. So a cultural change is needed.

The team member claims that having the right **individuals** in the intrapreneur team is a prerequisite. On the other hand, the wrong people working together will cause bad results (**dysfunctional team**). The manager agrees that individuals with drive and knowledge are the most important driver for intrapreneurship in their company.

Further, the team member says that even though they lack many of the other factors, individuals that work great in a **team** can do much good if they manage to isolate themselves and have key people in management as sponsors (**strategic focus**).

Regarding **strategic focus** the team member observes that there is a good focus and willingness to accommodate innovation. But sometimes there is bad alignment between the intrapreneurship initiative and the organization. The manager seconds this observation and states that the CTO has this very high on the agenda.

The team member also mentions **organizational context** as a factor. The whole industry needs renewal. It is not enough to incrementally improve current business models any more.

Lastly, the manager talks about **innovation programs**. She has had success with such initiatives in other organizations.

> *"There's a mix between culture and structure that is an extremely strong inhibitor, but I believe that the thing that can enable us to do it anyway is individuals that have enough drive and competency to gather the needed proof to gain trust."*
>
> *-Manager*

Key points

- Individuals key prerequisite
- The mix between formal structure and culture is an important inhibitor
- There is good strategic focus within the intrapreneur organization but it is sometimes misaligned with the rest of the company

---

4.5.1.6 Section 5: What is the thought process of the intrapreneurs?

Both interviewees agree that they have an overall vision but, as the team member points out, it is rather fluffy. As the team member explains it they often have to do a touchdown and ask themselves what they are doing.

The manager says that even though they have a clear view of what they need to create in the long run, she believes in a process where one tries to validate hypotheses in the market to find out exactly what to build.

The team member thinks they work fairly effectual especially since they also emphasize working closely with partners that could be future potential customers.

The manager believes that one needs to be effectual, but she points out that others in the organization do not necessarily agree.

> *"Others believe we should develop what they believe is the best product and hit the market with a very crisp product."*
>
> *-Manager*

Key points

- They have an overall vision but how to get there is not a clear cut path
- They believe that they work effectual and that this is what they should do
- Not everyone agrees on this way of working

4.5.1.7 Section 6: How is their intrapreneurship effort organized

The intrapreneurship initiative is organized under the R&D department. Consequently it is a functional design. The R&D department is actually split in two, with one part being the intrapreneurship initiative. The team member points out that they are fairly autonomous.

"The team is a part of the R&D department among other intrapreneur teams. But we are fairly buffered and autonomous from the rest of the organization"

-Team member

Key points

- Functional design

- Intrapreneurs are fairly buffered and autonomous

4.5.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

Both mention that the current initiative is one specific measure but there are other activities in the company. The manager mentions a case where they have created an entire new value chain with a partner in order to create innovative products and business models. Also, there are similar intrapreneurship programs similar to this one in other countries. The team member mentions innovation days and hackathons(Wikipedia.org, 2016a)

Key points

- In addition to the current initiative, the company is doing other things in other countries

- Have had innovation days and hackathons

4.5.1.9 Section 8: Other comments

No other comments

4.5.2 Team survey summary

The survey was sent to 6 individuals whereof 5 responded (83% response rate). The SPGR field diagram for this team is as follows:
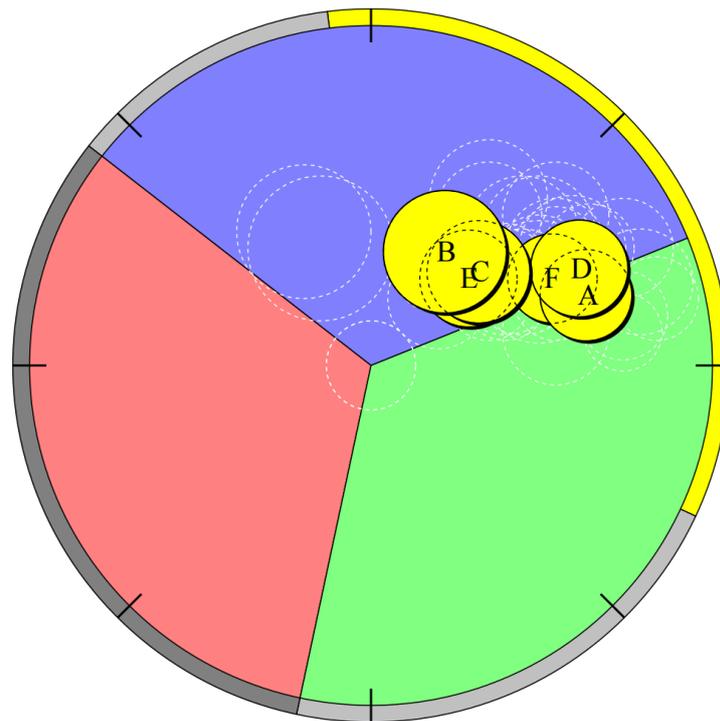
Figure 16 SPGR Field Diagram for Organization E's team

The following table shows the statistical indexes for the team:

Index / characteristic	Value	Comments
Control	4.50	Control and nurturing are relatively well balanced. Loyalty is slightly high and opposition quite low. This implies slight imbalance between loyalty and opposition.
Nurturing	3.08	
Loyalty	4.86	
Opposition	2.00	
Polarization	3.13	Polarization is high, indicating sub-groups.
Mental models	2.72	Mental models are extremely high indicating a very high discrepancy between individuals perception.
Influence	2.19	Influence is a little high, indicating that some individuals have more influence than others.

Table 9 Statistical indexes for Organization E's team

This team consists of two sub-groups, one group with very engaging and teamwork-focused individuals (A, D, F). The other sub-group is slightly more *control* and task-oriented (B, C, E). All members have a good amount of *influence* and have a balanced usage of the basic functions (they are yellow in the field diagram). However, one individual stands out and is a bit more *control* oriented and has more *influence* than the others. An effect of this could be that the opinions of the least influential team members are frequently overrun. The team also

has a relative high *mental model* index, indicating some misalignment between the members. This may be due to some lack of communication.

This team probably handles clear and specific tasks and goals very good, but as the team member explains the goal of the team is pretty "fluffy". Also, both interviewees agree that they should be working in an effectual manner, which implies a less goal-oriented and more "team-oriented" approach. The polarization should be considered a threat, and if the team is put under pressure, the polarization could grow[23]. This indicates that this team lacks some maturity for the task at hand and could benefit from team development.

4.6 Organization F

Organization F is a medium-sized company in the finance industry. Established actors in this industry are threatened by both new smaller actors and big corporations from other industries that start providing financial services. Further, regulations limit the industry's current profit areas. Consequently organization F is working with intrapreneurship to discover new business opportunities. They have an ongoing intrapreneurship initiative and I was able to interview one of the individuals who participates in and leads their intrapreneurship initiative.

It was not possible to perform an SPGR analysis on this case.

4.6.1 Interview summaries

4.6.1.1 Section 1: What is intrapreneurship and successful intrapreneurship

The interviewee explains that intrapreneurship is that employees get the opportunity to do work outside their daily day tasks. The purpose is to explore new business opportunities.

When asked about what successful intrapreneurship is, he says it is those cases when you have time, resources, prioritization and budgets to take a concept or challenge through the whole creative and technical process and offer it to customers. Also, customers must want to use this new concept. He emphasizes the importance of accommodating changes in the concept if one does not hit the mark the first time. Feedback from users has to be taken into account, either to make changes or to stop the initiative.

---

[23] As mentioned in 3.3.2 SPGR has a high predictive validity which implies that there's a high probability that identified threats will materialize unless action is taken.

Finally, he points out that there is a distinction between the intrapreneurship process and the product launch. An intrapreneurship initiative may be successfully executed even though it is killed.

> *"The first version very seldom hits its mark. There's always something that can be done better. There's always something else the customers expects. "*
>
> *-Team lead*

> *"One needs to avoid spending all resources on a first version"*
>
> *-Team lead*

Key points

- Intrapreneurship is access to resources and the opportunity to do work outside ordinary tasks
- Success is to complete the process from concept to a product offering. Even though the product may fail to entice customers, the intrapreneurship process may be successful.
- It is important to have an iterative approach: Accommodate changes instead of spending the whole budget on the first version.

4.6.1.2 Section 2: Success of intrapreneurship and innovation

The team lead explains that this form of intrapreneurship is a new area for their organization. They have barely started and are still fairly immature. But they are on the verge of launching their first product. He believes that being able to change business models through intrapreneurship is a sign of success.

Although their intrapreneurship efforts are yet to succeed, the company has a culture for being innovative.

> *"A sign of a successful organization is that the organization manages to continuously change their business models with intrapreneurship projects. In this perspective we have not succeeded yet."*
>
> *-Team lead*

Key points

- Intrapreneurship relatively new for this company. They are still immature
- They are on the verge of launching first product
- Being able to change business models is a sign of success

4.6.1.3 Section 3a: Types of innovation[24]

According to the team lead, they have created innovations in all areas throughout the history of the company.

They have been particularly good at **process innovation** associated with digitalization. In addition, the combination of **process** and **product** innovation with relation to self-service solutions is mentioned.

Further, they have created an open platform for 3rd parties to offer products, which he classifies as an **organization** and **market innovation.**

Based on the interviewee's comments in the previous sections their current intrapreneurship initiative is more **product and market** oriented since they are attempting to create new business models.

