

UNIVERSITY OF GOTHENBURG SCHOOL OF BUSINESS, ECONOMICS AND LAW

Master's degree Project in Management

Constructing an Explorative Approach for a New Reality: Ambidexterity in a Real Estate Context

A qualitative study at Castellum

Ida Fransson and Joel Rosman

Supervisor: Niklas Egels Zandén Master's degree Project No.

Graduate School

Constructing an Explorative Approach for a New Reality: Ambidexterity in a Real Estate Context

A qualitative study at Castellum

Ida Fransson

Master of Science in Management, Graduate School. School of Business, Economics and Law, University of Gothenburg

Joel Rosman

Master of Science in Management, Graduate School. School of Business, Economics and Law, University of Gothenburg

Abstract

The real estate industry in Sweden has historically performed well with similar actors and behaviours on the market. This has resulted in a slack change of adapting the industry to the society's new trends and behaviours, e.g. digitalization and services, compared to other industries, because of that there have not been any real incitements for it. Instead of trying to adopt themselves gradually from how the industry changes, there is an opportunity to proactively changing the business model and survive. Therefore, there are benefits for a firm of taking the lead before the industry changes of new actors entering the industry. This thesis is based on a case study at Castellum, a Swedish real estate company with focus on the Nordic market that has since 2017 run an innovation lab with the aim to pursue technology-based business development and to adapt service offerings around their business in accordance to changing conditions. We ask how does an established real estate company attempt to become an ambidextrous organization, i.e. how does it attempt to balance exploration and exploitation. We show that becoming an ambidextrous organization (with a clearer emphasis on exploration than before) could be central for gaining legitimacy. This can open up for new partnerships, benefit shareholders and customers, as well as attract and retain employees. Although hinted at in existing research into ambidextrous organization, we argue that legitimacy should be given a more prominent role in discussions of why firms attempt to become ambidextrous and the consequences of such attempts.

Key Words

Exploration, Exploitation, Ambidexterity, Legitimacy, Established firms, Real estate industry

Introduction

In today's world of business, a considerable amount of time and money is spent on organizations that are innovative and leading their industries (Gobble, 2015; Crossan & Apaydin, 2010; Slavich & Svejenova, 2016). It is often stressed that it is important for organizations and employees to "be innovative" and to continuously come up with new and creative solutions for their industries (Palazzo & Sherer, 2006; Slavich & Svejenova, 2016). It has also been said that innovation might be one of the few last sources of competitive advantage (Crossan & Apaydin, 2010). One such area where innovation is perceived as particularly important is in information technology (IT), where Sweden is considered to be one the most digital countries in the EU (EU, 2019).

The digital trend has, when comparing to other industries, in so far not been particularly prominent in the real estate industry due to a historically very stable business environment (Börjesson & McCormac, 2018). For example, the vast majority of industry representatives do not see digitalization as a threat to their profitability nor their ability to develop their business model, at the same time do they lack an established strategy to adapt to digitalization (Börjesson & McCormac, 2018). While incumbent firms have been relatively slow to adapt to digitalization, new "property technology" (PropTech) companies are emerging and one of the driving forces in the new digitalization of the real estate industry (Baum, 2017). This trend is likely to further develop (Rajakallio et al. 2018) as digitalization in commercial real estate has become especially vivid during the current Covid-19 pandemic which has drastically questioned the way people work and where they do it (Lundsten, 2020).

How could then large and established real estate companies tackle the challenge of adapting to a digital and more technological driven market? More specifically, how can they combine their current (historically successful) business with adapting to more innovative ones? Scholars have stressed the need to combine these two types of activities in everyday work to find a business model that are sustainable now but also in the long run (O'Reilly & Tushman, 2013; Gibson & Birkinshaw, 2004). According to organizational theory build around *ambidexterity* this combination of activities, or the balance of such, is an important thing to accomplish and the key to organizational survival. According to the Merriam-Webster dictionary (2020) being ambidextrous refers to someone being able "use both hands with equal ease or dexterity". This seems highly relevant for real estate companies and we therefore ask:

How does an established real estate company attempt to become an ambidextrous organization?

When answering this question, we draw on a qualitative case study of the innovation work at Castellum, a company that has started and running innovation projects in the recent years and are trying to balance exploration and exploitation business development. Furthermore, empirical data from external actors' experiences and knowledge will be used for gaining a broader perspective of exploration. We show that becoming an *ambidextrous organization* (with a clearer emphasis on exploration than before) could be central for gaining legitimacy, and could in turn be central step in gaining and even sustaining that ambidexterity. In other

words, being ambidextrous is important for especially large established firms in stable industries not only to develop innovative business models but also to be perceived by, for example, investors, customers and potential employees as a modern firm. Although hinted at in existing research into ambidextrous organization, we here argue that legitimacy should be given a more prominent role in discussions of why firms attempt to become ambidextrous and the consequences of such attempts.

Theoretical Framework

Introducing the Ambidextrous Organization

The word *ambidexterity* is used as a concept in organizational studies for the ability to balance activities of both an innovative (exploratory) nature, as well as a strengthening and enhancing (exploitative) nature. There are multiple definitions of ambidextrous organization written by many authors and it has come to a point where some argue that the initial clarity of the concept, might have been blurred (O'Reilly & Tushman, 2013). The concept was first mentioned by Robert Duncan in 1976 (Raisch & Birkinshaw, 2008), referring to organizations' ability of shifting their structure and strategy to both explore and exploit activities, at the same time aligning both with the overall organizational strategy. Gibson and Birkinshaw (2004) define the level of organizational ambidexterity as the firm's capacity to simultaneously conduct both types of activities on all business unit levels. Kollmann & Stöckmann (2008) has focused this approach of the business unit levels in large and established corporations. They argue that in order to sustain an organization in long-term, it would need to develop and preserve the existing business model at the same time as it would need to develop and explore potential future business. Otherwise, there is a risk that they either suffocate in conservatism or drown in chaos caused by too much change (Kollmann & Stöckmann, 2008). This is also similar to Koryak et al. (2018) use of ambidexterity as an organization's ability to manage current demands while continuously adapt to changes in the business environment.

Ambidexterity as a concept is further explained by Kollmann & Stöckmann (2008) as "the dual management of seemingly opposing tasks forcing managers to accept the challenge of paradox management" (p.17). This points towards the seemingly difficult task to maintain both exploitative and explorative activities at the same time. Koryak et al. (2018) also debate that recent research of ambidextrous organization has emphasized that the relationship between exploration and exploitation is a paradox, making it by definition difficult to manage. This resonates well with Andriopoulos & Lewis (2009) argument that the mindsets on how to achieve ambidexterity have gone from a view of trade-offs towards a view of paradoxes. The reason is that both types of activities demands very different processes, strategies and capabilities. This paradox ultimately creates inescapable tension in organizational resources and capabilities, to which Smith (2014) argue that this needs to be dealt with by dynamic decision making which integrates both types of activities in the core strategy of the organization itself. Decision which will ultimately be taken by senior management (Smith, 2014), to which highlights the importance the top management team's influence on the organizational capability to achieve ambidexterity (Heavey & Simsek, 2014). When it comes to management of innovation, ambidextrous organizations can be seen as the ones that succeed at exploiting their existing products and services to enable incremental innovation, while exploring new possibilities for achieve more radical innovation (Andriopoulos & Lewis, 2009).

The Concept of Exploration and Exploitation

The idea of an organization being able to balance the activities of both exploitative and explorative nature is not a new area in organization literature (Raisch & Birkinshaw, 2008). However, according to Raisch & Birkinshaw (2008) has this led to organizational theory to focus on "discrete, contrasting categories, forcing firms to focus on either exploitation or exploration." (p.377). However, James March's seminal article in 1991 put the balance of exploration and exploitation activities yet again in the interest of literatures. March (1991) argue that both activities are two radically different sources of learnings and experiences, between which organizations balance recourses and attention. March (1991) also argued for a simultaneous development of both types of activities since this would be a necessity to the survival of the organization itself, which Gibson & Birkshaw (2004) also directly agree with.

Exploration is activities that can be related to words like risk raking, discoveries, and innovation, while exploitation can be related to efficiency, selection, and implementation (March, 1991). As said before, March (1991) argues for a balance between the two concepts and according to him, are then the main factor for organizations' survival and long-term success. For example, exploration is inefficient by nature and inevitably connected to an increased risk, however without it, organizations are most likely to fail in times of change (O'Reilly & Tushman, 2013). March (1991) called for a management of this trade-off between explorative and exploitative activities, to which he also raises the conflict between short-term and long-term concerns. Koryak et al. (2018) argues for similar solution and that the organization's focus should shift between exploration and exploitation activities, and ultimately it is the top management team's responsibility to make it successfully.

From Tradeoff to Organizational Ambidexterity

Ambidexterity can be connected and has developed together with a stream of other organizational theories such as organizational learning (March, 1991), technological innovation (Andriopoulos & Lewis, 2009), organizational design and performance (Gibson & Birkinshaw, 2004), and leadership theory (Beckman, 2006). March (1991) early work on ambidexterity states that it is a constant trade-off between organizational activities that are exploratory or exploitative. From these trade-offs, March also argues that different learnings and outcomes will occur as an inevitable result. To limit the conflict on limited organizational recourses and processes, some researchers did promote a trade-off scenario where structures and strategies focused on either one of the two activities (Andriopoulos & Lewis, 2009), hence not actually at the same time at all, but still achieving ambidexterity.

