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Managing innovation from a leadership perspective in an IT-consultancy firm

- A case study of Cybercom Group

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Abstract

The IT-consultancy industry faces a paradigm shift. Successfully transform from resource-based consulting to asset-based consulting can be the difference between prosperity and being disrupted away. Instead of fulfilling customers' requirements, IT-consultancy firms have to develop organisational capabilities in managing innovative solutions. Hence, effective innovation management practices can be vital to establish and foster innovation. The IT-consultancy firm's decision-makers are therefore facing a crucial decision, not necessarily *if* investing in innovation is the right decision, instead *which* innovation management practices are effective in *how* to manage innovation more standardised.

The purpose of this study is to explore effective innovation management practices from a leadership perspective in an IT-consultancy organisation and answer the research question: "What is considered as effective innovation management practices from a leadership perspective in an IT-consultancy firm?"

This was managed by conducting a qualitative single case study of the IT-consultancy firm Cybercom Group. The theoretical framework of effective innovation management practices validates by interviewing ten leaders with decision-making positions for managing innovation in Cybercom. Hence, this process targets to answer the research question. Three leadership levels approach; Leaders, Middle Leaders and Top Leader. The abductive approach of the study enabled the authors to readjust the theoretical framework iteratively in comparison with respondents and validating or rebut the segments of the theoretical framework.

The findings identified by the authors are based on the theoretical framework, empirical findings and the analysis in between. First, managing innovation effectively can, to a certain degree, be managed by one standardised innovation management practice. However, to manage innovation more effectively, several innovation management practices can be combined and mutually reinforce innovation to be managed effectively. Secondly, Top Leaders mandate and commitment to innovation are fundamental for Leaders and Middle Leaders to practice innovation management effectively. Lastly, establishing innovation management practices centrally in the organisation can benefit a collaborative environment, shared understanding and decrease silo practices. All the findings will increase the understanding of what is considered as effective innovation management practices in an IT-consultancy firm, from a leadership perspective.

Keywords: *Innovation, Successful innovation, Innovation management, Innovation management systems, Innovation excellence, IT-consultancy industry, Asset-based consulting, ISO 56002:2019*

Acknowledgements:

We would like to start with expressing our gratitude to Cybercom Group for giving us the opportunity to conduct this study. An extra thank you to Cybercom and the Innovation Zone in Gothenburg and Henrik Lundqvist who has assisted with office space, supplies, support and a great time. Secondly, our sincerest appreciation goes to our supervisor at Cybercom Group, Carl Henrikson, thank you for inspiring and introducing us to the world of IT-consulting, the current transformation, and support throughout this study. Thirdly, we want to thank Sven Beiker from Stanford University and Gabriel Granström from Nordic Innovation House for taking their time to meet us during our fieldtrip to Silicon Valley, US. We would also like to direct a thank you to our supervisor at the School of Business, Economic, and Law at the University of Gothenburg, Erik Gustafsson for support and valuable guidance throughout the process of this study. Finally, we want to express our gratitude to family, friends, and partners for the support and motivation during the study.

Gothenburg, June 7, 2020

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Daniel Eriksson Lukas Bard

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1. Introduction

This chapter gives an introduction and a background to the specific setting for the topic of this study. Thereafter, the purpose and research question which will be presented. This is followed by a description of this study's delimitation and disposition.

1.1 Background

Many scholars consider innovation to be the primary driving force for progress and prosperity in business today, both on the individual firm level and for the economy in general (Schumpeter, 1934; Nelson &Winter, 1982; Tushman & Nadler, 1986). Previous research has further pointed at the central role of innovation capabilities. That innovative firms tend to facilitate higher profitability, higher market value, superior credit ratings, and thus, higher chances of survival and prosperity (Geroski, Machin & Van Reenen, 1993; Hall, 2000).

Hence, the development and capability of managing innovation is crucial for companies as to create competitive advantage and to be capable of surviving industry transformations (Porter, 1980; Basoglu, Daim, Dogan, Taskin & Gomez, 2013). Teece, Pisano & Shuen (1997) state that companies with capabilities to effectively and continuously innovate in response to expressed needs are the ones crowned as winners in the global marketplace. Grant (1991) further points that organisation's development of innovation capabilities is vital to provide the organisation with continuous and stable flows of innovations.

The extensive and multidisciplinary application of innovation has resulted in a wide range of definitions. The lack of one standard multidisciplinary definition contributes to uncertainty and confusion for how to define innovation, which has resulted in a challenge for organisations (Baregheh et al., 2009). This calls for a commonly accepted definition of innovation. Accordingly, the authors of this study have experienced the definition of innovation being often wrongly applied to not yet commercialised inventions. The invention is not an innovation because it is not yet commercialised (Stevens & Burley, 1996). Innovation is either the result of designing an invention or using an existing invention differently, but always paid for by a market actor (Hakkarainen & Talonen's, 2014). Although the commercialised invention does not necessarily return its related investments, the innovation will become a successful innovation when the return on investments has been reached, and there is an indication of future profit (Steven & Burley, 1996). Hence, the definition of successful innovation will be further be applied accordingly in this study.

The global digitalisation of businesses and rapid development of disruptive technologies enable greater access to resources, increases and reorganises competition and the risk of being disrupted away (Tidd, Pavitt & Bessant 2005; Christensen, 2013). Due to these recent advances in disruptive technologies, digitalisation has emerged and reorganised the business environment (Christensen, 2013). Incumbents have to be innovative in developing new business models and streamline

solutions based on customer needs to stay competitive. Alternatively, the risk for creative destruction and destruction of competencies cannot be reduced (Tripsas, 1997). Accordingly, the IT-consultancy industry is in a paradigm shift were traditional boundaries between market segments are vanishing, and global competition is a fact. The competitive game sphere is changing rapidly, not only due to digitalisation, but also the considerable changes and growing requirements from clients. (Nissen, 2018). Seifert & Nissen (2018) states that IT-consultancy firms should counter this by applying flexible delivery models, adaptable to the rapidly evolving needs of the clients.

Christensen (2013) claims that the transformation from resource-based consulting toward asset-based consulting can help IT-consultancy firms to sustain and strengthen their market position. Hence service-offerings provided in asset-based consulting can be multiplied and scaled to a more significant extent than in resource-based consulting, where the central role of employees performing the services hinders scalability. Also, asset-based consulting is generally performed at a lower price than traditional resources-based consulting due to virtualisation and hence efficiency, speed and productivity (Christensen, 2013). Asset-based consulting also creates a lock-in effect on the customer, consequently, the more the customer utilises the service, the more the service can be customised for the customer's needs and the higher the switching costs for the customer. This led to greater loyalty and higher profitability for the supplier (Nissen, 2018). Christensen (2013) defines asset-based consulting as the packaging of ideas, frameworks, analytics, processes, and intellectual property for optimal delivery through software or other technology. Christensen (2013) claims that with the same workforce, more projects can be successfully conducted and thus improve operation's margins.

The current paradigm shift, the increased global competition and the advances in disruptive technologies and potential transformation from resource-based- to asset-based consulting, indicates an increasing need for managing the development of new business models and services. This consequently increases the importance of ensuring a leadership which can effectively adapt to and master innovation management (Volberad, Van den Bosch & Jansen, 2006). This can be managed by leveraging the organisations' existing knowledge base, improve organisational innovativeness, increase productivity and develop competencies to survive the transformational environment in the IT-consultancy industry (Nissen, 2018).

Therefore, this study will further investigate the phenomenon of the IT-consultancy industry through the perspective of the IT-consultancy firm Cybercom Group. Cybercom is part of the above paradigm shift where innovation constitutes a critical area of their strategy. The organisation is one of many IT-consultancy firms that have to develop effective innovation management practices for leaders in charge of the development of innovation. Consequently, the transformation from resource-based to assets-based consulting requires new methods of developing innovative solutions to ensure prosperity in the future.

1.2 Problem discussion

The framing conditions for standard IT-consulting services has become increasingly competitive, resulting in eroding margins for IT-consulting services (Nissen, 2018). Consequently, standard services become more exchangeable resulting in reduced pricing power for IT-consulting firms, hence cost-effective measures can be required (Nissen, 2018). Additionally, the client's inclination to unbundle consulting engagements and buy services from different providers in their pursuit to find the best solutions further aggravates the situation (Parakala, 2015). The transformation can result in IT-consultancy firms not investing in increasing the correct capabilities and running the risks of being disrupted by having obsolete competencies and traditional business models. Conversely, IT-consultancy firms can obtain competitive advantages by establishing innovation management practices that allow leaders of organisations to effectively manage and develop innovation (Karlsson & Magnusson, 2019). Thus, strengthening their preparations for transformational challenges that could jeopardise the firms' prosperity.

Firms ability to identify potential signs in early indications, understanding them, to explore and exploit accurately upon them, increases the possibility to gain competitive advantages (Ansoff, 1975). The competition of the IT-consultancy industry is increasing, and the importance of organisations' ability to effectively master innovation management is essential (Nissen, 2018). Especially when facing transformational trends as; digitalisation of society, digital natives, soaring online trade, artificial intelligence, business engagement in digital products and services, and consulting services hardened framing conditions (Nissen, 2018). To stay relevant in the IT-consultancy industry, leadership constitutes an essential part as they have to establish effective innovation management to be able to adapt and deliver new value offerings towards a future market embraced by above mention trends (Nissen, 2018).