> *"We have grown our customer base extensively but haven't had the necessity to grow our staff at the same rate. "*
>
> *-Team lead*

Key points

- Have created all types of innovation in the company
- Process innovation associated with digitalization
- Process and product innovation associated with self-service solutions
- Organization and market innovation associated with an open platform

---

4.6.1.4 Section 3b: Levels of innovation[25]

The interviewee explains that the company has a cultural heritage that started with a radical innovation. This was followed by a series of architectural innovation (level 3) associated with

---

[24] See section 2.1.2 for definitions of the types of innovation.
[25] See section 2.1.3 for definition of different levels of innovation

digitalization of processes. But now innovation is more difficult and they are currently more in an operational efficiency mode (level 1).

He explains that the whole industry is more or less digitalized now and that one needs to think more radically and try to create new business models to gain advantage now.

"But when the low hanging fruit was taken, chasing innovation with the same products in the

market is getting more challenging"

-Team lead

Key points

- The company has a history of radical and architectural innovation
- Now it is difficult to reach these levels of innovation and they are doing more continuous innovation (level 1 and 2)
- They now need to create new business models

4.6.1.5 Section 4: Factors that affect intrapreneurship

The interviewee claims that **individuals** who can sponsor or lead of the intrapreneurship initiatives are the most important factor. He continues that it is not possible to start initiatives without someone advocating the new idea. The individuals must be sharp, engaged and have a deep understanding of the underlying challenge. The sponsor is either someone in management, or someone able to convey the idea to management.

Finally, the team leader also emphasizes the importance of interdisciplinary **teams** with the right mix of people. They need people with different areas of expertise such as markets, customers and technology in addition to people that are experts in none and can think out of the box. One needs a particular **group dynamic** where team members can challenge each other's in a psychologically safe environment. He also mentions that the team must have a good and iterative process where they do not wait too long before testing ideas. Finally he emphasizes the need for a leader that can push the team's work forward.

The team lead further explains that very few organizations manage to challenge themselves enough to see the need for intrapreneurship. An existential threat needs to be felt in order to gain focus on intrapreneurship, and this needs to happen before it is too late. In company F's market there are big structural changes such as new actors and regulatory changes that push profit margins (**Organizational context**). This combined with the owners' expectations of

---

long term value creation, causes the company to focus on long-term results which triggers intrapreneurship (**strategic focus**).

The interviewee mentions that they have an organizational **culture** that empowers employees. This is a source of insight and creative ideas and builds trust with the customers. This is coupled with **formal incentives** associated with customer satisfaction. The combination of empowerment and incentives enables every employee to suggest improvements or apply creative solutions.

> *"I don't think this is possible anywhere without these individuals…I don't think any organizations have a buil- in mechanism for creating intrapreneurship (Without the engaged individuals)"*
>
> *-Team lead*

Key points
- Individuals who can sponsor and lead initiatives are very important   - Interdisciplinary teams create a favorable group dynamic   - The organizational context such as the market conditions create existential threats for companies that drive them to do intrapreneurship   - The combination of an empowering culture and formal incentives is an important asset

4.6.1.6 Section 5: What is the thought process of the intrapreneurs?

The team leader explains that they use both types of reasoning in their company. It depends on the problem at hand so they classify it based on how clear the outcome is. He says that if they know what the outcome of the initiative should be they set up a project. Say they want a %-wise increase of sales of a certain product, then it is straight forward to find ways to solve this. On the other hand, if the task is less obvious, such as a general increase in customer satisfaction, the form something they call a lab. In the cases where they find projects they apply more of the causal style of thinking, with goals and plans. When they form a lab initiative, they work more effectually.

It is up to the intrapreneurship group to decide if the problem is something entirely new or not. If one agrees that this is something one does not know anything about, they form a lab,

otherwise a project. Finally, he explains that they involve different types of people depending on the characteristic of the problem.

> *"If you know that you need a %-wise increase of sales of a certain product, it is pretty straight forward how one could do this. On the other hand if the task is to increase customer satisfaction, it is less obvious what to do enable this."*
>
> *-Team lead*

Key points

- Both thought processes are used.
- They classify the problem
- If it is clear how to solve the task, they run projects; causal thinking
- If it is not obvious how to solve the task, they run innovation labs – effectual thinking

---

4.6.1.7 Section 6: How is their intrapreneurship effort organized

They are organized cross-functionally. The team lead explains that they have many competent people with insight into different disciplines such as markets, customers and technology. They want to form cross-functional teams and exploit the team dynamic created in interdisciplinary teams. They also use external competency.

> *"We need various backgrounds and I prefer the team dynamic created when people have different backgrounds."*
>
> *-Team lead*

Key points

- Cross-functional organization
- They want to exploit the team dynamic created in interdisciplinary teams

---

4.6.1.8 Section 7: Specific measures taken to cultivate intrapreneurship

The interviewee mentions two specific measures, the intrapreneurship program and partnerships with small entrepreneurial actors.

He explains the overall process of the intrapreneurship program as follows: The program is based on identifying new areas of work and finding someone in the organization to define the problem. Further, they put together a team with dedicated resources for running the new

---

initiative. The team works for a specified period of time at which they evaluate results and decide to continue or not.

> *"The team needs to work undisturbed for some months before one evaluates if it is worth continuing. Later they may consider spinning the initiative out in a separate unit or company."*
> *-Team lead*

Key points

- Intrapreneurship program is the main measure
- They partner with entrepreneurial actors

4.6.1.9 Section 8: Other comments

No other comments

4.7 Overall summary

The following table is an overall and shortened summary of the most important findings from the interviews.

Interview subject	What is intrapreneurship?	Success in org.	Types	Levels	Main prerequisites[26]	Main inhibitors[26]	Thought process	Organization	Intrapreneurship measures
Org. A – Manager	Creating business opportunities. It is not research	Team has created new IT platform In general, little success.	Product, Process	Series of lower level innovations will provide opportunities for higher levels.	Individuals(1), Team dyn(2), Vision(4&5), *Innovation programs(7)*		Both	Cross-functional	Copy intrapreneur team, Lower process focus
Org. A - Team member 1	Create value outside everyday tasks. Engagement User adoption is success	Team has automated processes for IT org. Outside team little success.	Product, Process, (Market)	80-90% level 1 and 2. It has enabled them to reach level 3	Individuals(1), Focus of CTO(5)	Culture(4), Process(3)	First causal, later effectual	Cross-functional	Not much in org. In team: socialize, hire right people
Org. A - Team member 2	A "we"- feeling. Success: Voluntary project becomes opportunity	Team has automated and democratized processes. Rest of org. mostly unsuccessful.	Process, Product, Market	80% lvl 1&2. 20% lvl 3. One level 4 product	Individuals(1), Team(2), Culture(4), *Innovation programs(7)*	Org. env.(3&4)	Both	Functional	Socialize to create trust, Manager's protection of team.
Org. B – Executive	It is a way to practice for innovation. Success=employees have influence	Intra. program has since 2012 created 7 concepts, 4 still viable. 40 employees involved	Product, Market, (Process)	Mainly 1- 3. Reach lvl 3 by extending value chains. May have lvl 4 opportunity now	Programs(7), Strat. focus(5) Individuals(1), Culture(4)- a given in this org.	Culture (4)	First causal. Realized they had to work effectual.	Combination: Cross-functional and unsupported team	Highlights intrapreneurship program. Company discusses need to break out units to create radical inno.
Org. B - Team member 1	New products / ideas in est. org. Success= break out of parent company	Intra. program has not produced radical business success. The team's initiative not yet success.	Product, Market	Mostly level 2 and 3. Lvl 4 to some extent (not new business model but it can disrupt market)	Individuals(1),	Dysfunctional team(2)	First causal. Realized they had to work effectual.	Unsupported team	Highlights intrapreneurship program
Org. B - Team member 2	Company facilitates employees to innovate. Success= new product serves purpose	Unsure if intra. program is mature enough. Team's product has yet to attract user base	Product, Market	Mostly level 3. New product but same kind of service. Could have caused disruption.	Individuals(1), Team(2), Culture(4)	Misaligned team(2), Strategic focus(5), Bureaucracy(3)	Lacked clear vision and difficult. Inconclusive	Cross-functional	-
Org. C – Manager	Innovation work in own org. Success= impact on customers and transfer learning back to org.	Haven't succeeded yet. Rest of org. not innovative enough	Product, too much. Some process. Need market	Mostly level 1. A few historical examples of lvl2/3. Team working on level 3	All factors relevant. Individuals(1), Teams(2) – teams are complex	Culture(4), Access to resources(3&5), Context(6)	Effectual	Unsupported team somewhat ambidextrous organization.	Intrapreneur team, becoming more customer focused

[26] The numbers in parenthesis indicate the factor (1) Individuals, (2) Team dynamic, (3) Formal Structure, (4) Informal structures, (5) Strategic Focus, (6) Org. context, (7) Innovation programs. Factors in *italic* are deemed as less important by interviewees.