Lately however, several researchers in organizational ambidexterity essentially agrees on this discussion and claims that, there is no longer a discussion about a "trade-off" between explorative or exploitative activities, or the question on which to choose. Raisch & Birkinshaw (2008) discuss the change from trade-off thinking to paradoxical, however raises the difficulty in reality to execute these activities as such. The activities compete for the same organizational

resources, which make senior management to make trade-offs and Raisch & Birkinshaw (2008) highlights that organizations tend to focus on only one activity. However, bigger firms might have more resources and therefor have a bigger chance to be able to both explore and exploit new possibilities. Moreover, organizations should simultaneously develop both types of activities to be strategically and long-term successful according to Raisch et al. (2009). Andriopoulos & Lewis (2009) argue that when discussing ambidexterity and its antecedents, that discussion has gradually gone from a trade-off mindset to a discussion on management of paradoxical activities. According to the authors and based on their findings, their interviewees did not express exploration and exploitation activities as trade-offs, but rather as "synergistic and interwoven polarities" (Andriopoulos & Lewis, 2009 p.701).

The definition of being ambidextrous, explained as a concept that refer to balancing two conflicting tasks, can be further explained from a case study. Du et al. (2013) describe this challenge in their paper about a technology organization that try to balance between profitdriven development and sustainable (environmental friendly) development. Without ambidexterity, organizations will naturally be homogenous and in this case focus either on sustainability or profitability. While the profit-driven development seems obvious for surviving, lack of sustainable development can receive considerable public criticism and subsequently lose market legitimacy (Du et al. 2013). In the context of corporate legitimacy, there is an interesting question of how businesses gain and maintain legitimacy, since it is so vital to their survival (Palazzo & Scherer, 2006). The Suchman (1995) article on legitimacy and both gaining and maintaining legitimacy still hits some very interesting points today. Strategic legitimacy is arguably a valid factor for organizations to regard, and in the authors view even purposive and an operational resource. Furthermore, the article does also imply that legitimacy can be managed and activities can substantially make a difference in how others perceive the organization (Suchman, 1995). Going back to Du et al. (2013), the two paradoxical activities need to be balanced, and they are simultaneously contradictory and complementary. In this case of sustainable business development Du et al. (2013) summarize that: (1) the developments are often contradictory, as for example business processes tailored to maximize profits often function badly in terms of energy conservation. (2) The developments also complement each other significantly, for example sustainable development improves the competitive contexts of the organization, which can in turn result in more future profits. In this case, instead of a radical development, the sustainability activities are gradually integrated into the organization to become ambidextrous (Du et al. 2013).

How to Achieve Ambidexterity

There are two main views of organizations achieving ambidexterity: a structural or a contextual view (Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013). The structural view is described as when one part of an organization focuses on innovative exploration, while another part of the same organization focuses on exploitation (O'Reilly & Tushman, 2013). It is defined as a way of adapting the organization's design to balance the explorative and exploitative activities. The decisions are made by the top management team, and their role is to define the structure and to make decisions between alignment and adaptability. The structural view is also related to the employees' roles to be relatively clearly defined, and the

skills to be more of specialists (Gibson & Birkinshaw, 2004). The contextual view heavily balances the tensions that arises within the organizations. Individual employees divide their time between exploitation and exploration activities (Gibson & Birkinshaw, 2004), this is comparable to what Blarr (2011) described in a reciprocal relationship, where the result is to combine explorative and exploitative activities across departments as well as time. The decisions are more taken on the front line, e.g. the employees themselves. The role of the top management team here is to develop the organizational context in which individuals act. The roles are relatively flexible, and the skills of the employees are more generalists (Gibson & Birkinshaw, 2004).

Markides (2008) conducted research on how to achieve ambidexterity and discussed separating or integrating a new business model into an organization. According to his research, simply separating or integrating new parts of the organization is not enough to ensure success. If the preferred strategy is separation, the company need to find ways to exploit its existing strengths (e.g. brand name, financial resources and industry experience) in the new unit without constraining it. If the preferred strategy is integration, the company must still strive to protect the business model from excessive interference or mismanagement, and at the same time exploiting. However, Markides (2008) states that "the key to a successful separation strategy is to protect the new business model in a separate unit but not give up on synergies altogether" (p.101). Companies must always find ways to exploit synergies, no matter how small or limited they are, to be successful companies, and the level of integration needed varies depending on the company. Lawrence & Lorsch (1967) found in their study that successful companies were able to achieve high degrees of both integration and separation, and that the level of differentiation needed was a function of the external environment facing the firm, which was later described by Markides (2008) as well. If the business environment is stable, then the integration level is easier, while an unstable environment requires that the company must be highly differentiated. Firms operating in unstable environments tend to use more integrating devices than the firms in stable environments. In addition to this discussion, O'Reilly & Tushman (2013) summarize in their article that achieving organizational ambidexterity is generally more valuable in: (1) times of environmental uncertainty, (2) increased competitiveness, (3) when a firm has more resources, and (4) larger firms.

Ambidexterity and Strategic Renewal

Explorative departments in an organization are many times separated from the core business structure in order for these explorative activities to be able to reach their innovative potential and find alternative revenue streams. Thus, avoiding tensions between the innovative activities and current organizational strategy (Friesl et al. 2019). Raisch (2008) found in his article that the separated innovative departments are more flexible and has more of an organic structure in order to find ways of coping with any new products or services, their case organizations had full ownership of their products, marketing and sales, however fully owned by the parent company. Friesl et al. (2019) found that separating the parent company (core business) and the innovative department were necessary due to the fact that the core business could not depart from their exploitative activities because of structural rigidity such as strict return on investment (ROI) goals, and the current strategy to maintain revenues. Similar to the separation

of exploration and exploitation, Blarr (2011) shows a partitional ambidexterity where departments are structurally separated inside an organization and pursuing an open culture exchange, however argue that this separation comes with an increased risk of isolation between work units. Both Friesl et al. (2019) and Raisch (2008) are talking about a strategic separation of departments, but also a balanced integration. According to Raisch (2008) this integration can only be achieved by two mechanisms: nurturing and sharing. First, Nurturing is to him when the parent company supports the innovative department with expertise and operational know-how. Second, sharing is the collaborative resources and assets shared between parent departments and the innovative one. With these two mechanisms of integration, Raisch (2008) also observed what he called *reverse nurturing*, where the innovative department brought new knowledge and new expertise back to the parent company.

Friesl et al. (2019) on the other hand use the notion of proximate isomorphism to discuss how activities on the parent company level that aims at imitating the capabilities, structure and culture of the explorative (innovative) department, and thus in some form integrate the innovative department into the parent organization. According to the authors this "mechanism" would give way to considerably more explorative activities in the parent departments itself and therefor ease an integration of the innovation department into the core business (Friesl et al. 2019). However, in order for this to be possible, the authors mean that the innovative department must gain internal legitimacy in key individuals as well as in the work that they have done. This can be done via showing good results in project portfolio and presenting alternative business models which in turn would present new revenue streams (Friesl et al. 2019). Both Raisch (2008) and Friesl et al. (2019) are thus arguing for a structural ambidexterity where a separation of innovation and core business departments (exploration and exploitation activities) to later move on to an inclusion of the innovative and explorative department into the core business (parent company). Which can be seen as a structural way of performing trade-off decision in order to achieve ambidexterity, however in the long run, both Raisch (2008) and Friesl et al. (2019) agree on that the explorative activities must be implemented in the core business to sustain ambidexterity over a longer period of time.

Methodology

Introducing the Setting

Castellum is a Swedish commercial real estate company publicly traded on the Nasdaq Stockholm Large Cap (CAST) and has had a stable growth since going public in 1997 (Nordnet, 2020). They estimate that more than 250 000 people go to work in their buildings every day and they employ 420 people themselves as of year-end 2019 (Castellum, 2020). Castellum also manage a real estate value to a total of 95.2 billion Swedish crowns, allocated over 4,3 million square meters in Copenhagen, Helsinki and 17 different cities in Sweden (Castellum, 2020). They have been focusing on cash flow with low financial risk and to be a customer-centric organization. Castellum's business regions have been Nordic growth markets in which cities in the countries: Sweden, Denmark and Finland belong. Since the early start the company have continuously presented good financial figures and a strong growth. Castellum's business model has since the founding in 1993 been to develop and administrate commercial

real estate, they were a front runner in sustainable development in the industry (Stevik, 2020) and have for the last couple of years focused more and more on innovation of their business.

The business environment for Castellum has since the start been a relatively stable one. This has made it possible for Castellum to establish themselves well on their markets and are today the third biggest real estate owner in Sweden, when looking at the total real estate value (Fastighetsvärlden, 2019). However, since more and more technology are introduced in our society, so is it also introduced to the real estate market and are presenting owners such as Castellum with new challenges (Castellum, 2020). Challenges such as smart technology, coworking spaces and different competition, urbanization and digitalization (Deloitte, 2020). Castellum have since 2017 been striving for a goal to become leaders in digitalization in their industry as early as 2020, and in the wake of this an innovation lab was developed (Castellum, 2020). The lab has been an important part of Castellum's path to become more innovative and to develop their business model and resulted in several new projects (Castellum, 2020).