Besides, Cybercom, being a multi-national organisation and with customers providing their customers in several countries with the latest technology, indicates a substantial need for managing innovation effectively not to encounter the potential to be replaced by competitors. Cybercom's current strategy is targeting to transform the standard IT-consulting services in meeting customers' requirements to provide clients with assets, and hence transforming client's business models. The Cybercom strategy, 2020 states:

" We are a solutions consultancy company in connectivity, sustainability and innovation. We chose to work with clients where we can provide high added value, and we orchestrate our client's transformation." – Cybercom's strategy, 2020

Consequently, the authors were temporarily recruited to the Innovation Zone department at Cybercom in Gothenburg, where the assignment was initially to identify how innovation is managed at the local innovation management department. By participating in operational activities related to innovation, the authors realised that the IT-consultancy industry has two main

perspectives on innovation. First, innovation is provided to clients as a consultancy-service, and second, innovation is managed internally, where activities as facilitating innovation capabilities, measure innovation results and establishment of internal systems for innovation management is essential. During the operational activates as meetings, workshops and seminars the authors identified the lack of the second, internal innovation management focus and that the internal focus on innovation can leverage the delivery of successful innovation to existing and new clients.

Moreover, the authors used literature databases to search for innovation management in the IT-consultancy industry and identified a gap in existing literature for effective innovation management practices from a leadership perspective. The study can hence contribute to the existing literature by exploring effective innovation management practices in the transforming IT-consultancy industry from a leadership perspective. The challenges of this transformation correspond to all organisations in the IT-consultancy industry, and actions will be necessary to survive in the rapidly changing environment (Nissen, 2018).

Thereby, the authors initiated a single case-study of Cybercom's organisational innovation management practises from a leadership perspective. The organisations' ongoing transformation of renewing their business model towards asset-based consulting, is considered as a significant opportunity of exploration regarding a systematic approach towards effective innovation management practises. Consequently, acknowledged international standards from ISO: Innovation Management Capabilities Assessment and the innovation management standard ISO 56002:2019 (ISO 56002 standard., 2019) gave perquisites for a comprehensive and systematic starting point of this study.

1.3 Purpose and research question

The purpose of this study is to explore effective innovation management practices from a leadership perspective in an IT-consultancy organisation. This will be managed by a single case study of the IT-consultancy firm Cybercom Group.

Following research question has been formulated based on the purpose, background and case-study:

What is considered as effective innovation management practices from a leadership perspective in an IT-consultancy firm?

By answering the research question, the study will contribute with a theoretical perspective on how three levels of leadership consider effective innovation management practices. The three leader-levels are; i) leaders responsible for daily operational activities and its employees ii) leaders responsible of the leaders mentioned above iii) leaders with the highest responsibility for departments or strategic initiatives. This choice is motivated by the current lack of research on this

specific topic of innovation management practises from a leadership perspective. Consequently, exploring leaders' considerations of innovation management, in a single-case study, can be of great value to validate the relevancy of further and broader explorations. Applying ISO 56002:2019 (ISO 56002 standard, 2019), and the innovation excellence, a theoretical state-of-art framework (Dervitsiotis, 2010; Bassiti & Ajhoun, 2016), to this exploration provide the authors of this study with prerequisites in answering the research question.

Moreover, the research provides a model for effective innovation management practice for leaders in the IT-consultancy industry, thus building on the minor amount of existing literature of effective innovation management practices for leaders. The leader-perspective of effective innovation management practices is not yet fully developed within these constraints, this research can contribute to a further understanding among leaders for future adoption of innovation management practices in the IT-consultancy industry.

1.4 Delimitations

The study's first limitation is to define leadership as leaders managing a controlling position (N.E., n.d.). Also, leadership is further defined as leaders' ability to lead and influence others in a given context (Oxford dictionary, n.d.). Secondly, this study will consider a strategic and theoretical perspective in front of a practical and operational. Thirdly, individuals' background, characteristics or titles are not considered. This because the background and characteristics would require a more comprehensive timeframe and including titles would jeopardise our promise of individuals' anonymity. Forth, the authors have delimited this study to focus on leaders with close relationship and mandate to foster innovation management in Cybercom Group.

Consequently, leaders belonging to the Innovation Zone departments and Business Advisory departments has been focused on as these departments are closely connected to the organisation's innovation processes. Lastly, employees with no decision-making power will not be investigated as the authors have delimited this study to focus on the leadership perspective and leaders with decision-making mandate in managing innovation. This due to the limited timeframe of the research and need of a more comprehensive data collection.

Given the limitations above, no external customers have been advised or any benchmark performed. Consequently, this study will be limited in focusing on the leadership in the Innovation Zone- and Business advisory departments' and study effective innovation management practices considered by the leadership in Cybercom Group.

1.5 Thesis disposition

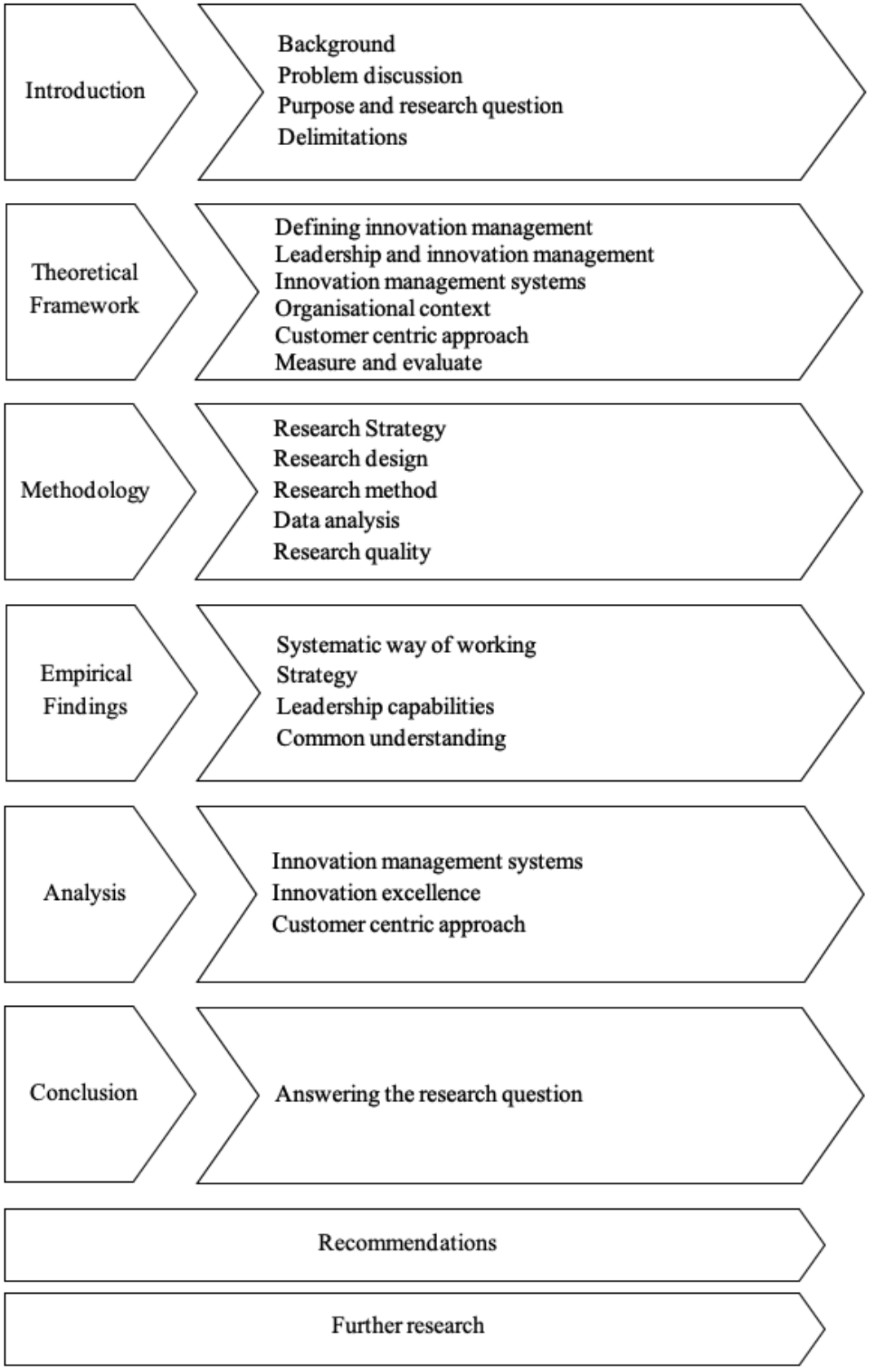

Figure 1 –Thesis disposition, designed by authors.

2. Theoretical Framework

The following chapter will present the theoretical framework. First, the value and feasibility of innovation management will be defined and followed by specifying the leaderships role in innovation management. Second, effective innovation management concepts are presented from a leadership perspective. The concepts are presented followingly: innovation management systems, innovation excellence and customer-centric-approach. Last, the conceptual model is summarising the theoretical framework and the interrelationships of the concepts.