Org. C - Team member	Innovation work in own org. Success= deliver results for org. , change culture and execute strategy to be more innovative	Haven't succeeded yet, but has created team with new culture Rest of org. not innovative enough	Process, Market inno. in relation to CSR	Mostly level 1. CSR work globally inno on lvl2/3	Individuals(1), Strategic focus(5), Teams(2), *Innovation programs(7)*	Culture(4), Context(6), Dysfunctional teams(2)	Causal but want to work effectual	Unsupported team	Intrapreneur team, interns, idea contests
Org. D - Executive	Intra is org. units working independently & w/new tech. Success= manage to create ind. teams	Went from 85% physical to 85% digital revenue in a decade. Strong focus on prod. Dev.	Product, Process	Most on level 1/2 but some reach lvl3. Currently working on radical concept (lvl4)	Culture(4), Individuals(1), Strategic focus(5)	-	Inconclusive / Both	Cross-functional	Use networks and innovation forums to exchange ideas
Org. E - Manager	Intra. Is creating new things within frame of est. org. Success= gain adoption/ profitable business	On the verge of proving new concept, but has not yet validated it.	Product, Market, Process, Org.	Reaching for lvl4 but working on many lvl2/3 on existing value chains	Individuals(1), Strategic focus(5), Innovation programs(7)	Formal structures(3), Culture(4), Strategic focus(5)	Tries hard to work effectual.	Functional (part of R&d)	Current initiative, Partnerships
Org. E - Team member	Intra. Is behaving like a startup. Success= not only commercial success. Also integrate knowledge into org. Failed product can also be success.	Succeeded in developing new opportunities. But struggle to integrate it into org.	Product, Market, Process, Org.	Reaching for lvl4 but working on many lvl2/3 on existing value chains	Individuals(1), Team(2), Key sponsors(5), Context(6)	Strategic focus(5), Team(2)	Fairly effectual	Functional (part of R&d). But fairly buffered from rest of org.	Current initiative, Innovation days, hackathons
Org. F - Team Lead	Opportunity to work outside daily tasks. Explore new opportunities. Success= Manages to complete project – launch product	New are for this org. On the verge of launching first product. Being able to change models is sign of success	All types. Intra. Initiative product & market oriented	Company started with radical and arch. Inno (3/4). Now more continuous inno(1/2). Need to create new business models (lvl3/4)	Individuals(1), Teams(2), Context(6), Culture(4), Incentives(3), Strategic focus(5)	-	Both, depending on problem	Cross-functional	Current intra. Program. Partnerships

Table 10 Overall summary of interviews

5 Discussion & Analysis

After performing 12 interviews across 6 different organizations there's evidence that the seven factor model proposed in this work has merit. All factors were shown to have some relevance either as driving factors, inhibitors or both. The factors had varying degrees of relevance and importance. I.e. some factors were universally relevant while some were relevant in a limited set of cases. Some factors were deemed as important much more often than others. However, it does not seem like any one factor is enough and it is inherently necessary to have a combination of factors in order to succeed.

Furthermore, the case studies unraveled very interesting enlightenments with regards to other characteristics of team-based intrapreneurship. The research cast important light on the purpose of intrapreneurship and definition of success; i.e. why organizations run intrapreneurship initiatives. Also, types and levels of innovation achieved by the intrapreneur teams may help set expectations for such initiatives. Finally, exploration of the thought process of intrapreneurs may help to bridge research of entrepreneurship into intrapreneurship.

In the following subsections I discuss my findings and their implications to current research. Limitations to the elements of this research such as the methods used and the seven-factor model are also discussed. Finally, focus for future research is suggested.

5.1 Analysis of the seven factors

5.1.1 Individuals

The most universally relevant and important factor for intrapreneurship is individuals. In 12 out of 12 interviews, individuals were deemed as an important factor for intrapreneurship. Also, among at least 10 out of 12 interviewees, individuals were seen as the **most** important driver or prerequisite for intrapreneurship. For example, in organization A there was agreement that skilled, senior and "unafraid" individuals are one of the most important assets. In Organization F, individuals are the sponsors of intrapreneurship initiatives.

In other cases, the intrapreneurial individuals were seen as the factor that could enable success in spite of the organization. For example, in organization E, the manager observed that regardless of strong inhibiting culture and structure, individuals with particular drive and competency are the ones who can prove ideas and gain trust from the rest of the organization.

In organization C the manager talks about individuals with entrepreneurial spirit and drive to "walk through brick walls". Finally, in organization B the intrapreneurs are the ones willing to face challenges and create something in spite of organizational obstacles.

Based on this, the following proposition can be made:

> **Proposition 1:** Individuals with the right mindset and skills are the most important driving factor or prerequisite for intrapreneurship.

Although this result may not be particularly surprising, it shows a dissonance between academia and practicians of intrapreneurship. Research on factors for intrapreneurship from authors such as Hornsby & Kuratko, Zahra and Christensen has no particular focus on individuals as drivers of intrapreneurship(Hornsby et al., 2002; Kuratko et al., 1990; Zahra, 1991). The focus is usually oriented around resources, formal structures, culture and management. However, in Marcus & Zimmerer's 2003 study of the effect of intrapreneurship programs on corporate performance they asked their research subjects to rank intrapreneurship program development factors. The factor of personnel was ranked last; number 8 out of 8 (both in a 2000 and 1994 study)(Marcus & Zimmerer, 2003). Thus, individuals are either entirely ignored or considered unimportant for successful intrapreneurship.

This would suggest that the findings of this paper are an important contribution to this field of research. It reinforces Pinchot's ideas from 1985 that intrapreneurs are crucial in order to create innovation (Pinchot, 1985). Further, this triggers a need to draw attention to academic contribution on the characteristics of entrepreneurial individuals and bridge this to the context of intrapreneurship. The contributions from Sarasvathy, Read, Baron and all related research should be examined in the context of intrapreneurship (Read, 2011; Sarasvathy, 2001a, 2001b). In fact, there are some academic papers on the subject of effectual thinking in an intrapreneurship perspective(Duening, Shepherd, & Czaplewski, 2012; Schmidt & Heidenreich, 2014). But they are relatively recent and not very numerous so this is clearly an area where more research is needed.

5.1.2 Teams and team dynamic

During the interviews 7 out of 12 individuals across 5 organizations claimed that team dynamic was important. Efficient team dynamic is a driving factor according to 6 interviewees, and 4 interviewees claim that a dysfunctional team is an important inhibiting factor. In fact one of the team members in organization B concludes the interview by saying

that their team was their own biggest obstacle. According to him, the fact that the team members did not know each other well enough when the group was put together caused big problems for the team. Misaligned personalities and expectations caused much trouble for these intrapreneurs. This notion is clearly supported by the SPGR survey, which shows a very fragmented team with a misaligned perception of the team's situation.

This is evidence that bad team dynamic and, equally important; the lack of team development efforts can effectively inhibit intrapreneurship efforts and even cause them to fail entirely.

In organization B, challenges with team dynamic were evident based on both the interviews and the survey. However, in other cases the signs were a bit more subtle. The other intrapreneur teams did not show such clear signs of dysfunction although organization B's team was not the only one to face challenges.

In organization C, the manager was not yet satisfied with the team's results, i.e. the team had not yet been able to create high level innovations. But the interviews gave no direct indication that team dynamics was a culprit, or otherwise was causing problems for the team. However, the SPGR survey indicates that this team lacks some of the maturity necessary to work in a context where the goal is very unspecific. And this could be one of the reasons why this team has not been able to make any major innovation breakthrough yet. The team's manager explained that although he has had great success building teams for solving specific goals, he believes it is very complex and difficult to create effective teams for vaguer and more open-ended goals.

This fits very well with the theoretical framework in Sjøvold's Spin-theory of Small Groups. Teams do not have to be on the highest maturity level in order to be efficient. This greatly depends on the purpose of the team, i.e. the task at hand. Teams that should solve specific goals will work very well on the "production" maturity level, which is the second highest. However, for open-ended problems such as creating higher levels of innovation it is very advantageous for the team to reach the highest level; "innovation". But reaching this maturity level is difficult and rare (Sjovold, 2007; E Sjøvold, 2014).

We also see less-than-perfect team dynamic in one of the teams that was having a good amount of success; the team from organization A. They are a polarized team with sub-groups, which is not ideal. However, the most "mature" and engaged sub-group is in fact a very balanced group in both terms of influence and positioning in the SPGR-field (see: 4.1.2).

There are four (out of 7) very engaging individuals that seem to work very well together in addition to 3 loyal individuals that probably follow the others' lead for most of the part. The team members interviewed were both part of the engaged and "innovative" subgroup. They were also very concerned with building a good culture in the team with a high level of psychological safety. Consequently, one should attribute the team's success at least partly to their team dynamic.

It is worth noting that the team's initial task (create an automated IT development platform) was pretty specific, and not something entirely new in a global perspective. The fact that the team started out with such a task, compared to say establishing new markets, has probably been advantageous for them with regards to building their team and allowing it to evolve gradually.

Based on these findings we can claim that a fairly mature and productive team that can efficiently execute specific tasks will work well if the team has a specific goal or it has an individual who can lead and set direction. However, to succeed when one has vague and open-ended goals, or no individual or leader to set clear goals is much more difficult. The team should be on the "innovation" maturity level and be able to efficiently apply all basic functions; control, nurturing, opposition and dependence/loyalty in order to be a favorable factor (Sjovold, 2007). It is extremely difficult for teams to reach this level of maturity.

Based on this the following proposition can be constructed:

> **Proposition 2:** Team dynamic is a strong factor for intrapreneurship, but the effect is dependent on conditions. (1) Dysfunctional team dynamic is a strong inhibitor of intrapreneurship and can cause initiatives to fail entirely. (2) Team dynamic is a driver of intrapreneurship, but it is more important to have a highly efficient and mature team dynamic when the goal is open-ended, and there is no individual to lead the team and set a direction. But to create a team dynamic that can handle this situation is very difficult.

The findings are underpinned by Sjøvold's Spin Theory(Sjovold, 2007; E Sjøvold, 2014). It is also worth noting that in the two typical intrapreneurship examples used in this paper, Skunk Works and IBM's PC project, we see that both these success stories had visionary leaders as well as relatively specific goals(see: 2.2.2). So although these examples had very hard technical challenges ahead, they were not doing anything entirely new on a global perspective. They knew what to do, but not necessarily how to do it. On the other hand, many intrapreneur teams such as the one in organization C have no specific task to solve, they only have an overall and open-ended vision (Camenker, 1983; Wikipedia, 2016).