Research Design

With the purpose of answering our research question and with the aim to conduct good rigorous research (Gioia et al. 2012), a qualitative case study with comparative elements has been conducted. We identified this research to be a case study with the help of a definition written by Barbara Czarniawska (2014, p.21) as a "study of the occurrence of a phenomenon – a chain of events, usually limited in time, usually studied retrospectively". Eriksson & Kovalainen (2016), wrote that when limiting the research, it is highly important to choose a topic where it is suitable to conduct the research, however, also accessible. The advantage of a case study method as concluded by Zainal (2007) is that the method is suitable when trying to explain the complex real-life situations and exploration. However the disadvantages of a case study method is the risk of biased views, lack of generalizations, and being too time consuming (Zainal, 2007). Therefore, we chose our research site and research area due to one authors' access to the organization, however letting personal opinions and all biased views to neutralized as much as possible. Moreover, due to the limited scope of time, we chose to limit the case to only account for our chosen organization. We find our method and research site to be a well suited place to study the phenomenon of balancing explorative visions with core business activities in a large organization within a real estate context.

The research process has been conducted in three steps: (1) background and literature review, (2) data collection and theorizing, and (3) lastly discussion and finalization of the research, it was. The research process as showed in figure 1 has also followed an inductive process where data collection, interviews and theorization were allowed to follow and adapt to the development of the research and thus hopefully allow for a more rewarding result. During the period in which the data was collected lasted for nine weeks, however during this time transcription, coding and theorizing was also conducted simultaneously as new data was collected.

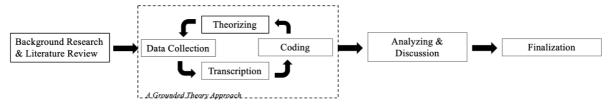


Figure 1. The research process

This report also includes a comparative qualitative analysis of professional management of innovative work in both Castellum, but also from horizontal collection of data from professionals working with management of innovation and strategy over several industries, not excluding real estate. Data from external professionals were included in order to validate the practices and ideas behind the interviews with Castellum, as well as to identify differences and similarities across industries.

Data Collection

The interviews conducted for this research was done in a semi-structured fashion. This is preferable in mainly two ways. First, it gives the interviewers a chance to plan and structure the interviews in a way that surely would give data to answer the research question as well as it gives the interview a natural flow (Eriksson & Kovalainen, 2016). Second, it gives the interviewee the chance to answer the questions given, however also add on to the discussed topic to give way for new interesting ideas, thoughts and themes, similar to a flowing conversation (Czarniawska, 2014). The interview guide had 16 questions which were separated into four themes of (1) personal background, (2) innovation management, (3) innovation lab, and (4) future trends and their effects. However, due to the iterative method for this research the interview guide also developed along the general development of the research. Some questions were added to the guide depending on the person that were interviewed, and some questions were removed due to the irrelevance to some interviews. The interviews lasted between 40-70 minutes, with the majority lasting an hour. The data collection and the choice of interviewee was also collected in a snowball sampling method according to Etikan et al. (2016) Snowballing method can be preferred when access to the population of interest can be tricky, however still leaving some influence on who and what to include in the data collection. Our first contact gave us great support in finding further contacts inside the organization and from that we came in contact with more interviewees. Table 1 summarizes the interviews conducted.

Professional Role		Number of Interviews
Senior Innovation Manager		4
Senior Internal Manager		4
Innovation and Strategy Consultants (external voices)		6
	Total	14

Table 1. Number of conducted interviews.

All interviews were recorded with the interviewees consent and then transcribed by both authors. The transcriptions played a huge role in the coding of the empirical material and the analytical part of the research. In order to account for ethical and staying true to your cause we

followed some ethical guidelines from qualitative research as discussed by Eriksson & Kovalainen (2016); all personal information from the interviewees have been anonymized and, transcribed and subsequently approved. We as researchers have kept an unbiased role throughout the research period and acted with a responsible and a professional integrity towards all participants, both individuals and organizations. All participations were voluntarily and communicated as such. This research also kept a zero-tolerance policy towards any type of plagiarism.

To summarize, the empirical data was thus collected from two primary sources: (1) during 14 interviews, and (2) from 10 documents originating from Castellum such as annual report, PowerPoints, and internal evaluation reports. These documents gave us the possibility to understand the broader context in which some of the interviewees are working in and the general operations of the organization. A media coverage about Castellum was also conducted to gain deeper understanding of external correspondents of the organization. This media coverage was limited to news and articles published in Sweden.

Data Analysis

In order to analyze the empirical data, we adapted approach influenced by grounded theory method introduced by Barney Glaser and Anselm Strauss in their 1967 article "the discovery of grounded theory" (Heath & Cowley, 2003). This meant that the data were coded in three iterative steps and the analyses were throughout the entire research period heavily influenced by an iterative approach and idea. The data were analyzed in three steps as illustrated by Gioia, et al. (2012) the first level coding was influenced by the interviewees' perceptions, creating concepts, the second level were coded with theory as background and thus creating themes. Finally, the third level coding is focused on aggregate dimensions which all three together creates a data structure from the empirical data (Gioia et al. 2012). Our analytical steps and structure have been summarized in figure 2.

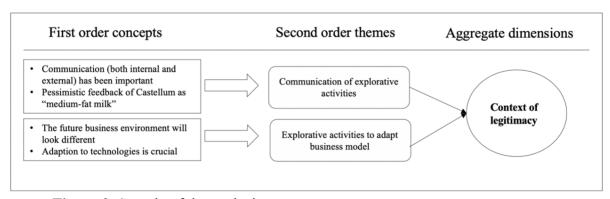


Figure 2. Sample of the analysis structure.

As Gioia et al. (2012) clearly states, it is a static model of a process which is highly dynamic and iterative. Nonetheless, this method of data analysis helped us to continuously find and understand interesting concepts that was introduced from the empirical material, and to have a connection to the material throughout the research.

Empirical Findings

Starting the Innovation Journey

In 2016, Castellum started to discuss how they could work for developing their business model in accordance with changing conditions in their business environment. Other industries had recently been affected by new actors entering their field with business ideas based on sharing economy and digitalization, e.g. Uber within the taxi industry and similarly to how Airbnb changed the hospitality industry. Thus, Castellum wanted to work proactively before their industry would be changed at some point. Instead of waiting and start acting in the case of their existing competitors coming up with new ideas, or new actors entering their industry, Castellum wanted to take the leading position and change the industry in accordance to new habits and patterns in the society with focus on digitalization. For Castellum, starting what they called innovation work, was the first step of changing their business model.

We should move from the idea of just renting out square meters to selling services, which is important for us. (Senior Innovation Manager₃)

The property management is the core business for Castellum, but they wanted to do something more. In the upstart phase, there were several ideas how they could proceed with the innovation work. For example, they had realized that they probably do not need to expand in more spaces, rather use the spaces they have more efficient, and started thinking how they could use that in the innovation work. Furthermore, they were thinking of how they could proceed with the ideas in the organization. One of the managers at Castellum mentioned the importance of their core business.

Castellum has property management in its DNA. There is a distinction how you work with customers in for example project development (real estate) firms, then you should try to find customers for buildings that have not been built yet. In property management you need to work more proactive and long-term relationship building. (Senior Internal Manager₃)

Throughout several interviews the topic of Castellum's historical performance came up as a challenge but also a benefiting factor to their work with innovation. The key factors as many managers at Castellum brought up was that they have the commitment from top management team. They have resources and the vision, historically they might lack the organizational experience from innovation, however, this is not something that is holding them back in terms of not wanting to take on this new journey. Another reason for starting the innovation work was that Castellum, as one of the big actors in their industry, felt that they wanted to give something back to the society and their customers, one senior innovation manager₁ even asked the rather philosophical question, "if not us, then who will?", however, the real estate industry is far behind many other industries when it comes to digitalization, and the reason is mentioned by one of the managers.

It is because the real estate industry has performed really well. It is a reason (for not innovating), we do not need to, and there has not been any motive power behind to change before. It would be different if there is a crisis or similar, then there is a reason for change. (Senior Innovation Manager₁)

More and more real estate companies are putting more efforts into innovation projects. During interviews, collaborative efforts between several organizations was mentioned as a join effort, mostly within the industry. Several interviewees though, also raised the complex problems that innovation and development projects brings to organizations as big as Castellum. As a larger organization, Castellum is not alone in having processes and core business that can slow down change and developing work.

This is for all companies that has a functioning business model. They have a service or a product that they live off. All companies are building control mechanisms that improves and protects that process in order for them to earn more money. (Senior Innovation Manager₂)

One senior internal manager raised the problem with relevance and how important it is to stay in touch with the demands on the market, but also being able to predict and work towards future demands in order to stay relevant and legitimate even then.