2.1 Defining innovation management

To create a better understanding of innovation, and what potential impact it might have on a company's competitiveness, the role of innovation management is increasing. According to scholars, innovation management is involving changes in a firm's organisational form, practices and processes in a way that is "new" to the firm and the industry (Karlsson & Magnusson, 2019). This to leveraging the firm's knowledge base and improve organisational performance in terms of managing innovation, which results in increased productivity and competitiveness (Volberad et al., 2006). According to Teece (2007), the business environment is changing due to rapid development and fast pace changes in technology, with notions such as product development, and radical versus incremental innovation. Additionally, existing trade barriers and transaction costs are decreasing, which results in the markets being overheated and stagnated. Hence, the competition is increasing, which forces companies forces to consider innovation of non-technological kind (Karlsson & Magnusson, 2019). To sustain competitive advantages, companies have to identify possible changes in the context of management within the firm, referred to as innovation management (Volberda et al., 2013).

Daft & Becker (1978) define technological innovation as the introduction of changes in technology and how these changes relate to the main activities of the organisation. Innovation management is performed to reflect and process changes in the way an organisation works with management (Birkinshaw Hamel & Mol, 2008). Accordingly, a definition of innovation management is according to Birkinshaw et al. (2008, p. 1.) "…the invention and implementation of a management practice, process/structure, or technique that is a new state of the art and is intended to further organisational goals". Thus, it gives a better understanding of the usually expressed purpose of innovation management among scholars, which is to increase the effectiveness and efficiency of internal organisational processes and thereby increase the competitiveness and productivity of firms (e.g., Birkinshaw et al. .2008; Teece, 1980; Hamel, 2006). However, effective innovation management cannot be achieved or developed if the leadership is not directed towards it. Thus, the establishment and development of innovation management are dependent on leaders in charge (Karlsson and Magnusson, 2019).

2.2 Leadership and innovation management

Leadership is central in design processes, structures and climate for organisational innovativeness and to motivate teams towards innovations (Wipulanusat, Panuwatwanich & Stewart, 2017). Additionally, leadership plays an essential role in overcoming challenges, enhance organisational capabilities and addressing barriers to retrieve organisational alignment (Carmeli, Gelbard & Gefen, 2010; Beer, Voelpel, Leibold & Tekie, 2005). Fundamental leadership skills are vital to focus on and improve, due to leadership skills role as key for increasing organisational capabilities (Beer et al., 2005). The "7Cs", introduced by Beer et al. (2005) sets out seven organisational capabilities fundamental for managing a successful implementation of most strategies and simultaneously supports managers to identify strengths and weaknesses. They are, therefore considered as vital for leaders to possess to effectively practise innovation management (Birkinshaw et al., 2008). The seven organisational capabilities for successful implementation of innovation strategies, among other strategies, are 1) coordination, 2) competence, 3) commitment, 4) communication, 5) conflict management, 6) creativity, 7) capacity management. Accordingly, leadership- and organisational capabilities are vital for organisational- alignment, innovativeness, adaptability and efficiency (Carmeli et al., 2010: Beer et al., 2005: Panuwatwanich et al., 2017). Consequently, the above seven organisational capabilities are key since every organisation faces challenges of adapting to its environments and can hence survive in overcoming these challenges (Aldrich, 1979).

Merging leadership and innovation into the organisational context, demonstrating innovation leadership fosters a climate more capable and adaptable for changing environments, which facilities more control and efficiency for managers in managing changes in environments (Carmeli et al., 2010). Innovation Management Systems as ISO 56002:2019 guides organisations and leaders to design and managing innovation management practices more systematically and iteratively. The ISO Innovation Management System 56002:2019 (ISO 56002 standard., 2019) strives for increased organisational capabilities and decreased barriers as unclear strategy, poor communication and low efficiency, with an overall focus on establishing processes for innovation management. Rothman & Koch (2014) highlights the value of innovation and creativity in most business strategies today. Gumusluoğlu and Ilsev (2009) & Rousseau et al., (2013) stresses the importance of leaders support to employees in their creative process, this because innovation and creativity are not enabled automatically from employees without leader's support.

Further, organisational alignment is widely discussed in business literature. Prominent research state that productive and competitive organisations have reached alignment in organisational-structure, environment, strategy, technology, culture and leadership (Beer et al., 2005). To manage a successful transition to organisational alignment, leaders in organisations have to be aware of barriers preventing leaders of organisations from solving the persistent problem of aligning the organisation with changes in strategy (Beer et al., 2005). Therefore, the six main barriers presented by Beer et al. (2005) is of high importance for leaders to take in consideration. If not, these barriers

could prevent the organisation's ability to align innovation management processes and eventually hinder the ability to become more innovative. The six barriers are according to Beer et al., (2015): unclear strategy or/and conflicting priorities, ineffective top management, extreme leadership styles (i.e. too much top-down or to laissez-faire), poor coordination and communication across functions, business and geographic regions, insufficient existing leadership skills and inadequate investments in future leaders, and lastly, modest vertical communication.

Furthermore, above mention theory regarding leadership is highly relevant for the sake of managing innovation and are therefore identified as a relevant applicable theory for this specific study. Additionally, for innovation management to effectively be employed, the support and guidance from several innovation management concepts can be used. However, these concepts are of no usage if the leaders cannot handle the above mention statements. In the following chapters, different concepts and frameworks are being presented based on their relevance for leaders in managing innovation.

2.3 Innovation management systems

To emphasise what has been stated in the previous section regarding innovation management, the ability of an organisation to innovate can be explained as an essential corporate process. A key factor for sustainable growth, economic viability, increased well-being, corporate competitiveness, and on a larger scale the development of society (Karlsson a& Magnusson, 2019; Porter, 1980; Roberts, 1988.). Many different tools have been exploited to seize these goals (e.g. design thinking labs, idea management platforms (Karlsson & Magnusson, 2019) without providing any actual results. Karlsson & Magnusson (2019) state that the failing loop is not only due to the usage of these different tools. Instead, the authors state that it is more rooted in the actual components of innovation management. Following six factors are essential to be crucial to facilitate innovation management 1) competences 2) established approaches 3) settled directions 4) measurements and processes 5) organisational structures 6) senior management. This implies a need for a systematic approach towards innovation management, Karlsson & Magnusson (2019) states that a more systematic approach can provide leaders with a more holistic perspective in their decision-making. Nowadays, systematic approaches to innovation management can be managed through standardised innovation management systems (Karlsson & Magnusson, 2019). These systems are referred to assets of standards, which are designed to help leaders in their organisations to navigate complex processes of innovation, as well as systemise their activities and enhance the efficiency of the management (Mir, M., Casadesús, M., & Petnji, L. H., 2016). Correspondingly, Mir et al. (2016) have performed a prominent study on 347 organisations' innovation management system and concludes how successful innovation management system have positive effects on the organisation's innovation capability and business performance.

According to Mir et al. (2016), the normative context of the usages of innovation management systems in organisations is changing considerably. The usage of innovation management systems'

will continue to change because of organisations are influenced by publications such as the European Standard CEN-TS 16555-1 Innovation Management – published by the European Committee for Standardization (CEN, 2013) and the ISO-Innovation Management Standard 56002:2019, – recently published by the International Organization for Standardization (ISO 56002 standard., 2019). For this study, the authors will apply the most recent publication of ISO 56002:2019 (ISO 56002 standard., 2019) as an initial framework. The ISO 56002 standard (2019) targets to guide organisations to determine its innovation vision, strategy, objectives, policy, establishing the processes and support needed to achieve the organisation's' intended outcomes. The ISO 56002 standard (2019) guides the organisation in systematic methodology to innovation management by providing the organisation with a framework of interrelated elements.

An acknowledged standard for innovation management system can provide the organisation with a practice of how to manage innovation more productive and successful. This because an innovation management systems standard targets to provide organisations with generalisable, effective and adaptable solutions for many organisations. The ISO 56002 standard (2019) presents seven critical elementals which are crucial for establishing an effective innovation management system. Following key elements and definitions are presented in Table 1 below:

Key elements of the ISO-standard´s innovation management system	
→ **Organisational context**	The internal and external challenges which affect the organisation's process in achieving its objectives.
→ **Leadership**	Top management and leadership demonstrate commitment and respect to the innovation management system and establishes an innovation vision, strategy, policy, roles, responsibilities and authorities.
→ **Planning**	Top management and leadership determine actions to manage opportunities and risk, facilitate objectives for innovation, structures and the portfolio.
→ **Support**	Establish necessary support for the innovation management system, i.e. people, competencies, financing together with resources as tools, communication and intellectual property.
→ **Operation**	Establish and implement innovation initiatives using adequate innovation processes. The innovation initiatives are projects and programs targeted to identify opportunities, create and validate concepts, as well as develop and deploy solutions.
→ **Performance evaluation**	Continuously evaluate the performance of the innovation management system with KPIs, related to vision, strategy, policy and objectives.
→ **Improvement**	The result of performance evaluation: The innovation management system is continuously improved by focusing on its most critical challenges in the context, leadership, planning, support and operations.

Table 1 – Innovation management system based on ISO 56002 standard (2019), illustrated by authors.

Above seven key elements of the ISO 56002 standard (2019) (Table 1) are stated to be comprehensive for facilitating an innovation management system. Therefore, the ISO 56002 standard (2019) will be the basis for defining the innovation management system in this study. The authors will further apply the following definition of an innovation management system (Table 2). The definition of innovation management elements applied further in this study are presented in Table 2 below. The key elements of the innovation management system further applied in this study will include three key elements, instead of the seven key elements defined in the ISO 56002 standard's (2019). The main contribution of the author's innovation management system framework (Table 2*)* is the increased focus and centrality of leadership.