5.1.3 Formal structures

Formal structure is identified as an inhibiting factor for intrapreneurship in 5 interviews. This factor is often associated with bureaucracy and rigid structures that stifle innovation. In organization A, one of the team members claims that following corporate processes would have caused them to fail. However, in one case incentive structures associated with bonus schemes was identified as a favorable factor for driving creative employee behavior. The factor was deemed important in 6 out of 12 interviews across 5 organizations.

It is not surprising that formal structures are seen as inhibitors of intrapreneurship, but at the same time the factor does not seem to be as highly relevant as others. Based on this we can construct this proposition:

> **Proposition 3**: Formal structures associated with control inhibit intrapreneurship but this factor is less important compared to individuals, informal structures, strategic focus and teams.

The relevance of formal structures is supported by research from various scholars such as Hornsby, Kuratko, Zahra and Christensen(K. S. Christensen, 2005; Hornsby et al., 2002; Kuratko et al., 1990; Zahra, 1991). In Zahra's 1991 work organizational factors such as formal communication, integration across units and formal controls were seen to have both a positive and negative association with intrapreneurship. Specifically, formal communication was seen as a driving factor and formal control was found to be an inhibitor (Zahra, 1991). Covin and Slevin had similar findings. They proposed that structural formalization, centralization and complexity are negatively related to intrapreneurship[27]. However, they find positive relationships connected to what they call organic structures which are associated with decentralized decision making and cross-functional integration(Covin & Slevin, 1991).

The earlier academic works fit well with the findings in this paper. Formal control structures and centralization are associated with processes and bureaucracy that stifle intrapreneurship. This also fits with Benner and Tushman's findings in relation to exploratory innovation(Benner & Tushman, 2001, 2015).

Another aspect of formal structures, organizational structure, was surprisingly enough not a topic for any of the interview subjects. This could indicate that they were fairly satisfied with the way their intrapreneurship initiatives were organized. Although the form of the organizational structure was pretty mixed (all variants except the ambidextrous organization

---

[27] Or what the authors call entrepreneurial posture

were identified. See: 2.2.2) all teams (maybe except for Organization D) were fairly buffered and autonomous from the rest of the organization. This implies that the intrapreneur teams were organized in a favorable way from the beginning, and the interviewees considered autonomy a given. This fits with Covin and Slevin's finding that organic structures, e.g. decentralized decision-making (autonomy) and cross-functional integration, have favorable effects for intrapreneurship(Covin & Slevin, 1991).

This factor is often identified with relations to and mixed with informal structures or culture. These two factors go hand in hand and a risk-averse culture will affect processes and incentives.

5.1.4 Informal Structures

Informal structures, usually associated with culture, are seen as a relevant factor by 10 out of 12 interviewees. But the effect is mixed. In 6 interviewees culture was seen as a driving factor, and the same number of people see it is an inhibitor. Two of those interviewees see culture as both a driving and inhibiting factor. For example, the manager from organization B points out that an innovative culture and acceptance to challenge the establishment is a given in this organization. However, organizations that lack this culture will experience problems. Organization C's manager explains that their risk-averse culture makes people more concerned with *"doing things right, instead of doing the right things."*

The findings in this paper support that culture drives intrapreneurship when it has the following properties:

- It values decentralized decision-making and empowerment
- It conveys a shared vision across the organization
- It values innovation
- It creates psychological safety

Culture impedes intrapreneurship when it has these properties:

- Conservative
- Control-oriented
- Risk averse

Based on this we can create the following proposition:

> **Proposition 4**: Informal structures such as culture, is a strong factor for intrapreneurship. Culture is a driving factor when it is based on values such as empowerment, shared vision, innovation and psychological safety. Culture is an inhibitor when it is conservative, control-oriented and risk adverse.

The relevance of informal structures as a factor for intrapreneurship is supported by earlier research from scholars such as Zahra, Covin & Slevin and Christensen (see also: Table 1)(K. S. Christensen, 2005; Covin & Slevin, 1991; Zahra, 1991). In Zahra's 1991 article is claimed that articulated organizational values that promote creativity and risk-taking amongst employees in addition to competitiveness is favorable for intrapreneurship (Zahra, 1991). Similarly Covin and Slevin propose that organizational cultures that promote empowerment and innovation are favorable (Covin & Slevin, 1991). These cultural values are analogous with the favorable properties defined above and consequently proposition 3 is partly supported by past research.

5.1.5 Strategic focus

As explained in 2.3.5 strategic focus is associated with focus and behavior of management on all levels. This was a factor found relevant in 10 out of 12 interviews. There were positive associations between strategic focus and intrapreneurship in 7 interviews. On the other hand, strategic focus was found to inhibit intrapreneurship in 4 cases. Some interviewees found strategic focus to be both a driving and inhibiting factor for intrapreneurship.

This factor had many different incarnations in the interviews and discussions. The following were typical favorable instances of strategic focus:

- Top management's focus (i.e. on innovation and intrapreneurship)
- Shared vision
- Managers as sponsors for intrapreneurship initiative

The cases where strategic focus was an inhibiting factor were connected to:

- Misaligned strategic focus between middle-level and top management
- Misaligned strategic focus between managers within and outside the intrapreneurship initiative

This is an indication that the factor of strategic focus is also very relevant and affects team-based intrapreneurship both positively and negatively. Based on this we can construct the following proposition:

> **Proposition 5:** Strategic focus is a strong factor for intrapreneurship. Top management focus and sponsorship drives intrapreneurship. Misaligned strategic focus between different levels of management and between the intrapreneur initiative and the organization inhibits intrapreneurship.

Among previous academic papers on factors for intrapreneurship, Hornsby, Kuratko and Zahra's 2002 article supports this proposition. This work studies the internal environment for intrapreneurship, with middle-level managers in mind. One factor from this study that is particularly relevant is *Top management support,* which is senior management's willingness to facilitate and promote intrapreneurship (Hornsby et al., 2002). Furthermore, Christensen's case study on a Danish engineering company shows that management support is associated with sponsoring intrapreneurs and giving them access to resources (K. S. Christensen, 2005).

In order to find support for the part of the proposition that relates to misaligned focus of management we may look at the Kodak and Polaroid case studies already discussed in 2.3.5. To summarize, Kodak top-level management was unable to overcome middle level management's resistance to digital photography(Lucas & Goh, 2009). In Polaroid the Electronic Imaging Division was unable to convince top-level management to abandon the razor/blade business model (Tripsas & Gavetti, 2000). Licas and Goh point out that management propensities are instrumental to avoiding or falling prone to Leonard-Barton's so called core rigidities. Thus a misaligned middle-level management may reinforce core rigidities even though top level management promotes innovation and intrapreneurship.

5.1.6 Situational context

Situational context was deemed as relevant in 4 out of 12 interviews across 3 different companies. This factor was seen both as a driver and inhibitor of intrapreneurship. In 2 out of the 4 interviews (Organization C), the fact that the company is state-owned and needs to follow more regulations than private companies greatly limits its options for experimenting and creating partnerships. This was a very important factor that this company struggled with.

On the other hand, the two other interviewees that mentioned context as a factor (Organization E and F) claimed that the competitive forces in their industries drives forward the need for innovation and consequently intrapreneurship initiatives. For example organization E's team member explains that the company is in an industry that needs to renew itself and create new business models. Tweaking pricing in existing business models is not enough. The team lead of organization F associates this with both competition and new regulation that greatly affect the industry's profit opportunities.

> **Proposition 6:** Situational context is a factor for intrapreneurship, but it is less important compared to individuals, teams, informal structures and strategic focus. Competitive forces in the industry are a driving factor for intrapreneurship. Ownership models (such as state ownership) and regulation that limits opportunities for business models and partnerships inhibit intrapreneurship.

It is worth noting that many of the intrapreneurship initiatives studied may have been created because of industry competitiveness. This implies that industry context is a given or an antecedent even though the interviewees did not see it as important.

As discussed in 2.3.6, Zahra in addition to Covin and Slevin claim that situational context is a factor that affect intrapreneurship. Covin and Slevin propose a positive relation between intrapreneurship and industry factors such as technological sophistication, dynamism and hostility. This is supported by Zahra (Covin & Slevin, 1991; Zahra, 1991). Antoncic and Hisrich further support the role of technological sophistication since they found a direct relation between technological opportunities and intrapreneurship in their study. This is particularly interesting since all the case studies in this paper are companies in digitally dependent industries. Consequently, these companies are dependent on information technology, i.e. software, which holds enormous technological opportunities.

5.1.7 Innovation programs and processes

Although mentioned in 5 out of 12 interviews across 4 companies, this factor was only deemed as important in 2 out of 12 interviews across two organizations. The other 3 interviewees claimed that such initiatives were quite contingent on other factors. For example organization A's manager claims that innovation programs can only succeed if they are decentralized and induce a "swarming behavior" among employees. Further, organization C's team member says that such initiatives require a lot of attention from management. One-off events are not enough. He also claims the company had an innovation portal but that it is now closed.

However, the executive in organization B claims their formalized intrapreneurship initiative is a central part of their success. But he also points out that culture is an antecedent for a successful initiative. The role of culture as an antecedent for innovation programs is supported by one of the team members in organization A. The manager from organization E had experience with creating innovation programs and had good experiences with this.

Based on this we can suggest that innovation programs and processes can be a driving factor for intrapreneurship under the following conditions:

- The programs are based on decentralized decision making and not centralized control
- Other factors such as informal structures or culture are already present in the organization

Proposition 7: Innovation programs and processes is a factor for intrapreneurship, but it less important compared to individuals, teams, informal structure and strategic focus. Other factors such as informal structure or culture are antecedents of this factor. Initiatives based on decentralized decision-making are more likely to drive intrapreneurship than centralized initiatives.

Referring to 2.3.7 we see that Marcus & Zimmerer found evidence that intrapreneurship programs have favorable effects on corporate performance. They find that both formal and informal programs are favorable; in addition they see that 66% of their respondents say they have organizational policies and procedures that foster intrapreneurship. This supports the proposition.