It is about having a business that is also relevant in five years [...] then you should also think of that something that is only a desire today might be a demand in five years. (Senior Internal Manager₂)

Another reason for starting the innovation work was from a branding perspective. Castellum, listed on the stock market, has delivered for many years to their shareholders and customers. Nevertheless, they were not as exciting as a company which was mentioned from one of the managers by using a metaphor.

In one of the newspapers, there was an article about Castellum where they compared us as medium-fat milk. It is not fun to hear, even if we deliver all the time, you want to stand out. It is an important motivational force. (Senior Innovation Manager₁)

What the newspaper meant by referring Castellum as "medium-fat milk" was that they were not seen as an exciting company, but it is a safe option for investing money and getting a return. Starting the innovation work and do something new was also driven from changing this image and stand out, with the ambition of becoming an attractive employer for new talents, and show their power of initiative for their customers and attracting new ones.

The Innovation Lab

In 2017, Castellum started the innovation work by introducing an innovation lab launched as Next20, with the ambition to become an industry leader in digitalization by 2020. The purpose was to "proactively pursue technology-based business development and to adapt service offering in accordance with changing conditions" (Castellum, n.d.). At that time, the innovation lab was first of its kind in the real estate industry in Sweden. Castellum decided to place the innovation lab as a subsidiary company called Castellum Innovation AB, to separate it from their property management business and therefore could have more freedom in the innovation work in terms of having an own budget, hiring external consultants and working agile. From several interviewees it is mentioned that the innovation lab is fully supported by the top management team at Castellum. This has been a strength for the innovation lab, if not an antecedent for a successful innovation lab, according to several interviewees.

The thing with that the top management team is on-board and dare to work with it (innovation), is absolutely essential. (Senior Innovation Manager₁)

One senior innovation manager also said that since the company is publicly traded on the Stockholm stock exchange, it has been very important that the top management team has shown support for their innovative work, and that they have been in favor of this journey from the start.

This company is listed on the stock market so it is really important that the top management team support the innovation work... and it is almost those who ultimately push us to do this. (Senior Innovation Manager₃)

One manager especially said that it is important to have the support of the top management team when it comes to the innovation and development unit to make decision on project that are riskier than the normal acceptance of risk, or when it comes to conduct project that are generally outside of the comfort zone of the core business.

How do I do it? This is the fundamental problem for bid industry companies to conduct innovation work and for their top management team. Their task is not to go from a hundred million to one billion via taking a high risk of perhaps 97% change of losing those initial millions, they rather want to go from a hundred million to two-hundred millions. (Senior Innovation Manager₂)

The employees in the innovation lab have meetings frequently with what they call an investment board where decisions are made for which project to pursue and which direction to take. The top management team is in some way participants in those investment boards. In the lab, Castellum have worked with external business developers as well as consult with start-ups who can contribute both resources and new expertise. According to the interviewees, it seems that the external's aspects are more considered among the internal employees, because of they come with new perspectives and dare to challenge, which they think is important especially in the upstart phase. In the beginning, the innovation lab identified focus areas for the innovation lab with take-off point in mega trends.

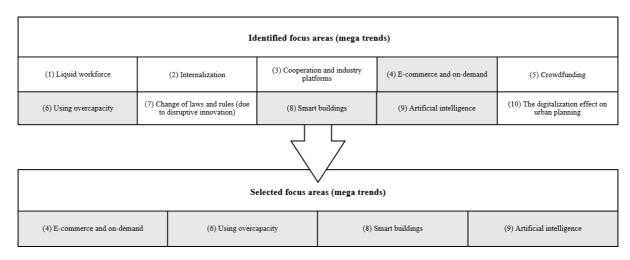


Figure 3. Identified focus areas (from project documentation₂).

After discussions, Castellum decided to push ahead with four of these focus areas: (4) E-commerce and on-demand, (6) Using overcapacity, (8) Smart buildings and (9) Artificial intelligence. With these focus areas in mind, the lab has generated several ideas where some of them are concepts while others are already integrated in Castellum's business model. An example of an idea is the project Beambox, which originated from three factors. Firstly, empty

and unused spaces which Castellum own, and secondly, a collaboration together with a delivery company which had unused trucks during daytime, and thirdly, a demand for storage space for private consumers in Stockholm. The lab developed a business idea which could potentially provide revenues to otherwise excess capacity. The project dealt with development of a new digital platform on which the service would be provided and a new collaboration with another company, planning on how the service would be provided in scale, and the formation of the new company Beambox. The idea seemed good and the service went live to the customers, however it was shut down after a while. It was simply not a service that people wanted to buy, and thus not providing the result that the team had looked for. One of the managers mentioned the outcome of the project.

We did many assessments before on what we could do with the service and the platform. There was a lot of different road or paths to take when selling the concepts. But there is still a good digital platform that we can use for other projects. (Senior Innovation Manager₁)

This is a good example of an innovation project that even though assessments were made and everyone believed that this would be a good service, there is no guarantee that it is going to turn out well. However, it also shows that even though the project is not live anymore, there are leftovers from projects that can be to good use in the future i.e. the digital platform. Another example of an idea is a collaboration with Instabox, a company that offers boxes for pick-up services for online shopping. Castellum have installed their boxes in their buildings, as a delivery service for their customers. A third project, called Accessy, is a collaboration with other property owners in an effort of developing a common platform for digital access to their buildings. Additionally, another concept that Castellum has added to their business is United Spaces, where they have bought a co-working company that they have integrated in their business model. This is highlighted by one of the managers as something they should do more of, because it seems as it is becoming higher demand to work in that kind of environment.

United Spaces is fantastic. It is a content that we do not have in the organization before. Today we rent out our buildings and it is more like that we rent a shell, we do not speak with the customers that much, except from when something is broken for example. (Senior Innovation Manager₃)

The innovation work is within many areas at Castellum and they strive for to develop small business that will make life easier for the people working in their buildings and developing through digitalization solutions. In a strategy for 2030 they expecting to have 500 000 people working in their buildings, which doubles the current amount. They expect this increase in number, but does not plan on having to double the space, rather using it more efficiently. In their vision of the future, they are also contemplating for events such as autonomous vehicles being a societal norm and thus changing much of the infrastructure as it is currently known. This presents a very rational but visionary view of Castellum as they are planning for future uncertainties, but also managing current demands.

The Matilda-project

In order to understand how a project is running in the innovation lab, the Matilda-project will be used as an example. In the beginning of 2010s, a functional demand in properties in terms of e.g. passage systems and ventilation systems, started the technological development of properties at Castellum. In the end of 2016, Castellum had a vision about to know how people

use their buildings such as how they behave in their buildings, e.g. how often meeting rooms are used. From this information, they would know how they could improve their buildings to get a better environment for the people working there. Their vision was to create the world's best workplaces by using machine learning and artificial intelligence.

During the spring in 2017, Castellum started the Matilda-project with the take-off point in the vision they have created. They were aware of that this work will take time, but that they wanted to create a service that could create value as soon as possible for their customers. It was financed by an investment package for all the projects in the innovation lab, with the aim for developing business ideas alongside with their core business. The project team involved external competence such as market specialists and how to develop the idea, but was running by Castellum. The budget and how to move on forward were decided by the investment board. The project used agile methods with short sprints to get everyone in the same direction and use the resources efficiently. In June 2017, the project team ordered wireless sensors that were installed in the head office building in Gothenburg for testing. At the same time a visualizing tool was built where occupancy, temperature, noise and air quality were measured by using the data from the sensors. It was important to visualize and communicate the work as a part of the process, to show what they were doing. The Matilda-concept was also tested in their own office in Stockholm, and they evaluated different suppliers of sensors and followed-up the analyze system. After the pilot project, the project has been up-scaled and implemented. In 2018, the Matilda-concept was installed in a customer's building and thereafter it has been used in more buildings with good results. Nowadays, there is a high demand of using the Matilda-concept among the customers and it is integrated in the business of Castellum. One manager also raised the Matilda-project as an example on how far they have come in innovation, e.g. smart technology and sensors, however maid the point that there is still much to do and develop.

I think we have only seen the beginning there. If you look at different industries then they are building different sensor technology in different machines and products, and perhaps only use them a shorter time. [...] Now we are looking at the need to make the facilities smarter and there are a lot of sensors that must communicate, and we need to access this and continue on. (Senior Internal Manager₁)

The Matilda-concept has changed the customer's demand and the business idea of Castellum. By using this tool, they can collect real information about their customers instead of what they think or believe, and therefore recommend what they can do with their spaces. In projects, Castellum also make sure to learn from both challenges and success. From the Matilda-project there were several important learnings for Castellum to take with them in the development of the service.

(1) It is important with a clear decision-making process with clear mandates. (2) The agile working method using sprints is inspiring and create a braver working method. (3) It is important to involve the employees in the innovation process. (4) It is challenging to expand an innovation project in an economical sustainable way. (5) Furthermore, it can be challenging for a company to maintain an innovation project in the core organization. To succeed, the right people are needed, the right competence and time for doing the projects. (From project documentation!)

The Matilda-project serves as a good example how ideas are transferred from visuals to pilots, to value for customers. As stated by one of the managers, this is just the beginning and it will

most likely develop throughout years to come. This goes in line with the digitalization of the industry and finding new solutions to their business models.