Accordingly, the authors of this study have defined operational activities to derive from *Stage-Gate and Innovation Funnel* (Table 2). ISO 56002 standard (2019) elements *Performance evaluation* and *Improvement* are included in the element *Measuring and evaluation* in the authors (Table 2). Lastly, ISO 56002 standard (2019) element *Support* is included in the element *Leadership* in (Table 2). The authors focus on the leadership perspective and how an innovation management system can support the leaders and organisation.

Key elements of the innovation management system – defined by the authors of this study	
→ **Organisational context**	The internal and external challenges affect the organisation's process in achieving its objectives. Regular scanning and analysis are necessary to identify risks and opportunities for potential value realisation.
→ **Leadership**	Top management demonstrates leadership by establishing an innovation management system, including the innovation vision, strategy, policy, roles, responsibilities, authorities. Leaders establish commitment and respect in the organisational context to support the innovation management system and hence the innovation management practices. Leaders plan improvements and increasing their innovation capabilities simultaneously by establishing accurate *Measuring and evaluation* - methods. This will support the improvement of innovation management systems and innovation management practices. Moreover, leaders are responsible for designing and deliver efficiency in the operational activities, which are part of the innovation management system.
→ **Measuring and evualuation**	The ISO Standard (56002:2019) key elements *performance evaluation* and *improvement* are combined to evaluate performance continuously. Leadership are able to plan and improve the innovation management system accordingly continuously.

Table 2 – Innovation management system designed by authors, inspired by ISO 56002 standard (2019).

2.3.1 Organisational context

For leaders in organisations to achieve desired outcomes in their use of an innovation management system, there is a need to establish an understanding of the organisation and its context. ISO 56002 standard (2019) presents the *context of the organisation*, which is the first of the seven key elements in supporting organisations to evaluate itself and its context. The *context of the organisation* includes that the organisations need to regularly determine external and internal issues that are relevant in their process to achieve the desired outcomes, as well as determine its effect on the ability to achieve these outcomes. In other words, the organisation needs to define various elements that influence the organisation's company culture, goals and objectives, the flow of processes and information, the complexity of products, markets, size of the organisation, and

customers. There is also a need to regularly scan and analyse the business context to detect potential risks and opportunities for potential value realisation. (ISO 56002 standard., 2019)

To create a better understanding of the organisational context, one needs to understand the elements of the organisational context that comprise the shape of behaviour and facilitate or hinder management processes (Rice, 2005; Porter and McGloghlin, 2006; Goodman and Haisley, 2007). Goodman and Heisley (2007) are clarifying the meaning of organisational context by presenting four features that include (1) the organisation's task and technology infrastructure, (2) the structure of the organisation, in terms of authority, communication, decision-making, reward-systems, (3) the social infrastructure, which includes norms, culture, and informal networks; and (4) the unique qualities of the workforce in terms of skills, distribution of knowledge, and abilities. According to Goodman and Haisley (2007) are these factors existing independently of any individual, they have relatively stable properties, and they shape and affect individual behaviour.

The ISO 56002 standard (2019) and theory, in general, are commonly in agreement about within the context of the organisation is that the organisation should promote a culture that supports innovation. Since innovation performs by coexistence and operation-oriented mindsets and behaviours are organisational climate promoting openness, curiosity, experimentation, creativity, of high importance to succeed with innovation (Nystrom et al., 2002). According to Millman and Wilson (1999), leaders' commitment to innovation activities is a cornerstone to create a culture that supports innovation.

Researchers such as Homburg, Workman Jr. & Jensen (2002) and Brady (2004) emphasises the importance of enabling collaboration and collaborative culture. Further, the researchers state that organisations should establish a management approach for both external and internal collaboration with a target to facilitate sharing and access to competences, knowledge and other resources. According to Brady (2004) can such collaboration support the identification of customer needs and rapid challenges. To promote a collaborative culture, the organisation should consider the importance of trust-building between involved parties as well as the respect and openness. Wilson and Woodburn (2014) also state the importance of including the collaboration in the innovation strategy, objectives and existing capabilities, and the further development of competences in the organisation.

2.4 Innovation excellence

In a further discussion regarding the increasing complexity, more considerable uncertainty and faster interactions among producers and consumers, many scholars state that the essential criterion of customer choice is no longer a matter of quality (Dervitiotis, 2008; Hagel, 2007). To further present this chapter of innovation excellence, it is, according to Dervitiotis (2010) necessary to discuss the meaning of quality and innovation. Quality, referred to as the prevailing interpretation

of fitness for use, which Adams, Bessant & Phelps (2006) refers to as the organisation's current capacity to generate value for stakeholders with already existing products and business models. Regarding innovation, Dervitiotis (2010) distinguish between innovation as the organisation's inherent capability to generate new value propositions for stakeholders and point out that this is mainly managed in rapidly changing times where the value provided by existing offerings are being less attractive by customers. Both of them are directed towards generating value that satisfies individual human and/or social needs, where the quality applies to the present time, and innovation concerns the future (Dervitiotis, 2010).

The global market is becoming more and more transparent, the term quality, usually presented in forms of ISO-type certifications, has only become a ticket for firms to enter a competitive environment (Adams et al., 2006). Dervitsiotis (2010) expresses that the focus has shifted from offering quality to generating value to customers. Generating value is the preferred outcome of innovation, and firms directing more focus towards innovation will enhance the potential to provide a new cutting edge for differentiation to improve their competitiveness. The success of generating innovation that creates value for customers requires innovation management. However, it is poorly understood by managers that the process of innovation works and commonly seen as a creativity-based random process rather than a systematic process (Dervitsiotis, 2010). Findings from several surveys executed by consultancy companies reveal that significant improvements to the innovation process can only be made by institutionalising innovation management and by making it a core process in the organisations. The institutionalisation of quality management and finance management in organisations during the '70s is an example of good practice how innovation can be institutionalised (Boston Consulting Group, 2008, 2009; Drucker, 1985; McKinsey Quarterly, 2008, 2009). Although managers have accepted the importance of innovation, there is a general dissatisfaction with the results that are realised from investments in innovation. Dervitsiotis (2010) are presenting a framework for the assessment of an organisation's innovation excellence. In other words, a systematic assessment of an organisation's value-generating capability of its innovation management.

2.4.1 The innovation excellence framework

Dervitiotis (2010) describes that necessary it is to manage the innovation process as a system consisting of useful performance measurement metrics, expressed to help managers to understand better and improve the firms' innovation performance. According to Adams et al. (2006) and Dervitsiotis (2010), the achievement of a high level of innovation capability is one necessary condition in the pursuit of best practice innovation management, referred to as innovation excellence.

Many organisations have developed impressive innovations in the past. However, many of them have failed in their attempt to take them to the market. In line with the definition of successful

innovation applied in this study are Adams et al. (2006) and Dervitsiotis (2010) arguing that innovation is only regarded as successful if it can be taken to the market and generate money. Based on this reason Dervitsiotis (2010) states that to obtain innovation excellence, an organisation needs to possess a high level of innovation capability to create a sustained stream of successful innovation, as well as new streams of cash revenues. To further explain how Dervitsiotis (2010) defines innovation excellence the author presents in line with Adams et al. (2006) and several annual survey findings (Boston Consulting Group, 2008, 2009; McKinsey Quarterly, 2008, 2009) the necessary condition for establishing innovation excellence is:

Innovation excellence = Innovation capabilities + Innovation results

In order to maintain innovation excellence, innovation capability referred to as the measure of the effectiveness of an innovation management system, must be well designed, well-integrated and well-coordinated to be effective. According to Adams et al. (2006), the innovation capability is a function of six key innovation system variables, namely; organisational culture, leadership for innovation, resources for innovation, customer participation, employee participation, supplier participation. Dervitiotis (2010) presents eight innovation enablers that determine an organisations innovation capability. These eight enablers will further be referred to as innovation capabilities. The condition is also dependent on the results of the total innovation effort, referred to as innovation result. Innovation results refer to the benefits realised from the innovation projects for a firm's key stakeholders. Thus, the conditions show the importance of combining scores of innovation capabilities and innovation results as dependent on achieving innovation excellence. Dervitiotis (2010) defines innovation excellence as the overall measure of innovation achievement from the combined assessment of both a firm's capability and results. The eight innovation capabilities and the four innovation results are summarised in Table 3.

Key elements of the innovation excellence framework		
→ **Innovation capabilities**	→ **Leadership**	Leadership capabilities in designing and establishing the vision, shared values, incentives for key stakeholders.
	→ **Organisational culture**	Engage creative talents, foster creative an environment and manage ideas effectively. Establish risk awareness and trust in accepting experiments with new ideas, accept failure provided by educational- and ethnical diversity and willingness to share and cooperate.
	→ **Resources and partnerships**	Internal resources are available for competence. External partnerships can complement, and strengthen organisations skills, knowledge or uniqueness.
	→ **Innovation strategy**	Identifies and acts upon new opportunities. Reflects on the portfolio of innovation projects, aiming to balance risks and benefits from short-term and long-term innovation investments.
	→ **Employee participation**	Valuable input for ideas and constant improvement supporting the innovation strategy.
	→ **Customer participation**	Continuously generate feedback on the satisfaction of performance and products.
	→ **Supplier participation**	Exploit expertise, competencies and support from partners in the development of new profitable ideas and products.
	→ **Innovation process effectiveness**	Utilises all the above inputs to select the best ideas for the development of new value-adding products, effectiveness in time to market, return investments in innovation and become new streams of revenues and profits.
→ **Innovation results**	→ **Customer impacts**	Impact on customers as customer's satisfaction-level from products, along with ensuring loyalty.
	→ **Employee impacts**	Impact on employees' level of satisfaction, loyalty and cooperation within the organisation.
	→ **Organisation impacts**	Impact on levels of trust, risk awareness, degree of cooperation, functionality and effectiveness of networks to facilitate the exchange of valuable information and tacit knowledge.
	→ **Overall performance**	Impact of competitiveness, economic-, market- and sustainability performance.