On a final note, it is important to point out that out of the 6 intrapreneurship initiatives studied, 5 were actually formally endorsed initiatives. Consequently, many of the intrapreneurship teams covered would probably not exist if it were not for the intrapreneurship initiative, i.e. a formal innovation program. Therefore, it is necessary to distinguish between the intrapreneur team (formal and informal) and other types of innovation processes. This was the purpose of adding this factor to the 7-factor model, but this was not communicated clearly enough across all interviews. However, it did seem like most interviewees saw their intrapreneurship teams as something else than formal innovation processes.

5.1.8 Summary

The following table summarizes the findings with regards to the number of interviewees and organizations that deem the various factors as relevant, drivers and inhibitors. The results are ordered by relevance.

Rank	Factor	Relevance[*]	Driver[*]	Inhibitor[*]	Both[*]
1	Individuals[**]	12i / 6o	12i / 6o	-	-
2	Strategic Focus	10i / 6o	7i / 6o	4i / 3o	1i / 1o
3	Informal Structures[**]	10i / 6o	6i / 4o	6i / 4o	2i / 2o
4	Teams[#]	7i / 5o	6i / 5o	4i / 3o	3i / 3o
5	Formal Structure	6i / 5o	1i / 1o	5i / 4o	-
6	Situational Context	4i / 3o	2i / 2o	2i / 1o	-
7	Innovation Programs[**]	2i / 2o	2i / 2o	-	-
		5i / 4o [***]	*5i / 4o* [***]		

[*] The letters "i" and "o" after a number denotes interviewees and organizations so that 12i / 6o means 12 interviewees across 6 organizations.

[**] Individuals were deemed a primary factor in 10 out of 12 interviewees. Innovation programs were deemed as primary in 1 interview while informal structure (culture) was deemed primary in 1 interview.

[***] Although 5 interviewees across 4 organizations discussed innovation programs as a factor, only 2 interviewees deemed it as important.

[#] Team dynamic was deemed the most important obstacle by one of the interviewees.

Table 11 Summary of the analysis of the seven factors from interviewees

5.2 What is successful intrapreneurship?

Although the definition of intrapreneurship and the reasons why it is important are discussed earlier in this paper, successful intrapreneurship is not defined. However, success criteria for intrapreneurship is an important element that was explored during the interviews. Gaining more insight into why companies run intrapreneurship initiatives and how they define success may shed light on the favorable effects of intrapreneurship besides the obvious business opportunities.

Some of the interviewees give quite interesting input to both the purpose of doing intrapreneurship and what they define as success. For example, Organization B's manager claims that their intrapreneurship initiative is a way to practice being more innovative and improving the organization's innovation capabilities. He defines success as when all employees contribute to innovation. One of the team members from the same organization explains that they have a goal that at least 5% of their employees should have been involved with their intrapreneurship initiatives at some time. Currently 10% of current employees have. Consequently, the intrapreneurship initiative creates a lot of buzz in the organization. It plays a part in strengthening the company's employer brand and has kept people from leaving.

Other interviewees emphasize the importance of integrating learning back into the organization. Both the manager of company C and the team member of company E associate success with integrating learning and discoveries back into their organization. Further, the team member explains that failed initiatives also provide value since they can save the organization from making the wrong investments.

This indicates that it is necessary that intrapreneurs have credibility and support in the rest of the organization. Otherwise their discoveries will not be seen as viable contributions. In fact, Jansen et al. emphasize the importance of integrating exploratory activities (e.g. the intrapreneurs) and exploitative operations in order to achieve ambidexterity. They claim that integration enables organizations to create value for both new and existing business (Jansen et al., 2009). This clearly supports the interviewee's observations.

Based on this we can construct the following proposition.

> **Proposition 8:** Favorable effects of intrapreneurship are not limited to the business opportunities directly created by intrapreneurship initiatives. Intrapreneurship is also associated with other favorable effects for the whole organization such as employer branding, innovation competence enhancing and knowledge creation, even though initiatives fail to create new profitable business.

The consequence of this is that companies considering doing intrapreneurship should assess all possible favorable outcomes from such an initiative. Considering that very few of the intrapreneurship teams in this study have been able to create level 4 innovations and none of them have yet been able to cause disruption, it is naïve to believe that an intrapreneurship initiative will produce a lot of high level innovation immediately. Therefore, in order to reap as much benefit from such initiatives as possible, one should also seek to operationalize other positive effects, such as organizational learning and training of employees in innovation work.

In this study there are two particularly notable examples of such indirect benefits from intrapreneurship. As mentioned organization B has strengthened its employer brand because of the intrapreneurship initiative. In organization A the team and the team's manager have been able to spread the success story of their intrapreneurial way of working across the organization, causing their new CTO/CIO to endorse the use of such independent intrapreneurial teams. According to the team lead this is one of the most significant single factors that may enable innovation for the rest of the organization.

5.3   Intrapreneur teams and innovation

The obvious purpose of intrapreneurship teams is to create innovation that gives rise to business opportunities. One part of this study was to examine what types of innovation the intrapreneurship teams typically managed to create. In 11 out of 12 interviews, across all 6 organizations, the interviewees claimed that they were creating (or aiming to create) product innovation. Often this was in combination with other types. The combination of product and market innovation was often the case for the intrapreneurs typically creating innovation for a

B2C market. Another combination was product and process innovation, that was present in cases where the intrapreneurs were creating process improvements, either for customers (e.g. organization E) or internally (e.g. Organization A).

This is useful insight since it indicates what team-based intrapreneurship is typically applied to produce some kind of product innovation. In other words, team-based intrapreneurship initiatives have best fit if product innovation is desired. This is either associated with new products in the market or new tools that cause process improvements. Based on this we can construct the following proposition:

> **Proposition 9:** Team-based intrapreneurship is a good fit for creating product innovation either in combination with market or process. Product and market innovation fits situations where one wants to create new products for new markets. Product and process innovation fits when one wants to create tools for internal process improvement.

Note that some interviewees mentioned process and organizational innovation associated with the practices the intrapreneurship team was using. Methodologies such as Lean Startup(Ries, 2011) and Google Design Sprints(McCue, 2016) are new to many of the organizations so when the intrapreneur teams apply them this is an important process and/or organization innovation. This implies that sources of these process and organizational innovations are usually indirect, i.e. from their professional community and literature.

The sources of product innovation are mostly direct. The interviewees explain that they try to develop new products for new markets, and to copy competitors. In some of the organizations product innovation comes directly from cooperation with their customers and partners (such as organization D).

Another dimension of innovation explored during the interview process, was the levels of innovation (see: 2.1.3) the intrapreneur teams managed to create. It is clear that architectural innovation is somewhat uncommon while radical innovation is very uncommon. In some cases the higher levels of innovation stem from a series of lower lever innovation, as in Organization A. Here the interviewees claim that higher levels of innovation are an effect of long-term work and consequently a long series of lower level innovation. This has several implications. Firstly, one should not forget the value of lower level innovations, and secondly, one should not expect radical or architectural innovation very often.

5.4 Behavior and cognitive process of intrapreneur teams

During the interviews the subjects were asked about how their intrapreneurship team worked and what their thought process was. They were shown Figure 8 from section 2.3.1 and asked to describe which of the two options (causal or effectual thinking) fit best with how their team worked. 10 of the interviewees explained that they were either trying to apply effectual thinking, doing it or they were applying both causal and effectual thinking. In several cases, such as in organization B, the team reached the conclusion that they needed to change the way they were working after encountering problems while working according to causal thinking.

However, in some organizations, such as A and F, interviewees claim that their team applies both methods. For example organization A's manager claims that the team has several clear strategic goals in addition to an overall vision, but in everyday work they are much more effectual and "do more of what they are good at". Both team members in Organization A agree but they point out that the team has changed more over to effectual thinking after reaching their initial goals. The interviewee in organization F claims that they adjust the process to the problem at hand. As he says it, they classify the problem according to how clear the outcome is. If the goal is specific and clear (although not necessarily easy to achieve) they set up a traditional project that mainly applies causal thinking. If they try to solve open-ended problems they set up an innovation team that tries to work effectually.

In some cases the intrapreneur teams try to apply effectual thinking, but encounter challenges because of their organizational environment. For example, in organization C the intrapreneur team is held from working entirely effectually by formal structures such as reporting requirements. But as the team member explains, they need to focus on experimentation and this does not fit with traditional reporting and KPIs. Causal thinking is traditionally seen as a rational and "correct" way of working, especially in corporate settings. This is the typical rational MBA sensemaking framework (Sarasvathy, 2001a, 2001b). Therefore it is not surprising that intrapreneurs that attempt to apply effectual thinking meet these obstacles. The manager of organization E was also experiencing resistance from the organization because of their desire to work effectual.

In general, almost all interviewees quickly grasped the concept of effectual thinking and saw clear benefits from it within the context of team-based intrapreneurship. Therefore one should assume that effectual thinking is applicable to both entrepreneurship and intrapreneurship.

> **Proposition 10:** Effectual thinking is applicable to intrapreneurship. However, it is more difficult for intrapreneurs within corporate environments to apply effectual thinking than entrepreneurs. This is because corporate environments are typically based on causal reasoning.

This proposition is supported by recent academic work that applies effectual thinking in the context of intrapreneurship (Duening et al., 2012; Schmidt & Heidenreich, 2014). However, effectual thinking in intrapreneurship is still a new field as there are not many academic papers available at this time.