The Agile Way of Working

The processes and the activities in the innovation lab are done by small agile groups. In the beginning of projects, a vision is created and thereafter the work is started by developing a pilot project. In each pilot, goals are determined, as well as prioritizing of working areas and prove of concepts. The agile way of working is often mentioned as a benefit as it is easier to handle in terms of resources, and not to mention project organization.

If there are too big teams, the coordination of everything gets difficult, there will be troublesome to arrange meetings. People are further away from each other and does not meet that often, as they do in smaller and more compacts agile teams. (Senior Internal Manager₁)

Just as the normal agile method, projects at Castellum have been divided into sprints, where the amount of time for each sprint have been one month. For each sprint, the managers together with the lab workers have decided the content, goal and budget. This gives them the opportunity to fail earlier, having better control, and they can change and execute initiatives faster and more unrestricted.

There is no-one to control us (on a daily basis). We work with established goals and we deliver on what we are working on. There is a freedom to work like that. And this is what makes it work well. (Senior Innovation Manager₂)

The agile way of working for the innovation teams have given them the possibility to act with speed and agility in many projects and the innovation lab has delivered several projects in a relatively short period of time, which has been great for the overall organizational development at Castellum. It has been some challenges though, in terms of being brave in the decision-making process, not knowing the results and that the work has been made rapidly. To develop ideas that are supported, it has been important to involve the customers and users in the process, to find out if there is a potential interest in the idea. One senior innovation manager who has a big administrative role expressed the need for courage to try things without being afraid of failing.

There is no way to work with innovation in a very structured way with an agile method. You must dare to try and to be think outside the box, so that is important. Courage is such an important thing. There is no point in working with it if you only do it by the book and not dare to take any other take on it. (Senior Innovation Manager₁)

This working method is not exactly how Castellum usually work with in their core organization, where processes and decisions are perhaps not as dynamic. This shows that there is a difference between the processes in the core business and the processes in the innovation unit. This was mentioned by one of the managers when talking about buying a new IT-system.

Decisions does sometimes not come as quick. I believe that the wish from everyone is that it should be more agile, but we are not there yet as a whole organization and when it comes to making decisions. (Senior Internal Manager₃)

This also shows for the difficulty of aligning a large organization to a new way of working. Working methods and behaviours, are based on our interviews, difficult to change and requires a certain period of transition from old to new.

Prospective Reasoning of the Innovation Work

Starting the innovation work at Castellum in a separate unit was according to managers inside Castellum a good way of entering new areas for business development. The focus in the innovation lab has shifted, where the current focus is on developing existing ideas rather than coming up with disruptive innovation. From now, several managers want to transform the external innovation lab into to the core organization and using more internal ideas. They want to change the culture among the employees of thinking how they can develop their business model.

It is about culture and strategy, to get people on-board in same direction. When it comes to innovation, I want to create an experimental innovation climate at Castellum where people dare to try. (Senior Innovation Manager₃)

This is something that we are working with a lot today (culture). To change the culture or to make everyone aware that they can participate in the change and to claim for internal innovation. We need to figure out good conditions for this and to form paths where ideas are generated and not just put in the office drawer. (Senior Internal Manager₁)

An important aspect is to start with the right things. Instead of starting with building applications, platforms or writing contracts with other companies they should start to try the ideas and see how it works first. Then unnecessary money is not spent with an idea that might not have any potential customers. An example of this was mentioned by one of the managers who told how they tried to sell flowers in collaboration with their co-working place United Spaces. They bought 20 flower sprays and tried to sell it at the co-working place. Many of their customers thought this was a great idea, and already after 10 minutes they were all sold out. This shows that being able to test simple ideas gives quick response and feedback, and it does not have to be so complicated at all. This is connected to a cultural change that is needed to start with this kind of experiments, both among managers and employees. They want to develop the internal creativity and innovativeness in order to not be dependent on external consultants or help to drive innovative projects. It is clear that the interviewees all have expressed culture change as a challenge, but also a fantastic opportunity to develop Castellum into an organization that leads the industry in more ways, such as new and smart technology, great customer experiences and offerings, and a brand image that potential employees are drawn towards. They states that if the employees, dare to and can question the way things are currently run, then very interesting things will come out of that. Castellum has started a culture program that will hopefully change the organization and increase performance, as one senior innovation manager stated.

You stop talking about problems on the coffee break, instead you say that "maybe we could sell this to our customers". That is what we want, starting the discussion around the coffee machine. That is when it is good. We have some time left before we are there, but in 2-3 years I think we are there. (Senior Innovation Manager₃)

This is where managing of innovation becomes something more than itself. As a summary of all the topics that have been raised in an interview that was raising question in how they manage their innovation lab, projects and challenges, are brand image, people management, knowledge management and competence, cultural discussions, the importance of senior management, and their current incentive process in which people base their bonuses on. Speaking of the last example, this has a huge impact on the employees working in the core units of Castellum, which still is to rent out office space and maintain their business revenues. This has a big impact on both managers and non-managers, since they are being evaluated on making the core business grow, not coming up with innovative solutions.

Should I make time for this or that? And my salary is based on this and if I do not do that, my boss will tell me. Because I have been spending time on something that he or she does not make any money on. (Senior Innovation Manager₂)

These types of questions though are things that the managers at Castellum are aware of, since they were brought up by themselves, however, has not gotten the focus it needed until now. When it comes to the internal innovativeness and the ideas created by the employees outside of the innovation lab, several interviewees raise the problem with a tool to help them capture these. A tool, but also a unit that can evaluate the potential ideas. However, to succeed with this, the managers think that it is important to involve those employees that came up with the idea in the projects.

It is not just to come up with an idea and let it to someone else, the one who came up with the idea has something in her or his mind. They need to work with this creative idea. It is not that much about time, you need 2-3 months with 20 % of these people, so maybe one day every week to develop the idea and they can do it with a colleague. (Senior Innovation Manager3)

The issue now is the working time; the employees have their ordinary working tasks that they must do every week, the innovation work can therefore become to feel as an extra task. The system nowadays is not that the employees are rewarded, e.g. bonuses, if they are working in solely the innovation projects. Another issue is that when they have developed an innovation project and want to implement it into the core organization, it has been lacking how they should move on forward with it in long-term. For example, the Beambox-project, was started in the innovation lab as an idea and transformed into an own company.

We invested a lot of money in it, to develop a service as we decided to have as its own company, and it was about making use of overcapacity. We had empty spaces in our buildings and therefore we could offer it for a good price. However, when we started to rent that space it was still issues because it was involved (in the core organization) in terms of balance sheet, consolidated statement of income and salaries. You cannot run a start-up company in that way, and therefore the project ended. The question is if listed companies should run start-ups, or maybe it is better to collaborate? (Senior Internal Manager₁)

If the innovation work should be done more into the core organization, they need to use their experiences from the innovation lab and transform it into the core organization. Communication is also essential for doing this, and it is mentioned that they should try to find an internal platform where they can share and develop ideas. Castellum want to be better of promoting themselves of what they are doing, and specifically what making them unique. One of the managers mentioned how they should define their own innovation work.

We cannot compare us with innovative companies such as Apple and Google, this is something else. Property management is the business, there are routines and the customers are used to do some things. Our goal is to change our customers' behaviours by offering services that they did not expected, so it is also a change in the industry that is needed to be done. (Senior Innovation Manager₃)

Using more internal competence for innovation work is a cultural transformation. The importance in the case of Castellum seems to be that they should be inspired by others but focus on their own way of creating this new culture.

Contributing Factors and Challenges in the Innovation Work

From the empirical data, the most important aspects of why the innovation projects have been successful at Castellum have been identified. Thereafter they have been divided into several contributing factors. Finally, the challenges of doing innovation work at Castellum as identified by the managers, have also been identified and divided into most prominent factors.

Identified Contributing Factors

(1) Castellum is a large organization with great resources in terms of strong economy and customers in the whole Scandinavia. They have the possibility to experiment without the risk of losing money and an imminent bankruptcy, and they can use their already existing customers for trials when new ideas will be tested. (2) The innovation work is fully supported from the top management team at Castellum and they are involved in the decision making of the projects. They want to increase the innovation work and spread it to the whole organization. (3) Using agile working methods has resulted in better managing of resources as well as a more flexibility in the projects. (4) Having the innovation lab as a separate unit has not affected the core organization's business, which has resulted in more freedom how the innovation work has taken place; it has been allowed to experiment and taking risks. (5) The innovation work has been good branding for Castellum, both internal and external, which has to some extent reshaped their trademark.