Table 3 – Innovation excellence defined by Dervitiotis (2010), illustrated by authors.

Further, Adams et al. (2006) claim how organisations face two fundamental issues in innovation improvement, related to the distinction between doing *the right kind of innovation* and *doing the right kind of innovation right.* The first is related to effectiveness, in terms of effectively selecting

choices between incremental innovation and radical innovations. Whereas the latter includes optimisation of the innovation operation process (e.g. idea generation, project selection), in other words, managing the innovation process efficiently. Adams et al. (2006) following Dervitiotis (2010), states how there are currently too many variations of focus on innovation among organisations. Thus, Dervitiotis (2010) states how organisations ability to develop a systematic and reliable view of innovation management are being a difficulty due to the variation in approach innovation. Accordingly, Dervitioits (2010) following Adams et al. (2006), presents the aggregated framework of innovation excellence (Figure 2). The framework target to first identify key system variables - the innovation enablers related to the innovation process, which determine the firm's innovation capabilities. Secondly, it identifies the critical innovation results, which captures the realised benefits for the stakeholders. Thirdly, the framework aims to determine how innovation capabilities and innovation results are connected and related. The fourth step is to develop metrics for each variable and determine their importance and contribution. The fifth step is to use the integrated framework for the innovation system, this to come to an overall measure of the organisations' innovation achievement by adding the evaluation of both innovation capabilities and innovation results. In the last step, management can use this assessment to identify what actions should be prioritised and what areas need to be improved, both on short- and long term.

The illustration of Dervitiotis' (2010) integrated framework (Figure 2) captures how the combination of the evaluated scores for the firm's innovation capability, with the scores related to the actual innovation results realised, provides an overall measure of innovation achievement. This model should be used in the pursuit of innovation excellence (Dervitiotis, 2010; Adams et al., 2006).

Additionally, when leaders have established and evaluated the different innovation capabilities, as well as the actual results from the organisation's innovation project portfolio, the combining scores from both sides, shall provide an overall measure of innovation achievement towards innovation excellence (Dervitsiotis, 2010). Leaders can develop guiding questions to ask the organisation, referred to as innovation capability profiles and innovation results profiles (Dervitsiotis, 2010), which should be used to identify strengths and weaknesses of the innovation's system and provide the leaders with a score for each key element in Table 3. Further, Kanji (2002) states that the usage of more advanced measurement techniques can enable presenting questions in the form of innovation metrics. In return, such metrics can be evaluated to explore existing causal relationships. Leaders can learn from the results that occur from each evaluation period, and so forth examine possible paths to improve the innovation capability further. The expressed process will enable leaders to use a wide-angle lens for exploring emerging opportunities and improvements. Chessbrough (2006) states in line with Dervitsiotis (2010), how it may influence the organisation to, e.g. adapt to an open innovation model based on corporations with external parties.

Furthermore, Hamel (2007) and Kim & Mauborne (2005) express how more potent forms of innovation can evolve from such evaluating and measuring approach, where it may involve new business models regarding more robust and flexible structures of organisations. This can enable new leadership styles to emerge, such as a leadership that engage more individuals within the firm but also externally. Hamel (2007) also mention that new project selection criteria can emerge, which makes the leadership free to follow more novel and competitive strategies towards innovation.

Dervitsiotis (2010) states how the effectiveness of this innovative system is dependent on three essential requirements that need to be ensured and most importantly, balanced. To ensure this, leaders of organisations must always maintain a balance between (1) demand for innovations and supply of new good ideas; (2) a balance in taking risks between incremental and radical innovations; and (3) a balance in using internal and external resources.

Following Dervitiotis (2010), Bassiti & Ajhoun (2016) state that in order for organisations to master the process of innovation, they need to be able to identify factors that hinder and support the achievement of innovations in their pursuit of innovation excellence. However, Bassiti & Ajhoun (2016, p.1) mentioned; *"what is not measurable cannot be neither managed nor improved."*.

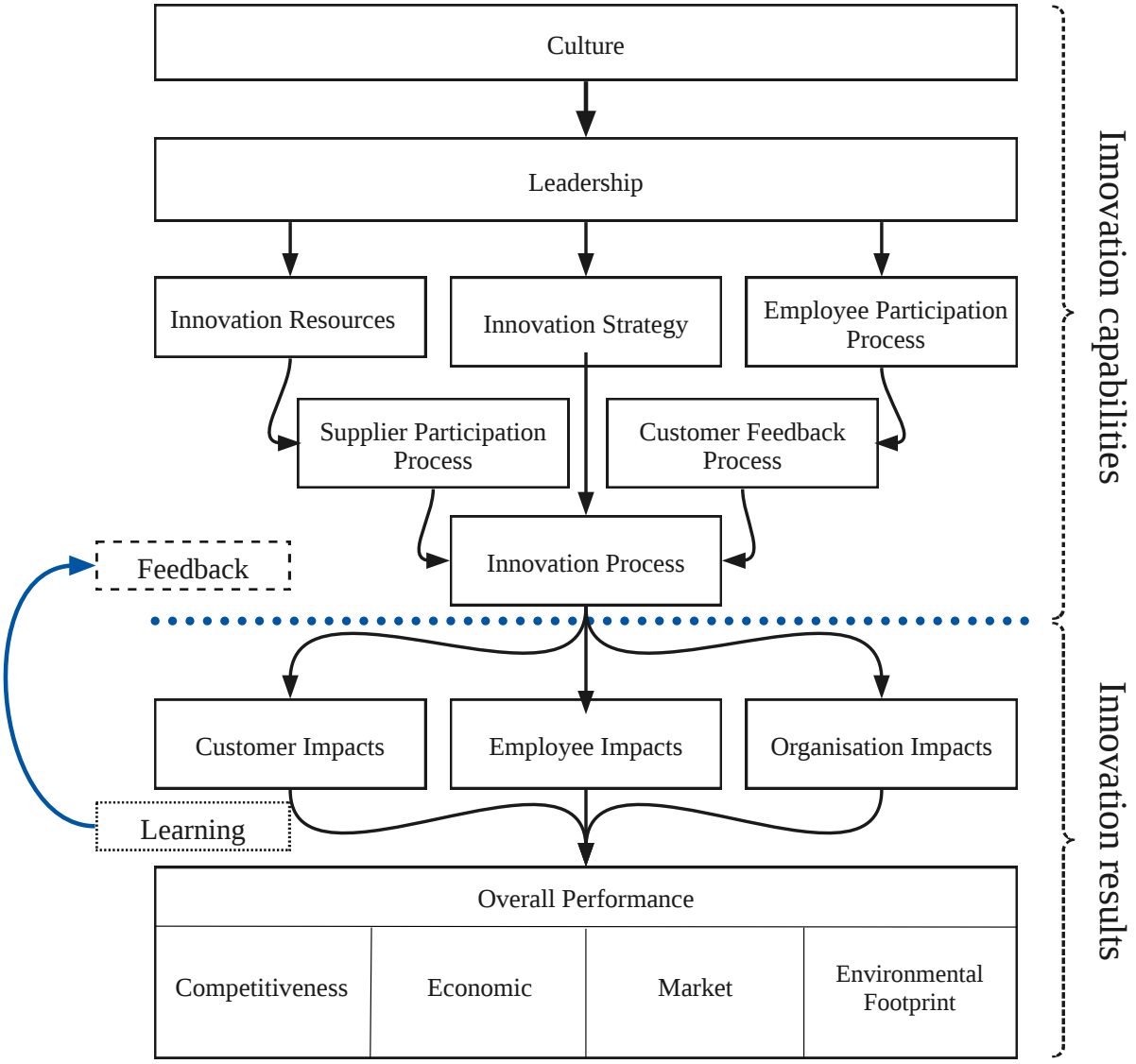

Figure 2 – The aggregated framework for assessing a firm's innovation excellence, designed by Dervitsiotis (2010) illustrated by authors.

Consequently, as previously done in section 2.4, the authors of this study summarized the ISO 56002 standard (2019) innovation management system and focused on essential factors considered for leadership (Table 2.). Accordingly, the same procedure has been applied in this section, where the innovation excellence framework (Table 3 and Figure 2) have been dissembled in Table 4, based on each factor's relevance to innovation management from a leadership perspective. The innovation management framework, illustrated by the authors of this study and presented in Table 4, will further be applied throughout this study.