5.5   Contributions of this work

This study has several contributions to the fields of innovation and intrapreneurship. Many of the findings from underpin and reinforce previous research on factors for intrapreneurship. However, some contributions are relatively new to the field. Research on intrapreneurship antecedents and factors often focuses on management behavior (Hornsby et al., 2002; Kuratko et al., 1990) and treats the actual intrapreneurs as resources. This work focuses on teams of intrapreneurs and consequently it includes individuals and teams as important elements. This is new in comparison to previous research. The finding that individuals are such an important factor for intrapreneurship seems to be a unique contribution. Also, the explorations of how team dynamic and the nature of the intrapreneurs' challenge affect chances of success is a very interesting and particularly useful area worth deeper examination. Consequently, this thesis can be seen as an excellent hook for further research on both individuals and teams in the context of intrapreneurship.

Also, the findings regarding purpose and outcomes of intrapreneurship are important. The fact that intrapreneurship produces favorable side-effects may provide more purpose and motivation for running intrapreneurship initiatives. It could also help companies avoid pressure to shut down initiatives that don't give immediate business outcomes.

Another important contribution is the exploration of the effectual thinking concept in the context of intrapreneurship. There is not very much research that studies effectuation and intrapreneurship, but some quite recent papers cover this topic (Duening et al., 2012; Schmidt & Heidenreich, 2014). This work further establishes the applicability of effectuation in the context of intrapreneurship and reinforces that this is an area worth more attention from scholars.

Finally, the taxonomy proposed in the theoretical context chapter (chapter 2) is a structuring of existing research on the topics of innovation and intrapreneurship. The various topics are set into a system that makes it easier to have an orderly discussion on these topics. Peers and colleagues found the model to be very useful, so it should be considered a theoretical contribution to academia.

5.6 Limitations and further work

A broad part of this study was the qualitative in-depth interviews where elements such as factors for intrapreneurship were explored. The nature of the study implied that it was not possible to reach a very large population of organizations and interview subjects within the scope of a Master's thesis. Also, the selection of research subjects was somewhat skewed since only Norwegian companies in digital industries were covered. Cultural bias, both nationally and in the context of the industries covered, may have had some effect on interviewees' responses. It would be interesting to look at other more capital intensive industries such as the maritime or construction industry where information technology plays a lesser role. Consequently longitudinal and broader study would have merit in order to underpin the propositions from this study.

Also, although face-to-face interviews let the interviewer guide and explain the various topics to increase understanding of the questions, the responses were subject to some interpretation. Such interpretation may cause confirmation bias. Therefore, a qualitative follow-up study of intrapreneur teams would be of interest. Such a study could explore this work's important findings, such as the role of individuals. One approach could be to look more into the concept of effectuation (Read, 2011; Sarasvathy, 2001a, 2001b) in intrapreneur teams in order to measure if intrapreneurs show the same behavior as entrepreneurs. Also, a study on how companies find their intrapreneurs could be very valuable.

A deeper study of team dynamics in a larger population of intrapreneur teams would also be of great interest. For example, one could gauge team dynamic and compare it to the successes achieved by the intrapreneur teams. This would give an even clearer indication on the role of individuals vs. the team and team dynamic. This could help answer if intrapreneurship teams are successful because of individual leaders or whether it is the team that creates the success. Also, as mentioned in 5.5, it would be very interesting to further explore how the nature of the intrapreneurs' challenge and team dynamic affect outcome. How important is team dynamic if

the challenge is open ended vs. if the goal is very specific, and how do individuals come into play in this situation?

The 7-factor model also had some weaknesses. A few topics from the interviews did not fit very well into the model. The two topics are (1) access to resources and (2) partnerships.

Access to resources is associated with strategic focus in the 7-factor model. However, in some cases it could also be associated with culture (informal structures) since access to human resources is often informal. Furthermore, it is not only strategic focus, but also the formal incentives (formal structures) of management that govern how access to resources is given.

Partnerships is a factor that can greatly drive innovation in companies. One important element in effectual thinking is to apply partnerships to increase the footprint and reach of the entrepreneurs (Read, 2011; Sarasvathy, 2001a, 2001b). I see no reason why this should not apply to intrapreneurship as well. In fact the executive from organization D claims that their ability to form effective partnerships is a very important source of their success.

Consequently *access to resources* and *partnerships* could be better incorporated into the 7-factor model, maybe even as separate factors.

6 Conclusion

This thesis studies factors for intrapreneurship with a specific focus on teams. 7 factors were proposed as drivers and inhibitors for intrapreneurship. The goal was to find out whether any factors were more important than others and which factors act as drivers, inhibitors or both. Other characteristics of team-based intrapreneurship were also studied such as the purpose of running intraprenurship initiatives, the types of innovation typically created and the cognitive process of the intrapreneurs. These are the conclusions:

Individuals with an entrepreneurial spirit, is decidedly the most important factor. These are the ones that drive forward intrapreneurship initiatives despite organizational challenges. Little previous research has emphasized individuals' role in intrapreneurship, but the findings in this paper clearly indicate their importance.

Team dynamic is also an important factor. Most importantly, a dysfunctional team dynamic has severe adverse effects and can cause intrapreneurship initiatives to fail. However, with clear and specific goals or individuals that can lead the team, a very mature team dynamic is not necessary as long as the team can work efficiently. However, if the problem is complex and open-ended, teams need an "innovation" team dynamic[28]. Unfortunately, it is very difficult for teams to reach this level of maturity.

Informal Structures or culture is seen as a very important factor. It is both a driver and inhibitor of intrapreneurship. A culture that values psychological safety and decentralized decision-making is favorable, while risk-avoidance and control inhibits intrapreneurship.

Strategic Focus is seen as a very important factor. It is both a favorable and inhibiting factor. Management focus, vision and sponsorship are favorable elements of strategic focus, while misaligned strategic focus between levels of management inhibits intrapreneurship.

Formal Structures such as processes were mainly seen as inhibitors. Intrapreneur don't consider the way they are organized a particularly important factor as long as the teams are fairly independent.

Organizational Context and *innovation programs* were not seen as particularly important.

---

[28] Innovation is the name the highest maturity level of teams (Sjovold, 2007).

The purpose of intrapreneurship initiatives should be diverse. Companies aiming exclusively for direct business outcomes from their intrapreneurship initiatives risk missing out on opportunities for learning and practice on innovation work.

Product innovation is the most probable type of innovation outcome from team-based intrapreneurship.

Effectual thinking is applicable to intraprenurship. If the problem is vague there is a lot of value for intrapreneurs in applying effectual thinking as opposed to causal thinking. However, it may be challenging for intrapreneurs to apply effectual thinking in corporate settings.

The main limitations of this study were the population size and types of industries covered. Further research should have a broader and/or more longitudinal perspective.

References

Altringer, B. (2013). ENTREPRENEURSHIP A New Model for Innovation in Big Companies, 1–7.

Antoncic, B., & Hisrich, R. D. (2004). Corporate entrepreneurship contingencies and organizational wealth creation. *Journal of Management Development*, *23*(6), 518–550.

Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, *24*(1), 45–68.

Baron, R. (2007). Behavioral and Cognitive Factors in Entrepreneurship: Entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal*, *1*(1), 27–47. https://doi.org/10.1002/sej

Benner, M. J., & Tushman, M. L. (2001). EXPLOITATION, EXPLORATION, AND PROCESS MANAGEMENT: THE PRODUCTIVITY DILEMMA REVISITED.

Benner, M. J., & Tushman, M. L. (2015). Reflections on the 2013 Decade Award—"Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited" Ten Years Later. *Academy of Management Review* , *40*(4), 497–514. https://doi.org/10.5465/amr.2015.0042

Camenker, B. (1983). The Making of the IBM PC. *Byte Magazine*, *8*(11), 254–256. Retrieved from https://archive.org/stream/byte-magazine-1983-11/1983_11_BYTE_08-11_Inside_the_IBM_PC#page/n255/mode/2up

Castanias, R. P., & Helfat, C. E. (2001). The managerial rents model: Theory and empirical analysis. *Journal of Management*, *27*(6), 661–678.

Christensen, C. M. (1997). *The innovator's dilemma. Harvard Business School Press* (Vol. 1).

Christensen, K. S. (2005). Enabling intrapreneurship: the case of a knowledge-intensive industrial company. *European Journal of Innovation Management*, *8*(3), 305–322. https://doi.org/10.1108/14601060510610171

Covin, J. G., & Slevin, D. P. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship: Theory and Practice*, *Fall*, 7–25. https://doi.org/1042-2587-91-161

Drucker, P. F. (1998). The discipline of innovation. *Harvard Business Review*, *76*(6), 149–157.

Duening, T. N., Shepherd, M. M., & Czaplewski, A. J. (2012). How Entrepreneurs Think: Why Effectuation and Effectual Logic May be the Key to Successful Enterprise Entrepreneurship. *International Journal of Innovation Science*, *4*(4), 205–216. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=84461605&lang=es&site=ehost-live

Frankelius, P. (2009). Questioning two myths in innovation literature. *Journal of High*

Technology Management Research, *20*(1), 40–51.
https://doi.org/10.1016/j.hitech.2009.02.002

Furr, N. (2011). Big Business ... The End is Near: Why 70% of the Fortune 1000 Will Be
Replaced in a Few Years. *Forbes.com*. Retrieved from
http://www.forbes.com/sites/nathanfurr/2011/04/21/big-business-the-end-is-near/#458cb0a774fb

Garud, R., Tuertscher, P., & Van de Ven, A. H. (2013). Perspectives on Innovation Processes.
Academy of Management Annals, *7*(1), 775–819. Retrieved from
http://dx.doi.org/10.1080/19416520.2013.791066

Govindarajan, V., & Desai, J. (2013). Recognize Intrapreneurs Before They Leave. *HBR Blog
Network*. Retrieved from http://blogs.hbr.org/2013/09/recognize_intrapreneurs/

Groysberg, B., Thomas, D. A., & Wagonfeld, A. B. (2011). Keeping Google "Googley."
Harvard Business School Case.