Identified Challenges

(1) Castellum is a traditional public company. It can be questioned if publicly listed companies should run innovation work and start-up companies in terms of financial requirements, reporting, and long-term goals versus short-term goals. It can be quite different in comparison with the core business. (2) The responsibility distribution in the innovation work has been mentioned as a problem in the organization. For those who are involved in both the core organization and the innovation lab, the innovation work sometimes can be interpreted as an extra task. The organization expect them to do their ordinary work tasks which they prioritize, and they are not rewarded for participation in the innovation work. Furthermore, the responsibility distribution lacks when the projects are being implemented in the core organization, there is no clear structure for who should be responsible for running them. (3) External consultants has contributed with their expertise for the project development, but this will be too expensive in the long-run. Castellum need to hire new internal competence to their organization to have the resources of entering new business areas on their own. (4) Having the innovation lab as a separate unit is easier to control than having it in the core organization,

which can results in that the projects are impeding. Furthermore, it is a threat to have it as an external unit if there will be low economic activity; the innovation lab will probably be the first thing to phase out. (5) While the core organization works more traditional, the innovation lab has worked agile. This can cause several problems for those who are involved in both activities, such as expectations and communication. (6) The culture in the core organization at Castellum, even if the company itself have started innovation work, is still not that innovative. The innovation lab as an external unit can be a reason for that.

An External Perspective of Innovation Work

In order to get another perspective of innovation work in large organizations, where finding the balance of explorative and exploitative activities are important, several interviews were held with external professionals working with and having experiences with similar issues. The external voices are interviews with several innovation and strategy consultants working internationally, but based in the United States (US) or Sweden. The consultants have worked in both larger organizations and start-ups, as well within industries such as real estate, automotive, health care, and information technology. From an interview with a consultant in the US, the interviewee expressed the importance of considering the current organizational culture as a restraint for change, especially in a larger organization where things tend to take longer time to alter.

The biggest issue is corporate culture. What we have done the last 20-30 years, using Lean, Agile and Six Sigma and outsourcing, is that we have constantly put emphasis on operational efficiency (exploitative activities). This is driving all the variance out of your business. Now, what we are trying to do is that we are introducing this idea of let us take risks, let us be divergent thinking, let us be creative...That runs completely counter to what we have trained the business to do for 30 years. You have a really dynamic force going on between the way the companies have been thought to work, very efficient, lack of variance, lack of risk and now we are saying to them that "failure is okay now", when we have been telling them for 30 years that failure is bad. (Innovation and Strategy Consultant₁)

Several interviewees also mentioned the difference between larger organizations versus smaller or newer ones. They raised the difference from the natural motivation for innovation work in start-ups where the whole business idea is usually driven by one idea and it has to be made to work. Larger organizations have whole portfolios of working business processes and the challenge are to find the best ideas to develop. It is about prioritizing innovation, using resources from something else and apply it to innovation work. Another topic, which were discussed in interviews with both managers at Castellum as well as external consultants, was working with agile methods, which is according to the interviewees is something that can be applied to all organizations.

I think that you can apply it (agile methods) in all projects. Agile methods are so flexible that you adapt it. Working agile for me is to adapt the project to the situation. If agile methods had to be in a certain way, then I think it would be difficult to adapt it to different project. (Innovation and Strategy Consultant₃)

Another consultant agreed that agile methods could work in all working departments and environments, and that it is all about involving the right people in communicating the methods.

It is about the right people are involved and the communication between. I think it (agile methods) can work everywhere, but of course all organizations are matured on different levels. However, I think there are possibilities to work agile in other areas than IT-organizations. (Innovation and Strategy Consultant₄)

For an organization that is used not to work agile it can cause several issues. One of the consultants described personal experiences of changing from the waterfall model to agile methods.

It is about the time coefficient. Before (using the waterfall model), you have said that this project is going to be done at a certain time. The idea with agile is that you have a team and things can happen as you handle at that time. It takes a bit more time, but in the end, you get a better result. It is about an approach. (Innovation and Strategy Consultant₄)

It can as said cause problems if someone involved are used to working with one of the methods and not completely understanding the expectations of the other method, which in turn will cause misunderstandings. Therefore, it is important having the right people in the team and educate them if a company plan to implement agile methods. It is a big changing process going from waterfall model to agile methods as well as a cultural transformation, especially for a company that is used to have clear mandates in what they can do. It is also mentioned as a benefit with agile methods that it is easier to work cross-functional, where different competences in a company can be used more efficiently. Where there are challenges to innovate for larger organizations, there are evidently also benefits, as states before, larger organizations usually have more resources, larger network, and an existing functioning business model. One interesting expression from one consultant were the lack of evidence in successful dual innovation, which is similar to ambidextrous organizations.

In other words, you have a highly efficient operation model, and a highly effective innovation model working at the same time. I have come to believe that this is not possible in most business, I have come to believe that if you do innovation you have to do it in the periphery of your business, and allow the core to focus on being efficient, and have the peripheral team to do innovation. (Innovation and Strategy Consultant₁)

This, present an example of the multitude of views and ideas on how to successfully manage innovation. Our interviews with senior consultants working, in one way or another, with managing innovative and explorative activities are presenting different views and their ways in how to manage this multifaceted organizational challenge.

Discussion

Bringing Exploration to the Firm

Based on the interviews from managers at Castellum, it is clear that Castellum is exploring into activities that were new to them just a couple of years ago. They are undergoing attempts in trying to balancing explorative activities of their business, while exploiting their core business which has been very successful so far. We find that these are attempts on becoming an ambidextrous organization, which is defined by several authors as the ability to manage both exploration and exploitation activities (Gibson & Birkinshaw, 2004; Kollmann & Stöckmann, 2008; O'Reilly & Tushman, 2013). The initial reasoning behind it was the defined wish of

becoming industry leaders and to pre-empt changes in the real estate industry. Castellum wanted specifically to become industry leaders within digitalization, which was the start of the innovation lab in 2017. The Matilda-project shows as a good example for how they positioned themselves and how they worked with new technology, digitalization and customer value. According to the empirical findings, the commitment from the top management team has been the most essential thing for doing exploration into new domains at Castellum. This is something that the external innovation managers also mentioned as an important factor that without the top management team's support, nothing will happen. Without support for these kinds of strategic efforts, the projects will be prioritized lower than activities that exploit core business and more "important" activities will take the needed resources instead. Just like Koryak et al. (2018) argue for that top management teams are ultimately responsible for all activities that are done inside the organization, one can imagine that they want to focus on the projects most beneficial to them. Raisch and Birkinshaw (2008) however, states that a paradoxical mindset is emerging; which tells us that the top management team must think in the lines of how can we make our processes more efficient (exploitative activities), and at the same time invest in new innovative ideas (explorative activities). We can identify this mindset when speaking to managers at Castellum, which is ultimately what previous research say is an antecedent to ambidexterity.

Being ambidextrous is usually driven by being profitable in long-term, especially for larger firms with relatively more resources according to O'Reilly & Tushman (2013), which corresponds to what a manager at Castellum said about the importance of having a relevant business in five years as well. Based on the empirical findings, bringing exploration to the firm has resulted in many different outcomes than the exploration itself. Except from the new ideas that is emerging from the organization, such as cultural change, rebranding, and positive media coverage. As an organization they have a vision on a future business model that is clearly different from the current one, and they are aware that in order to have a chance to live up to this vision, their culture must adapt as well. This is related to the notion of proximate isomorphism as Friesl et al. (2019) discussed when the core business of an organization engage in activities of imitation of the explorative and innovative department as a way to change culture and capabilities. We find that this potentially shows that innovative and explorative activities has more to bring than simply innovative projects. In the long run, these department has an impact on a cultural and personal level. The interviews with external innovation consultants also say that culture and competence is not an antecedent to successful innovative or explorative endeavors, they simply learned on the way, however without these cultural adaptions to the "new normal", they would not have achieved the long-term commitments and profits. Perhaps the innovative department at Castellum could also bring more of what Raisch (2008) means when he discusses reverse nurturing, where the innovative department brings new experiences and learnings back to the core organization. We argue that signs of this occurring can already be seen, when other departments are talking about working in an "agile way", and when cultural changes are emphasized, and more departments are invited to join innovative projects. Since the new strategic direction is to implement the innovation department into Castellum, they are also stepping closer into achieving the balance of explorative and exploitative activities and thus could gain long-term ambidexterity.

What we also understand from our empirical data is that innovation is many times equal to communication and collaborations together with other organizations. Just like the organization needs customers and suppliers, they also need partners to help them develop things and ideas. What has been clear from the data is that innovation of especially services are rarely a purely internal venture and they save money, time and effort if they collaborate with others. This could be a way for organizations to actually be able to balance explorative and exploitative activities, and thus manage the current demands of their environment at the same time as they explore new business opportunities (Koryak et al. 2018; Kollman & Stöckmann, 2008). These collaborative efforts also shed light on the paradoxical mindset of ambidexterity (Andriopoulos & Lewis, 2009) which here is just one of many paradoxes managers of innovation has to consider in their work. As Castellum and similar organizations also have the benefits of existing relationships as well as a good reputation, the problem sometime arise on who to collaborate with and if that join venture would bring a result that benefits both parties. For example, the project Accessy which is developing digital keys is a joint venture. One manager said that this type of project would probably not be possible to the same extent without collaboration, since it would be too expensive and use too much resources for one organization to handle alone. However, as another manager expressed it, collaboration is only possible to a certain extent and that they always want to stay closest to the customer themselves, thus not leaving to much influence to the other part.