Key elements of the innovation excellence framework – defined by the authors of this study		
→ **Innovation capabilities**	→ **Leadership**	Leadership is central for enabling the development and establishment of innovation capabilities. The innovation capabilities are necessary for design and reach the innovation results.
	→ **Organisational culture**	Engage creative talents, foster a creative environment, managing ideas effectively. Establish risk awareness and trust in accepting experiments with new ideas, accept failure provided by educational- and ethnical diversity together with encouraging a willingness to share and cooperate.
	→ **Innovation strategy**	Identifies and acts efficiently upon new opportunities. Reflects on the portfolio of innovation projects, aiming to balance risks and benefits from short-term and long-term innovation investments. Directed to foster collaboration and hence shorten gaps between departments of an organisation.
	→ **Innovation process effectiveness**	Utilises all innovation capabilities to select the best ideas for the development of new value-adding products, effectiveness in time to market, return investments in innovation and become new streams of revenues and profits. The innovation capabilities are efficient in reaching the innovation results, and leaders set the innovation results with a high level of innovation capabilities.
→ **Innovation results**	→ **Overall performance**	Level of impact from the organisation's innovation process on customers, employees and the organisation. Also, the innovation results measure the organisations' competitiveness, economic-, market-, and sustainability performance.

Table 4 – Innovation excellence designed by authors, inspired by Dervitiotis (2010).

2.4.2 Measuring and evaluating innovation performance

Preez & Louw (2008) state that there are common factors among successful innovators, regarding the process of managing innovation with recurring measurements of every critical factor. However, Morris (2011), one needs to be careful when measuring innovation. If the wrong things are measured at the wrong time using the wrong mechanisms, it can undermine the spirit of creativity, discovery and learning that the innovation process requires. Also, the process in-between the inputs (e.g. spend and speed to market) and outputs (e.g. numbers of new products) are commonly ignored in measuring innovation (Adams et al., 2006). Therefore, in line with Bassiti & Ajhoun (2016), is it critical for managers to have a measurement model that gives a solid ground for monitoring and measuring innovation performance. Also, to detect faults and perform repairs help the organisation to develop its capacity to innovate more systematically and successfully.

Bassiti & Ajhoun (2016) present three different models that should be applied in a tri-axial conceptualisation, referred to as the *generic innovation management framework.* The purpose is to overcome the gap of innovation as a complex and multidimensional phenomenon. The first one is called the *Innovation Granularity Scales, which* helps Organisations to adopt to a granular view of innovation in order to implement innovation performance measurements successfully. If it is established it will allow the actors of innovation to align activities and decisions regards to the conceptual factors (e.g. long-term goals), actors profiles (e.g. interest, behaviours, and areas of expertise), and the knowledge capabilities (e.g. required competencies) (Bassiti & Ajhoun., 2016).

The second model referred by Bassiti & Ajhoun (2016) is called *Innovation Capability Stages* and gives a perspective over the process by presenting six capability stages that representing the key performance milestones that can be achieved by innovation actors. The six capability stages are 1) generation stage, 2) interlinking stage, 3) improvement stage, 4) validation stage, 5) implementation stage, 6) exploitation stage. These stages aim to allow measurement of the minimum availability of required capabilities in the stages of the innovation lifecycle (Bassiti & Ajhoun., 2016).

The third model referred by Bassiti & Ajhoun (2016), is called the *Innovation Maturity Levels* and aims to provide a maturity perspective. The focus is on the ability to present improvement across the entire innovation journey, by helping organisations to assess their innovation capabilities and thereby develop a roadmap that enables them to prioritise and eventually sequence them. The different innovation maturity levels that the model presents are ranging from one to five and starts with awareness level, defined level, linked level managed level and ends with sustained level. The sustained level is defined as the highest maturity level were self-responsibility is in place, innovation actors have common goals and broad authority, high trust and community spirit are holding the actors together, a collaborative and creative culture is in place. According to Bassiti & Ajhoun (2016) is this the beginning of a successful innovation networked journey.

While these three models are being used together, they provide opportunities for innovation actors to measure and improve their innovation activities performance (Bassiti & Ajhoun, 2016). Further, Bassiti & Ajhoun (2016) states that this method can be used to effectuate innovation management and assessment efforts in organisations. It also enables a structured approach to teaching innovation as well as a formal base for innovation learning processes.

2.5 Customer-centric approach

Organisations that have access and the ability to transfer different types of information can reduce uncertainties involved in innovation projects (Cassiman & Veuglers, 2006). According to Von Hippel (1998) can this information can be divided into two groups; where the first is *information on the customer,* and the second is *market needs* and *information on (technological) solution possibilities*. To upgrade the innovation performance, Kastelli & Takanikas (2004) state how

successful innovation requires a combination of these two. Further, in their study of information exchange in new product development, they state that internal capabilities and openness towards knowledge sharing are both highly important for increasing an organisation's innovative performance. Many scholars state that the innovation process can thus be seen as a continuous interaction between external actors and internal actors (Allen, 1993; Berthon, Pitt, McCarthy & Kates, 2007; Chesbrough, 2003; Brown & Eisenhardt 1995). The external information from different sources regarding the need and solution needs to be transferred along all stages of the innovation process, Piller, Ihl & Vossen (2011) state that one of the primary external sources of information for innovation is the customer itself.

What determines an organisation's competitiveness today are its ability to manage and understand the "value" from the customers' point of view, instead of the perspective of the actual provider. Piller, Reichwald & Tseng (2006) present the idea of a *customer-centric enterprise* where the focus of all operations in the organisation should be directed towards serving customers and delivering unique value by considering the customers as individuals. Further, Piller et al. (2011) refer to *customer-centricity* in a way where a committed organisation should meet all needs of relevant customers. Customer-centricity can be translated into different levels in the organisation. At the *strategic level*, customer-centricity should be seen as the orientation and mindset of the organisation to be open and sharing their interdependencies and values with their customers. At the *tactical level*, Piller et al. (2011) discuss that instead of focusing on the convenience of operations, organisations need to align their activities and processes with their customers' convenience. At the *operational level*, Pine (1993) states that organisations have implemented mass customisation and personalisation to reach customer-centricity. Hence, customer-centricity can be defined in means of customers driving the business forward, instead of influencing customers to buy/use a product/service as a way of creating and stabilising customer demand. Organisations embracing a customer-centric approach are adjusting their capabilities, including product designs, production, and supply chains to the unique demand of each customer.

2.5.1 Customer-centricity and innovation management

Access to customer information is, as mentioned in 2.4 essential and a fundamental requirement for any innovation to be successful. For this thesis, an explanation of how customer-centricity can be applied to innovation management is seen by the authors of this thesis as highly crucial due to how it can effectuate the process of realising innovation.

Piller et al. (2011) indicate in their study that customers can take on different roles in the innovation process, e.g. customers providing information regarding future trends and solution technologies, and customers providing an evaluation of innovative concepts and participating in refinements of prototypes. Piller et al. (2011) are presenting a framework that structures these different roles of customers and can be used for organisations innovation management work. The model is an

extension of the original framework by Dahan & Hauser (2002) and presents three different modes of using and generating customer information in new product development.

Mode 1: Listen

In order to identify customer needs, organisations should use existing customer information produced from diverse input channels, e.g. feedback from salespeople, analysed past-sales data, internet log files, or third parties research reports (Dahan and Hauser, 2002). Researchers also point out the vital input of reviews of the performance of existing products and services (Pillar et al., 2011). This should be from both an internal and external (competitors) perspective. In this mode other approaches can be applied such as studying customers by observation Kozinets 1998), emphatic design (Leonard et al., 1997), Quality Function Deployment (Akao, 1990) which can be used to integrate data from customers in a design methodology.

Mode 2: Ask

A more "hands-on" approach to *mode one* mention above is to ask the customer for inputs regarding the innovation process. This can be managed by using surveys, qualitative interviews, and focus groups. This should be applied in the early stages of the innovation process. Ulwick (2002) presents a proven method regarding this, referred to as *"outcome-driven innovation"*, which combines surveys and evaluation methods. Furthermore, this can be used when the innovation project has been developed further. According to Dahan & Hauser (2002) can de organisation present different solutions and concepts for customers and by letting them react and give feedback on proposed solutions.

Mode 3: Build

Building on the definition of customer-centricity, mode three is referred to as an active integration of the participation of customers in the innovation process. The previous modes above are isolating the customers from the organisation, mode three is instead involving the customer in the design or/and development of future innovation (Piller et al., 2011). Also referred to and seen as the genus of *customer co-creation* and commonly seen as *open innovation* with the customer, where the organisation is empowering customers to design and develop solutions by themselves. They can also implement methodologies to transfer an innovative solution that the customer effectively possesses into the organisation. Kjellberg, Tseng & Lu (2003) refer to this co-creation as a product development process where customers are actively involved in the design of new offerings. Thus, it can be seen as an active, creative, and social process, which is highly based on what is emphasised in this thesis regarding the collaboration between producers and customers (Piller & Ihl., 2009).

Therfore, customer-centricity constitutes a vital part of effective innovation management practices. Additionally, the next chapter presents a holistic framework for innovation management, where customer-centricity fills a role of equal importance.

2.6 Conceptual model

The conceptual model (Figure 3) is designed to examine effective innovation management practices from a leadership perspective within an IT-consultancy firm. The conceptual model captures how leadership constitutes an essential part of the potential success of an organisation's innovation management. Innovative ideas heritage from the minds of employees, but if the ideas are not supported or act upon by the leadership, they will not be allowed to proceed in any processes to become realised, thus cannot be called innovations. Therefore, leaderships' commitment, involvement and understanding of innovation are fundamentals for an organisation's innovation management.