Henderson, R. M., & Clark, K. B. (1990). Architectural Innovation : The Reconfiguration of
Existing Product Technologies and the Failure of Established Firms Author (s):
Rebecca M . Henderson and Kim B . Clark Source : Administrative Science Quarterly ,
Vol . 35 , No . 1 , Special Issue : Tech, *35*(1), 9–30.

Hill, R. J., Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1958). The Measurement of
Meaning. *American Sociological Review*, *23*(2), 227. https://doi.org/10.2307/2089024

Holcomb, T. R., Holmes, R. M., & Connelly, B. L. (2009). Making the most of what you
have: Managerial ability as a source of resource value creation. *Strategic Management
Journal*, *30*(5), 457–485.

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the
internal environment for corporate entrepreneurship: Assessing a measurement scale.
Journal of Business Venturing, *17*(3), 253–273. https://doi.org/10.1016/S0883-9026(00)00059-8

Jansen, J. J. P., Tempelaar, M. P., van den Bosch, F. a. J., & Volberda, H. W. (2009).
Structural Differentiation and Ambidexterity: The Mediating Role of Integration
Mechanisms. *Organization Science*, *20*(4), 797–811.

Kuratko, D. F., Montagno, R. V, & Hornsby, J. S. (1990). Developing an Intrapreneurial
Assessment Instrument for an Effective Corporate Entrepreneurial Environment.
Strategic Management Journal, *11*(4), 49–58.
https://doi.org/http://www.jstor.org/stable/2486669

Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new
product development. *Strategic Management Journal*, *13*, 111–125.

Lockheed Martin. (2016). Skunk Works. Retrieved June 20, 2011, from
http://www.lockheedmartin.com/us/aeronautics/skunkworks.html

Love, J. H., & Roper, S. (2009). Organizing innovation: Complementarities between cross-functional teams. *Technovation*, *29*(3), 192–203.

Lucas, H. C., & Goh, J. M. (2009). Disruptive technology: How Kodak missed the digital

photography revolution. *Journal of Strategic Information Systems*, *18*(1), 46–55. https://doi.org/10.1016/j.jsis.2009.01.002

Maranville, S. (1992). Entrepreneurship in the business curriculum. *Journal of Education for Business*, *68*(1), 27. https://doi.org/10.1080/08832323.1992.10117582

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, *2*(1), 71–87. https://doi.org/Doi 10.1287/Orsc.2.1.71

Marcus, M. H., & Zimmerer, T. W. (2003). A Longitudinal Study of the Impact of Intrapreneurial Programs in Fortune 500 Firms. *Journal of Management Research (09725814)*, *3*(1), 11. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9867970&site=ehost-live

McCue, M. (2016). How Google Ventures Uses Design Sprints to Ship Great Products. *99u.com*. Retrieved from http://99u.com/articles/52707/how-google-ventures-uses-design-sprints-to-ship-great-products

Merriam-Webster.com. (n.d.). Innovation. In *Merriam-Webster*. Retrieved from http://www.easybib.com/cite/view/style/apa

Moore, G. A. (1991). Crossing the chasm: Marketing and selling technology to mainstream customers. Harper Business New York, NY.

O'Reilly, C. A., & Tushman, M. L. (2004). The Ambidextrous Organization. *Harvard Business Review*.

OCDE. (2005). *Oslo Manual - Inglês - Terceira Edição*. *Communities* (Vol. Third edit). https://doi.org/10.1787/9789264013100-en

Osgood, C. E., May, W. H., & Miron, M. S. (1975). *Cross-cultural universals of affective meaning*. University of Illinois Press.

Oxford. (2016a). Definition of cause in English. Retrieved from https://en.oxforddictionaries.com/definition/cause

Oxford. (2016b). Definition of source in English. Retrieved from https://en.oxforddictionaries.com/definition/source

Pinchot, G. (1985). Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur. *Historical Research Reference in Entrepreneurship*. https://doi.org/10.2139/ssrn.1496196

Pinchot, G., & Pinchot, E. (1978). Intra-Corporate Entrepreneurship, Tarrytown School for Entrepreneurs. Retrieved from http://www.intrapreneur.com/MainPages/History/IntraCorp.html

Read, S. (2011). The bird-in-hand principle: Start with what you have. *Effectual Entrepreneurship*.

Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. *Crown Business*. New York.

Sarasvathy, S. D. (2001a). Causation and Effectuation: Toward a Theoretical Shift From

Economic Inevitability To Entrepreneurial Contingency. *Academy of Management Review*, *26*(2), 243–263. https://doi.org/10.5465/AMR.2001.4378020

Sarasvathy, S. D. (2001b). What Makes Entrepreneurs Entrepreneurial.

Schein, E. H. (1985). *Organizational culture and leadership*. San Fransisco, CA: Jossey-Bass.

Schilling, M. A. (2013). *Strategic management of technological innovation*. Tata McGraw-Hill Education.

Schmidt, J., & Heidenreich, S. (2014). Investigating organizational antecedents of effectual corporate entrepreneurship. In *ISPIM Conference Proceedings - Innovation for Sustainable Economy & Society* (pp. 1–32). International Society for Professional Innovation Management.

Sjovold, E. (2007). Systematizing Person-Group Relations (SPGR): A Field Theory of Social Interaction. *Small Group Research*, *38*(5), 615–635.

Sjøvold, E. (2002). The SPGR Manual. Oslo: SPGR publishing.

Sjøvold, E. (2014). *Resultater gjennom team. Universitetforlaget, Oslo*.

Snider, J. G., & Osgood, C. E. (1969). *Semantic differential technique; a sourcebook*. Aldine Pub. Co.

Song, XM; Montoya-Weiss, M; Schmidt, J. (1997). Antecedents and consequences of cross-functional cooperation: a comparison of R&D, manufacturing, and marketing perspectives. *Journal of Product ….*

SPGR Institute. (2016). SPGR. Retrieved January 1, 2016, from http://www.spgr.no/institute/

Starbuck, W. H., Hedberg, B. L. T., Nystrom, P. C., & Starbuck, W. H. (1976). Camping on Seesaws : Prescriptions for a Self-Designing Organization. *Administrative Science Quartely*, *21*(1), 41–65. https://doi.org/10.2307/2391877

Suarez, F. F., & Ulterback, J. M. (1995). DOMINANT DESIGNS AND THE SURVIVAL OF FIRMS. *Strategic Management Journal*, *16*(6), 415–430. https://doi.org/10.1016/0024-6301(95)99957-2

Teece, D. J., Pisano, G., & Shuen, A. M. Y. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, *18*(7), 509–533.

Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: evidence from digital imaging. *Strategic Management Journal*, *21*(10), 1147–1161. https://doi.org/Doi 10.1002/1097-0266(200010/11)21:10/11<1147::Aid-Smj128>3.3.Co;2-I

Tushman, M. L. L., & O'Reilly, C. A. A. (1999). Building ambidextrous organizations. Forming your own "skunk works". *Health Forum Journal*, *42*(2), 20–3, 64. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/10538896

Wikipedia. (2016). Skunk Works. Retrieved January 1, 2016, from https://en.wikipedia.org/wiki/Skunk_Works

Wikipedia.org. (2016a). Hackathon. Retrieved from https://en.wikipedia.org/wiki/Hackathon

Wikipedia.org. (2016b). Intrapreneurship. Retrieved July 14, 2016, from
    https://en.wikipedia.org/wiki/Intrapreneurship#cite_ref-1

Zahra, S. a. (1991). Predictors and financial outcomes of corporate entrepreneurship: An
    exploratory study. *Journal of Business Venturing*, *6*(4), 259–285.

Tables, Figures and Propositions

List of tables

List of Figures

List of Propositions

Appendices

Appendix 1 Interview guide

1 Hva er intraprenørskap og innovasjon (max 5 minutter)

1.1 Hvordan definerer du intraprenørskap (Entreprenørskap i etablerte organisasjoner)

1.2 Hvordan definerer du vellykket intraprenørskap?

2 Hvor vellykket er organisasjonen? (max 5 minutter)

Hvor godt klarer din organisasjon å drive innovasjon generelt og gjennom intraprenørskap? Lykkes dere? Gi eksempler, kvalitativt og kvantitativt.

3 Nivå og type innovasjon (max 10 minutter)

3.1 Hvilke typer innovasjon klarer organisasjonen å skape?

Nye produkter? Nye måter å organisere seg på (internt og mot partnere) ? Nye kanaler mot markedet, eventuelt nye forretningsmodeller? Prosessforbedringer?

3.2 Hvilket nivå av innovasjon har dere oppnådd?

#	Nivå	Eksempler	%-andel
1	Inkrementell innovasjon (Samme innsatsfaktorer men mer optimalisert)		
2	Modulær innovasjon (Endrer innsatsfaktorer i eksisterende verdiskapningsprosesser)		
3	Arkitektonisk innovasjon (Helt nye verdiskapningsprosesser)		
4	Radikal innovasjon (Helt nye forretningsmodeller)		

4 Hva er det som påvirker innovasjon og intrapenørskap i positiv og negativ forstand i din organisasjon? (max 5 min)

1. Individer – flinke folk
2. Teams - flinke til å samarbeide og oppnå mål. Risikovillige?
3. Kultur – uformelle insentivstrukturer. Aksept for risikosøkende adferd
4. Strategisk fokus
5. Organisasjon og prosesser – formelle strukturer
6. Organisasjonens kontekst
7. Innovasjonsprogrammer, prosesser og spesielle tiltak spesielt myntet på å skape intraprenørskap

5 Hvordan vil du beskrive intrapenør-individene og teamene i organisasjonen? (max 5 min)

Be intervjuobjektet velge hvilken «tankemåte» som er nærmest slik man jobber i teamet.