From Structural to Contextual Ambidexterity

The empirical findings in this report suggest that Castellum also deployed an exploitation and exploration separation, at first. The innovation lab had the explorative focus, while the core organization itself had an exploitation one, similar to what Friesl et al. (2019) found in their case study on a French real estate organization's structural separation on their explorative department. Castellum's structure seemed to be very lucrative and produced multiple strong new projects, similar to the case organization, and that has been presented in this research paper. The results of the projects were mixed, however as both managers at Castellum and external managers said, it is about trials and errors and to make sure that new opportunities are acted upon. Just as Friesl et al. (2019) found proximate isomorphism in their case company where the mother company imitated both capabilities and culture, we have seen the same tendencies at Castellum where the explorative department could be seen as some base for imitation in competences, work methods and culture to the core business.

Castellum tries to find a balance between exploitation and exploration, which is challenging in more than a few ways according to March (1991). As March states, there are conflicts arising from the organizational resources being deployed between the different activities, as well as different sources of competence needed to capture the full potential of being an ambidextrous organization. Lawrence & Lorsch (1967) would have agreed with this when concluding that organizational differentiation is as needed as ever, however integration is at least just as complex, which is something we have found to be true even today. Castellum is of course not unaware of any of these challenges since they are presented with them daily. Neither are they unaware of the benefits of achieving a balanced organization which can do both well in future business environment at the same time as using their current models to stay profitable now.

This resonates well in one way with how Du et al. (2013) see ambidexterity and explorative activities as gradually integrated into the business and should be seen as more of an evolutionary process. The authors stresses the key factors of both time and organizational interdependence between departments. The innovation lab was a good start for beginning the exploration activities, but Castellum is in it for the long run. Castellum started it as a subsidiary company and hired external consultants, and by doing so it had the freedom in terms of not risking anything in their core business and focusing on innovation and experimentation.

When the work started, they came up with all kind of ideas, discussed them and tried some of them. During this time, the core organization had an exploitation function, where they could run their normal business and rely on their existing knowledge. This refers to the structural view of ambidexterity (O'Reilly & Tushman, 2013), where one part of the organization focuses on innovative exploration, while another part of the organization focuses on exploitation. In this context, the roles are clearly defined, the skills of the employees are more specialists and the decisions are made by the top of the organization (O'Reilly & Tushman, 2013). This can be exemplified by using the Matilda-concept that was developed in the innovation lab. During this project, there were specialists with technological competence working in the project in terms of smart technology and sensors and the roles were clearly defined. The decisions for the project were also taken by the top of the organization. However, according to the interviewees, this could sometimes impede the development of the project compared to if it was running as a start-up company, due to limitations of budget and the size of the project. On the other hand, it was clearly crucial having the support and decisions from the top of the organization while running an innovation project in an established firm, for having the trust and mandates in doing exploration.

Castellum is in a current situation where they want to implement the innovation lab and its work to the core organization. So, there is a desire to go from having separated exploration and exploitation on an organizational level, to merge it together in the core organization. This can be explained by using the contextual view of ambidexterity (Gibson & Birkinshaw, 2004), as well as the evolutionary process of Du et al. (2013). The innovation work has shifted from the beginning where disruptive ideas was in focus, while it is now rather services around their business as they want to develop, which is an important reason of changing the ambidexterity from a structural to a contextual view. They might not need an external group focusing on ideas they can develop around their business. Instead, according to the interviewees, they are thinking of that they can come up with ideas and work with them in the organization instead. All their employees see things every day and meet their customers in comparison to an external group, so there is potential here to use where the whole organization can work with an innovation mindset, and having flexible roles and generalist competence as Gibson & Birkinshaw (2004) states as important parts in an contextual view of ambidexterity. This requires however a change of the culture in the organization where the employees are encourage to thinking of ideas and have the possibility to do it in their daily working life, as well as a system of how to manage the ideas in the organization. Gibson & Birkinshaw (2004) states that the role of the top management team in this context is to develop the organization context in which individuals act. According to the interviews, it is important that the one or those that came up with the idea should get time for developing it. This approach, where

individuals divide their time between exploitation and exploration activities, is stated by Gibson & Birkinshaw (2004) as a part of the contextual view of ambidexterity.

It can be a discussion whether separating or integrating the innovation work at Castellum. According to Markides (2008) is not simply separating or integrating enough to ensure success. If the preferred strategy is separation, the company should find ways to exploit its existing strengths. This is what Castellum did in terms of having the explorative activities in a subsidiary company financed by the core organization, using their knowledge as a foundation and having a brand name (Castellum Innovation AB) that is connected to Castellum. Markides (2008) further states that if the preferred strategy is integration, then the company need to protect the business model from excessive interference or mismanagement, and at the same time exploiting, which is according to the prospective section in the empirical findings how Castellum want to develop their innovation work.

Gaining a New Corporate Legitimacy

As mentioned in several interviews, the background of starting the innovation work at Castellum except from developing the business model, was to start something new that would stand out among their competitors in the field. The industry has performed well over time and there has not been any direct reasons for introducing change. The last years however, innovation as concept has been popular and used frequently by companies even in the real estate industry (Gobble, 2015). The definition of innovation is unclear though, thus meaning different things of what it actually means concretely. It is the same with agile working methods which is often connected innovation work, it is used by many companies but on different levels. However, both innovation work and agile working methods are generally related to being interesting, modern and attractive today; and therefore, it is also about building a brand image and a way of becoming legitimate.

If a company as Castellum is marketing that they have an innovation lab and working with agile working methods, especially in an industry that historically did not have that much of branding, it gives them legitimacy of being brave and futuristic. According to Palazzo & Scherer (2006), gaining and maintaining legitimacy is vital to the survival of a company, for example in the Matilda-project it was important to communicate the vision and concepts of the explorative endeavor. However, in the context of ambidexterity theory, there is a lack of legitimacy discussion and how important this also is to the organizational development. As Suchman (1995) argues for, strategic legitimacy could even be seen as an operational resource, which we can find at Castellum as well. As the respondents in this report have raised important internal factors to their innovation work such as: competence, courage and support from the top. They have also raised the very important factor to innovation work such as collaboration and partnership. This external legitimacy is however not discussed much in an ambidexterity context although it seems that the ability to collaborate and find good partnership is key to innovation (exploration) ability. Castellum was for example in 2019 invited onto a European expert group of innovation and sustainability in real estate (SVD, 2019). This can indicate that investment in innovation and more exploratory projects can increase the organizational legitimacy and thus reach out to more partners. Evidently, as to what Du et al. (2013) found in their study, two paradoxical activities can complement each other in both ways in terms of competitiveness and increased profits. This discussion of explorative activities as a way of gaining legitimacy is however not anything that has been allowed any significant space in the ambidexterity theory. In our opinion it has potential for an interesting discussion on the exploration vs. exploitation abilities.

An additional benefit of why Castellum should gain legitimacy through their innovation work is for their customers and shareholders, showing that they take responsibility for changing and digitalize the industry, it gives them creditability that they dare to do new things and being in the front. Being a publicly traded company, shareholders are as said by many managers at Castellum a central point of their business responsibility. Customers and other stakeholders are the same. Being a legitimate organization within the innovation trend in our society could make it possible for Castellum to, in reference to Suchman (1995), use their legitimacy as a resource in their business model to ease their long-term ambidexterity capabilities, which Gibson & Birkinshaw (2004) has shown to increase performance, which in turn would benefit shareholders as well as customers. Lastly, the innovation work makes Castellum more interesting for the employees working there, and that also strengthen the possibility of attracting new ones as well as new competence to the organization. When Castellum plans to develop their business model, they need new competence in the organization, along with employees who are interested and engaged in what they are doing. Palazzo & Scherer (2006) states that corporate legitimacy can be in the context of both internally and externally, and there is need for both types of legitimacy.

One unexpected factor on what managers of innovation are working with are basically gaining external legitimacy. Both managers at Castellum had this on their mind, as well as external managers who pressed that this was a natural way on how to bring more competent and innovative people to the organization. Managers at Castellum said that an internal survey had picked up on the fact that the reason why employees are working in that organization, is because of the innovativeness and modern culture at Castellum. Innovation managers at Castellum also said that their innovation work has gained increased amount of attention in media and this is in combination with internal acceptancy of their innovation work only gives Castellum a good reputation and can show for some social legitimacy amongst people and that they could be developing in a good direction. Friesl et al. (2019) speaks about how the innovative department must gain internal legitimacy in order for it to be embedded in the organization, however they do not speak about external legitimacy and how this has an effect on the organization as a whole. Be that as it may, referring back to the mentioning of Castellum as a "medium-fat milk", we find that evidently and based on media and the EU noticeability ever since, Castellum has gained credibility from their explorative work. Legitimacy could thus be something that benefit the organizational as a whole and everyone involved.

Conclusion

In this report we have studied how an established real estate company attempt to become an ambidextrous organization, via constructing a new explorative approach to innovation. Castellum is exploring activities (focusing on digitalization) that were new for them just a

couple of years ago, which they try to balance with their core business as being a property management company. According to previous research and the external voices, we can conclude that Castellum is not the first or unique in being in their situation of balancing explorative and exploitative activities. However, what can be stated in this case is that Castellum has a clear vision and wish to achieve more innovative business ideas along with a cultural transformation of the employees. From the interviews we can detect organizational branding, organizational culture, competence development as well as PR. This notion goes well in hand with the theory presented in this report and how ambidexterity only can be achieved by balancing innovation with core business. Likewise, how an innovative department can, through reverse nurturing, brings back important experiences and knowledge to the mother company, as well as how proximate isomorphism mechanics makes the core business department imitate the innovative one, as in the case with the legal department working agile. This proximate isomorphism can in turn help the innovative department being implemented into the core business through gaining legitimacy.