The conceptual model (Figure 3) further explains that leadership can establish and use two frameworks and two concepts to manage innovation. The framework Innovation Excellence, presented by Dervitiotis (2010), supported by Adams et al. (2006), captures how organisations can leverage their innovation management systems by ensuring different innovation capabilities before starting the development of innovation. This contributes to more specific competencies applied for specific areas, thus avoiding waste of resources. Innovation excellence further demonstrates that it is not enough to only focus on the innovation process to be able to improve. Therefore, innovation results should be evaluated and act upon after the innovation has been realised, thus enables identification of areas of improvement (Dervitioitis, 2010). The conceptual model further captures that an innovation management system can be used as an effective framework for leaders to act after. The innovation management system enables a systematic approach towards managing innovation, as well as strategic guidance for the organisation (Karlson & Magnusson, 2019; ISO 56002 standard., 2019).

Consequently, the conceptual model captures the importance of continuously measuring and evaluating the innovation process and thus constitutes an essential activity for leadership to ensure value creation throughout the innovation process. The last of the four presented boxes in Figure 3 is the concept customer-centricity. The conceptual model shows that customer-centricity constitutes a vital approach for leadership to ensure customer interaction and feedback possibility. The arrow from customer-centricity to innovation management systems captures how customer-

centricity should be applied throughout the innovation process to sustain interactions with the customer and keep the focus on the intended value while developing the innovation.

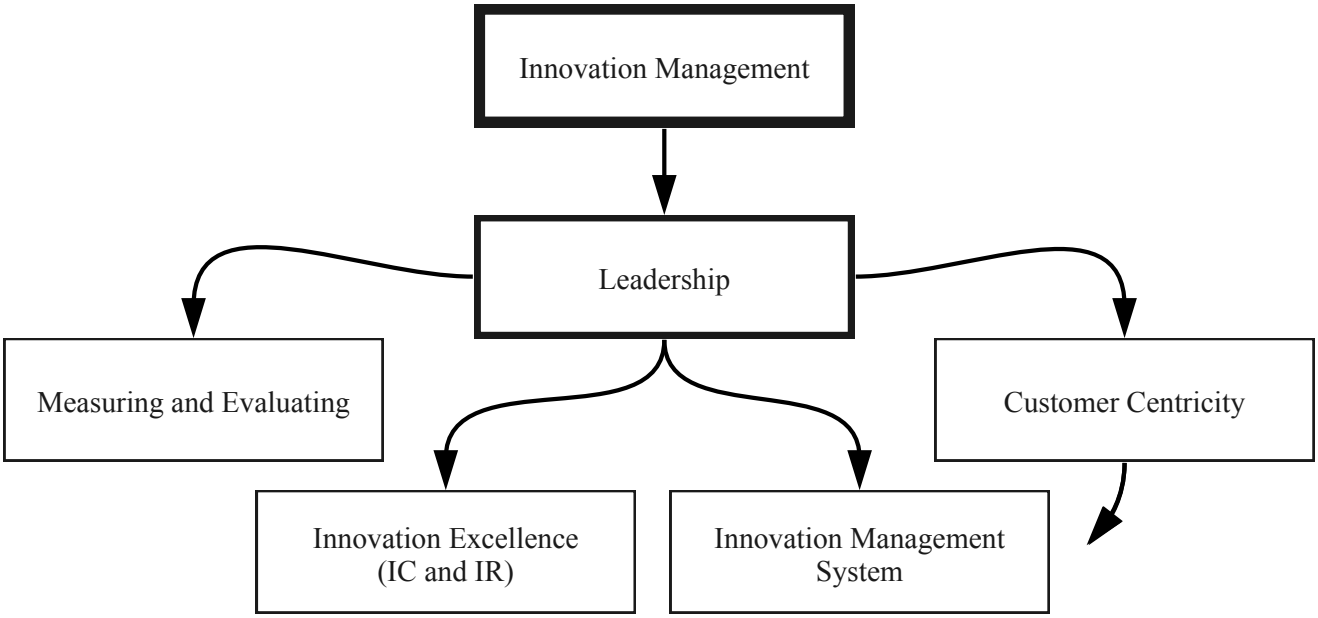

Figure 3 – Conceptual model of the theoretical framework, designed by the authors.

3. Methodology

This section describes the methodology behind the research conducted in this thesis. Starting with the chosen research strategy, followed by the research design, including a pre-study and case study. Further presented is the primary data collection, including semi-structured interviews and observations. Followed by secondary data collection and the applied data analysis process. Lastly, a demonstration of the quality level of this qualitative research is presented.

3.1 Research strategy

To explore the topic of this study the authors have chosen to apply a single qualitative case study due to its nature of being a good fit to explore complex phenomena in their real setting (Yin, 2018). The choice of a qualitative research strategy is based on a qualitative research strategy's ability to make sense of complex situations and social processes (Bell, Bryman & Harley 2011). For the sake of the purpose and to answer the presented research questions, the author's needed to understand the different phenomena profoundly and in detail. According to Bell et al. (2011), this is done by, e.g. learning from participants about their experiences, such as beliefs, motivations, and opinions. A qualitative research strategy, as in line with Bell et al. (2011) reasoning, are commonly described as concerned with the generation of theories rather than the testing of theories. Thus, a qualitative strategy is appropriate for the proposed study as the author's aim to explore good innovation management practices from a leadership-perspective, where existing theories, in the same manner, are few due to a limited amount of research on the subject from a leadership perspective. According to Ying (2018), is there usually problems with case studies, such as access to locations and the organisation. Fortunately, the authors was temporarily employed for their master thesis project and therefore authorised to get access to many of the internal systems within the organisation. This has facilitated access to people. Also, being part of Cybercom have the authors the possibility to work from their office and attending meetings, seminars, and other events. Thus, being close to the case company has enabled to both do observations and interviews. The authors have been assigned a supervisor which have supported the authors to get in contact with relevant leaders and access to continues feedback and questions.

3.2 Research design

An abductive approach has been applied for this qualitative study as its iterative nature of usages and applicability allows for making both logical inferences and develop existing theoretical frameworks, as opposed to creating new theories (Dubois & Gadde 2014). The abductive approach was further considered valid due to the non-linear nature of case study research, which allowed the authors to move between theory and empirical observations (Dubois & Gadde, 2014). The authors employed 6 phases to execute the work of the study. As the choice of an abductive approach enabled to have an iterative process, the first phase began with a pre-study in order to explore and identify areas of challenges and opportunities of innovation management. Also, the

identification of potential research streams to apply to the empirical context of innovation management was simultaneously made with the pre-study. The literature review revealed several models for good innovation management practices.

Furthermore, the generation of the purpose constituted the second phase as an iterative outcome of the first phase. In the third phase, an extensive literature review was executed in order to screen and source out a solid ground for a theoretical framework concerning the purpose. During this stage, the authors went on a field-study to Silicon Valley, where two additional pre-study interviews were conducted. The findings from the interviews and the extensive literature review emphasised the leadership perspective on innovation management, which came to shape the purpose of the study and outlined the research questions. In the fourth phase, the selection of interview respondents was made, and interviews were conducted. An interview guide was built based on early findings from the pre-study, including the field study, and relevant theories from the theoretical framework. During the data collection process, the authors of this study extended the literature on innovation management and adopted a leadership perspective in order to devise a theoretical framework. In the fifth phase, the acquired data was analysed and evaluated. Lastly, the research questions were answered, and recommendations based on the conclusion was given to Cybercom.

Because of this iterative process and the pervading interplay between empirical data and theory, the research approach in this study can be situated as abductive research (Bell et al., 2019; Dubois & Gadde, 2014). Furthermore, being part of the organisation allowed the authors to work side by side with employees of both the Innovation Zone and the Business Advisory department. This enabled the authors to be part of their daily work, where they attended several meetings, seminars, and events. Observations and interactions were, therefore, possible daily and covered in the four first phases.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Pre-study	**Research purpose**	**Research question**	**Data collection**	**Data analysis**	**Conclusion**
• Explore and identify challenges and opportunities • Literature review • Conducting interviews	• Defining scope • Constitute purpose of the research	• Field study • Extensive theoretical framework • Designing research question	• Designing interview guide • Primary data interviews	• Analyse the data (primary- and secondary data)	• Answering the research question • Further recommendations to Cybercom

Table 5 – An overview of the study's methodology-process, designed by authors.

3.2.2 Case study

This study has applied a single case study design together with a qualitative approach. This because the case study design should be considered when the focus of the study is to answer questions regarding "how" and "why" and where the boundaries are not evident between the context and the phenomenon (Yin, 2018). The study's purpose is to explore effective innovation management practices from a leader-perspective and analyse how leaders in an IT-consultancy firm practise innovation management. Hence, the answers to "why" and "how" are vital to create an understanding. Consequently, the initial pre-study revealed how the scope of this study was of high relevance but indicated unclear boundaries between the context and the phenomenon. Thus, that gap in existing theory validated the choice of a single case study and as Crabtree & Miller (1999) and Yin (2018) states, is it advantageous to use such approach since it allows for close collaboration between the researchers and the participants. Thus, it allowed the participants to tell their stories and enabled them to describe their views of reality, which enabled the authors of this study to understand the actions taken by the participants better.

Previous research has not yet fully explored this specific context of exploring effective innovation management practices from a leader-perspective in the IT-consulting industry, the determination of the type of case-study is exploratory. In line with Yin (2018), exploratory case studies are used when one seeks to explore situations in which the intervention being evaluated has no clear single set of outcomes. To strengthen the choice of an exploratory case study, significant indications of Cybercom never being investigating their innovation management practices from a leadership perspective, which clarifies the choice of seeing this study as exploratory.