Eksempler på midler:

Hvem jeg er	**Individuellt nivå:** evner, vaner og «smak»

	Organisasjonsnivå: Tilgjengelige fysiske ressurser
	Øknomi / industri: Demografi
Hva jeg er / jeg kan	**Individuellt nivå:** Kunnskap / bredde
	Organisasjonsnivå: Tilgjengelig kompetanse
	Økonomi / industri: Teknologiregimer
Hvem jeg kjenner	**Individuellt nivå:** Sosialt nettverk
	Organisasjonsnivå: Nettverk innenfor og utenfor organisasjonen
	Økonomi / industri: Sociopolitiske institusjoner

M1
M2
M3
M4

Gitte
Midler

Forhåndsdefinert
mål, effekt eller utfall

Alternativ 1

M1

M2

M3

M4

Gitte
midler

E1

E2

E3

E4

Forskjellige
effekter og
utfall

Alternativ 2
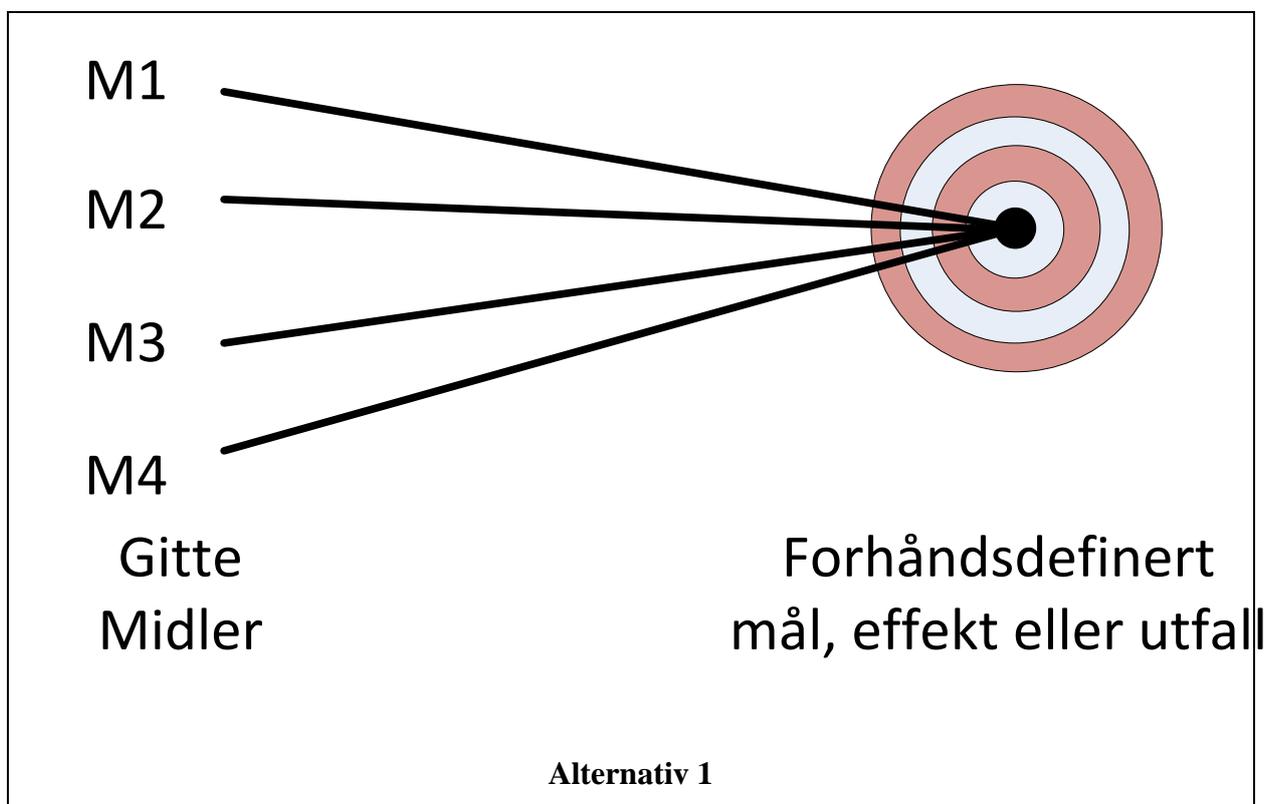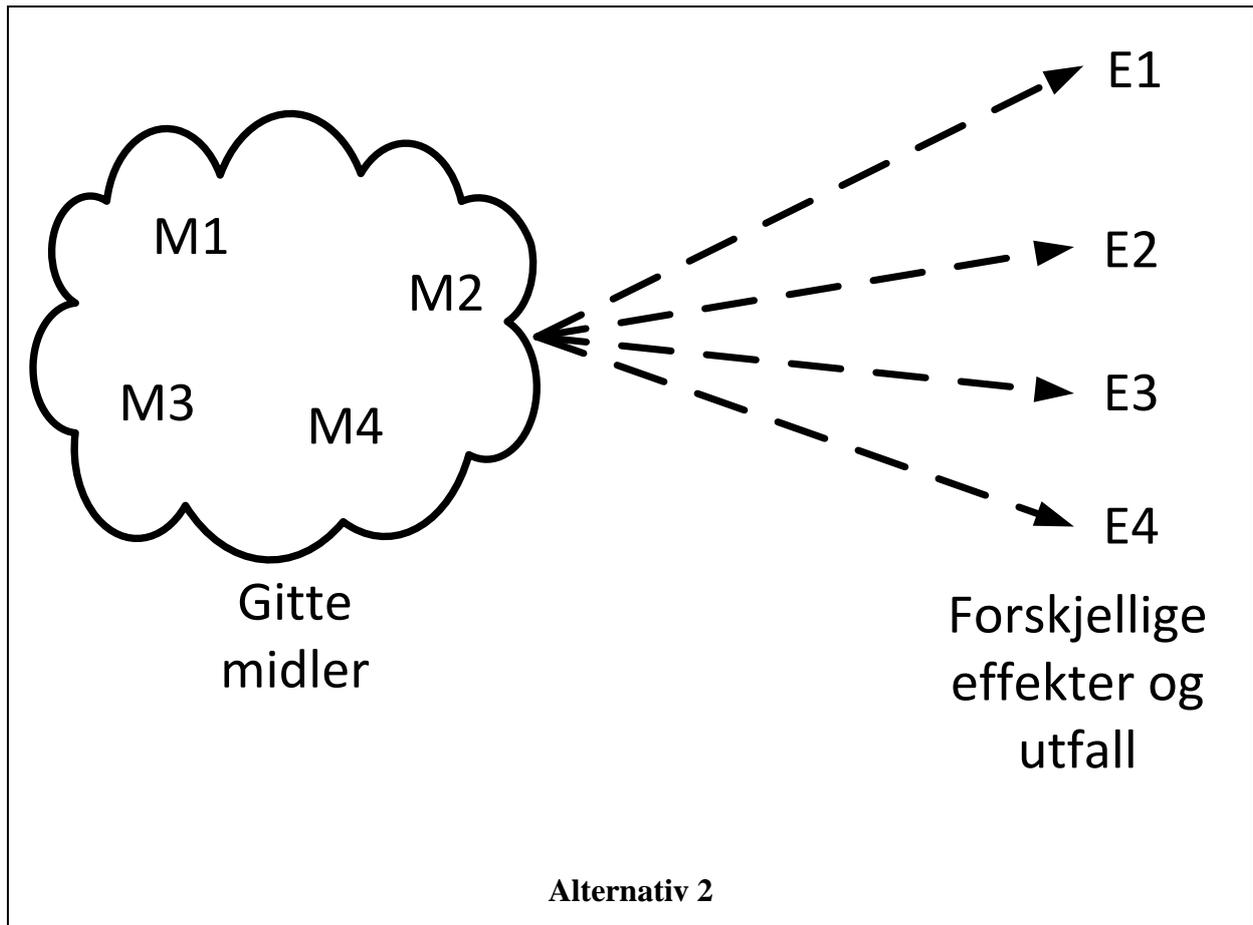
6 Hvordan er intraprenørskap organisert? (max 5 min)

Be først intervjuobjektet beskrive generelt, så peke på figurene,


Functional design
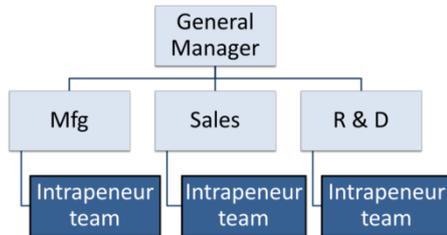
Cross-functional teams
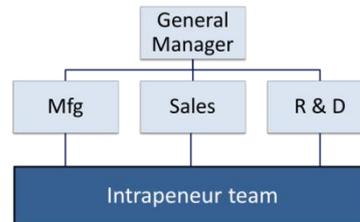
Unsupported teams
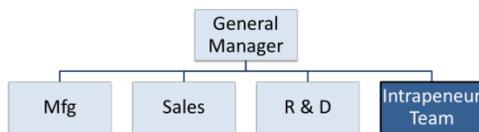
Ambidextrous organization
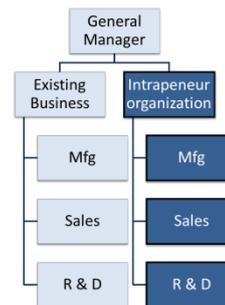
7 Konkrete tiltak som gjøres for å kultivere intraprenørskap? (max. 5 min)

8 Annet / avslutningsvis (max. 10 min)