The analysis of this research has been based on ambidexterity theory and the empirical data. The theory draw benefits from organizational ambidexterity on the performance, sales, valuation and other rational and substantial measurements. However, we also found that legitimacy, which is an important factor in many other organizational theories, however less so in ambidexterity, could contribute greatly to ambidextrous activities. In changing markets where organizational legitimacy could be based on old merits, achieving ambidexterity, or working towards both exploitative activities as well as explorative ones, could help gaining legitimacy in areas. Striving for being ambidextrous and becoming legitimate is like a spiral, they contribute to each other where one thing leads to the other. Thus, being an ambidextrous organization in a context where the trend is to be innovative, gives the organization legitimacy. However, being a legitimate organization in the same context, could potentially also help in gaining and maintaining ambidextrous capabilities, such as finding partnerships, benefit customers and shareholders, and attracting and retaining employees.

Ultimately, theory of ambidextrous organizations is emphasizing to find a balance between explorative and exploitative activities. We argue that this balance should not be taken too literal. The goal should not be to find a perfect balance per se, but to hinder one type of activity from having too much representation. Each organization have to find the perfect balance in their unique context.

Future research

Little research are conducted without boundaries in either scope or time, this paper is no exception. Consequently, we have identified several areas where further research would be interesting to follow and develop the research area of ambidexterity even further. Firstly, it would be interesting for future researchers to see what a longer research period in combination of a more diverse data collection inside an organization would bring for potential results on ambidextrous capabilities. Secondly, this topic would also benefit from deeper insights into how organizations sustain ambidextrous capabilities over a longer period of time. These insights would benefit the argument of why organizations should aim at achieving organizational ambidexterity. Thirdly, from our own discussion, we would find it interesting

in following future attempts on combining the rational theories of ambidexterity in a combination with legitimacy and its impact on capabilities as more discussed in more organizational theories. We would find it interesting to read about a development in organizational legitimacy in theories on ambidexterity.

Acknowledgement

We want to take the opportunity to thank all the contributing respondents at Castellum as well as external consultants to this research, without your knowledge and time, this thesis would not have been possible. All your input have been priceless. We also want to extend our gratitude and thanks to our supervisor, Niklas Egels Zandén, for all your support and feedback during this process. You have given us invaluable advice in how to conduct academic research as well as shared your opinions and experience in order to improve arguments and our final report. Therefore, to everyone contributing to this report, thank you!

References

- Andriopoulos, C., & Lewis, M. W. (2009). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization science*, 20(4), 696-717.
- Baum, A. (2017). *PropTech 3.0: the future of real estate*. University of Oxford Research. Available at: https://www.sbs.ox.ac.uk/sites/default/files/2018-07/PropTech3.0.pdf
- Beckman, C. M. (2006). The influence of founding team company affiliations on firm behaviour. *Academy of Management Journal*, 49(4), 741-758.
- Blarr, W. H. (2012). Organizational ambidexterity: Implications for the strategy-performance linkage. Springer Science & Business Media.
- Börjesson & McCormac. (2018). *Lysande utsikter för fastighetsbranschen*. Fastighetsägarna Stockholm. Available at:https://www.fastighetsagarna.se/globalassets/rapporter/stockholms-rapporter/lysande utsikter-for-fastighetsbranschen.pdf?bustCache=1591276535349
- Castellum. (n.d.). Available at: https://www.castellum.se/en/about-castellum/digitalization/
- Castellum. (2020). *Årsredovisning 2019 Digital*. Available at: https://vp244.alertir.com/afw/files/press/castellum/Castellum_AR_2019_sv.pdf
- Czarniawska, B. (2014). Social science research: From field to desk. Sage.
- Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of management studies*, 47(6), 1154-1191.
- Deloitte (2020). 2020 commercial real estate outlook: using digital and analytics to revolutionize tenant experience. *Deloitte Insights*. Available at: https://www2.deloitte.com/us/en/insights/industry/financial services/commercial-real-estate-outlook.html
- Du, Wenyu & Pan, Shan L & Zuo, Meiyun. (2013). How to Balance Sustainability and Profitability in Technology Organizations: An Ambidextrous Perspective. Engineering Management, IEEE Transactions on. 60. 366-385. 10.1109/TEM.2012.2206113.
- Eriksson, P., & Kovalainen, A. (2016). *Qualitative methods in business research: A practical guide to social research.* Sage. 2:nd Edittion.
- Etikan, I., Alkassim, R., & Abubakar, S. (2016). Comparision of snowball sampling and sequential sampling

- technique. Biometrics and Biostatistics International Journal, 3(1), 55
- EU (2019). The Digital Economy and Society Index (DESI). Available at: https://ec.europa.eu/digital-single market/en/desi
- Fastighetsvärlden. (2019, 27 May). 50 Största ägarna 2018/2019. Available at: https://www.fastighetsvarlden.se/analys-fakta/topplistor/50-storsta-agarna-2019/
- Friesl, M., Garreau, L., & Heracleous, L. (2019). When the parent imitates the child: Strategic renewal through separation and reintegration of subsidiaries. *Strategic Organization*, 17(1), 62-94.
- Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Journal*, 47(2), 209-226.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16(1), 15-31.
- Gobble, M. M. (2015). The case against disruptive innovation. *Research-Technology Management*, 58(1), 59 63.
- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glaser and Strauss. *International journal of nursing studies*, 41(2), 141-150.
- Heavey, C., & Simsek, Z. (2017). Distributed cognition in top management teams and organizational ambidexterity: The influence of transactive memory systems. *Journal of Management*, 43(3), 919-945.
- Kollmann T., & Stöckmann C. (2008). *Corporate Entrepreneurship*. In Wankel C., 21st Century Management: A Reference Handbook (p11-21). Thousand Oaks.
- Koryak, O., Lockett, A., Hayton, J., Nicolaou, N., & Mole, K. (2018). Disentangling the antecedents of ambidexterity: Exploration and exploitation. *Research Policy*, 47(2), 413-427.
- Lawrence, Paul & Lorsch, Jay. (1967). Differentiation and Integration in Complex Organizations. Administrative Science Quarterly. 12. 1-47. 10.2307/2391211.
- Lundsten, P. (2020, 12 May). *Pandemin skapar kamp om kontoren "Behöver vi en fysisk lokal?"*. Dagens Industri. Available at: https://www.di.se/nyheter/pandemin-skapar-kamp-om-kontoren-behover-vi-en fysisk-lokal/
- March, J. G. (1991). Exploration and exploitation in organizational learning. Organization science, 2(1), 71-87.
- Markides, C. (2008). *Game-changing Strategies: how to create new market space in established industries by breaking the rules.* John Wiley & Sons.
- Merriam-Webster dictionary. (2020). *Ambidextrous. Merriam-Webster Dictionary*. Available at: https://www.merriam-webster.com/dictionary/ambidextrous
- Nordnet (2020). Castellum AB (CAST). Available at: https://www.nordnet.se/marknaden/aktiekurser/16099785 castellum
- O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of management Perspectives*, 27(4), 324-338.
- Palazzo, G., & Scherer, A. (2006). Corporate Legitimacy as Deliberation: A Communicative Framework. *Journal of Business Ethics*. 66(1), 71-88.
- Raisch, S. (2008). Balanced structures: designing organizations for profitable growth. *Long Range Planning*, 41(5), 483-508.
- Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators.

- *Journal of management*, 34(3), 375-409.
- Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. L. (2009). Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization science*, 20(4), 685-695.
- Rajakallio, K., Cuthbertson, R., Pulkka, L., & Junnila, S. (2018). Creating urban platforms—Opportunities and challenges for innovation in commercial real estate development. *Cities*, 77, 92-103.
- Slavich, B., & Svejenova, S. (2016). Managing creativity: A critical examination, synthesis, and new frontiers. *European Management Review*, 13(4), 237-250.
- Smith, W. K. (2014). Dynamic decision making: A model of senior leaders managing strategic paradoxes. *Academy of Management Journal*, *57*(6), 1592-1623.
- Stevik, L. (2020, 19 May). *Castellums vd Henrik Saxborn: "Vi behöver inte bygga en enda kvadratmeter kontor till"*. Göteborgs-Posten. Available at: https://www.gp.se/ekonomi/castellums-vd-henrik-saxborn-vi beh%C3%B6ver-inte-bygga-en-enda-kvadratmeter-kontor-till-1.27833073
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610.
- SVD (2019, 27 June). *Castellum ansluter sig till europeisk expertgrupp kring hållbarhet och innovation*. Available at: https://www.svd.se/bors/news_detail.php?newsid=6143d59b-9331-47ca-9a86 d24dd1c6f41d
- Wankel, C., 2008. 21St Century Management. Los Angeles: SAGE Publications.
- Zainal, Z. (2007). Case study as a research method. Jurnal Kemanusiaan, 5(1).