Bell et al. (2019) discuss, in addition to identifying the specific "type" of the case, researchers must consider whether it is prudent to conduct a single case study or not. The case might be that a better understanding of the phenomena is gained by conducting a multiple case study, where the researcher allows exploration of differences within and between cases. Thus, it enables to replicate findings across cases (Yin, 2018). Due to the limit of time for this study, the authors have chosen to only focus on Cybercom as an organisation internally. Therefore, the approach of a single case study is applied.

3.2.1 Pre-study

A qualitative pre-study initiated the study and was utilised to gain a better understanding of Cybercom as an organisation, as well as their current work on innovation management. The pre-study was ideal for clarifying what challenges Cybercom has regarding its innovation management process, which was used as an outline for this research. The pre-study included two unstructured interviews with the Head of Business Advisory and one with the innovation leader who belongs to the business advisory department. Further, observations were continuously conducted during the

pre-study phase, where the authors attended global meetings with innovation leaders, seminars, workshops, and daily work situations.

One part of the pre-study was a field trip to Silicon Valley in the United States of America. It was initiated with the purpose to gain inspiration and global insights to develop a broader understanding in the process to define the scope for Cybercom. The location of Silicon Valley was chosen based on its high reputation and track record of being a world-leading start-up cluster where many of today's world-leading technology firms' heritages. Two interviews were scheduled before the authors travelled, One interview with Sven Beiker, a professor in Business Management at Stanford University and CEO of Silicon Valley Automotive Mobility, and one interview with Gabriel Granström, at Nordic Innovation House in Silicon Valley. In discussion with the authors and Sven Beiker, it came clear that leadership and commercialisation of innovation are two critical factors for managing innovation effectively. The meeting with Gabriel Granström generated clarifications regarding the importance of organisation culture and networking as a means of facilitating fruitful innovation management. After conducting these meetings, the leadership perspective was acknowledged by exploring effective innovation management practises. Besides the interviews, the authors also visited Googleplex and Facebook in Palo Alto. The visits were initially planned with the purpose to have the opportunity to meet and discuss with employees to gather insights regarding their daylily work with innovation. Due to the circumstances regarding Covid-19 pandemic, the authors were not allowed to get in personal contact with any employees. Still, the authors had the opportunity to visit the areas and get a feeling of the innovative environment of being part of such innovative organisations, which gave inspiration and insights on how the business of tomorrow can be designed.

3.3 Research method

Research methods refer to suitable techniques for collecting data (Bell et al., 2019; Yin, 2018) The most used methods in qualitative research are interviews and observations, as mentioned earlier, these have been applied for this thesis.

3.3.1 Primary data collection

To explore good innovation management practices from a leadership-perspective and be able to analyse how leaders practise the innovation management process. The primary data collection was based on ten semi-structured interviews within Cybercom. The authors performed this study from a leadership-perspective and the semi-structured interviews were conducted with employees within the organisation where their current role included some level of decision-making. The authors defined this as a leadership-role throughout the research. The theory suggests that the business perspective as being of high importance for successful innovation, three of the total interviews were held with leaders belonging to the Business Advisory department. The choice of semi-structured interviews was mainly based on its approach to simplifying the action of being

coherent in the process, also to make it easier to gather comparable data of specific themes. According to Bell et al. (2019), semi-structured interviews provide flexibility and a sufficient level of the structure where comparisons easily can be made. This also gave the authors incentives for the usage of semi-structured interviews in the research. The flexibility given to the respondent gave a great deal of leeway in their replies and thus opened for discussions regarding what they found worth to discuss. The choice of semi-structured interviews allowed the authors to have a list of questions on specific topics that were found valuable and relevant for the research, referred to as an interview guide (Bell et al., 2019). The interview guide was prepared in advance based on findings from the pre-study phase and relevant theory (Yin, 2018; Bell et al., 2019). The interview guide was created with a certain amount of order on the topic of innovation management to make the questions flow reasonably well during the interview (Bell et al., 2019). The questions were formulated in a way that persons with no prior knowledge within the area of Innovation management would still be able to relate the topic to their daily work and answer to some extent. Although, the questioning and the use of language was adjusted to be comprehensible and relevant for the specific respondent, where leading questions where avoided (Bell et al., 2019).

3.3.1.1 Selection of interviewees

The authors were temporally employed at the organisation for the study. They possessed full access to internal contact networks which enabled to gain in-depth knowledge of the organisation efficiently. The selection of interviewees was mainly based on opportunistic sampling as a start. All respondents were leaders from Cybercom, with decision-making mandate to influence innovation management in the organisation. When the first interviews were conducted, a more snowball-sampling emerged where the authors asked the interviewees for suggestions on other potential managers to interview (Bell et al., 2019). The authors got in contact with the persons who had a genuine interest in and worked close to innovation management, which created more active and passionate discussions around the questions. The sampling of respondents was focused on employees in a decision-making role, referred to as a leader in this study. This study is delimited to explore effective innovation management practices by exploring leaders with a strong relation to managing innovation in their role. Hence, the majority of the respondents come from the Innovation Zone and the Business Advisory departments.

3.3.1.2 Conducting the interviews

The authors intended to conduct the interviews face-to-face at both the local site in Gothenburg but also travelling to other sites in Sweden. This is a commonly preferred approach since it increases personal engagement, as well as enhances the opportunity and possibility to get a more nuanced discussion and gain a deeper understanding (Bell et al., 2019). Due to the current situation at this time, the worldwide crisis of the Covid-19 pandemic resulted in quarantine for all Cybercom employees. The possibility of face-to-face interviews was precluded. The interviews were therefore conducted by virtual video streamed meetings in Microsoft Teams, which to some extent facilitated observations of the interviewees.

The interviewees were contacted by phone to schedule an appropriate date and time for the interview. The authors chose to use the phone rather than email for scheduling the interview, since it enabled short presentations of the authors and gave a picture of the authors as being committed and professional in their approach. After the call, a Microsoft Teams invitation was sent in Google calendar with the author's private accounts to assure and confirm the scheduled date and time. The interview guide (see Appendix 1) was attached in the invitation to give the interviewees reasonable time to familiarise themselves with the questions and thus enable more detailed answers.

Both authors performed the ten interviews jointly, to form the basis for the empirical findings. Bell et al. (2019) present advantages with multiple interviewers, partly the possibility of having a "passive" interviewer that can take extensive notes as well as intervene at any point if further explanation is required. Also, multiple interviewers can contribute to the interview becoming more of a discussion rather than an exchange, and so forth contribute to a more informal atmosphere. As the authors aimed to reach this atmosphere where more precise and informative answers could be gained, both were attending the interview. One of the authors was in charge of asking the questions and leading the interview, while the other was passive and took notes. The interviews took approximately one and a half-hour to two hours each and all of them were recorded by sound. As Yin (2018) states, an interview should only be recorded if the interviewee gives permission to do so, which was confirmed at the beginning of every interview. The interviews were taken in a quiet place, where no risk of interruption was possible as it was considered as a suitable place for an interview (Bell et al., 2019).

The ten interviews performed are summarised in Table 6 below. The categories are i) pseudonyms ii) Interview date iii) length. The first category has provided the respondents with pseudonyms to respect the respondents' request for anonymity. This because a single-case study performs this study, and respondents risked being identified. Hence, ensuring the respondents' anonymity, the authors target to study a case more similar to reality.
The three leadership-levels have been identified to contrast differences and similarities across the leadership-levels. The "Leader" is the leaders closest to operational activates with a responsibility of one or more employees. The "Middle Leader" is a leader responsible for one or more leaders. The "Top Leader" is responsible for one or more Middle Leaders and responsible for a department or a strategic initiative. Hence, the leaders will be followingly referred to their pseudonyms', based on the interview is performed and the leadership-level. The interviews were performed in the period 25th of March and 6th of April 2020. The interview length represents the time of when the formal interview started. All interviews were introduced with an introductory presentation of the authors, the study's design, the applied theoretical frameworks and concepts and definitions which are not represented in the "Interview length" in Table 6. Hence, the full interviews were between 1,5hr – 2hr but the interview lengths below represent the formal interview. All respondents provided the authors with permissions to record the interview.

Overview of interviews		
Pseudonyms	**Interview date**	**Lengths of interviews**
Leader 1	2020-03-25	59 min
Leader 2	2020-03-26	108 min
Leader 3	2020-03-31	65 min
Leader 4	2020-04-03	130 min
Leader 5	2020-04-03	70 min
Middle Leader 1	2020-03-26	66 min
Middle Leader 2	2020-03-26	78 min
Middle Leader 3	2020-04-02	42 min
Top Leader 1	2020-04-01	99 min
Top Leader 2	2020-04-06	72 min

Table 6 – Overview of interviews, designed by authors.

3.3.2 Secondary data collection

The secondary data collection was initially initiated to search for relevant information regarding the topic of innovation management. The search was done in the early phases of the study to form a broad perspective of the topic and supported the authors in developing the purpose and research question. The secondary data collection was mainly executed by searching on keywords on the web (e.g. innovation management in IT-consultancy firms, innovation management systems, managing innovation in IT-industry). The author's target was to familiarise themselves with the latest updates within the field of innovation management. The target was also to identify opportunities and challenges within the field, where literature started to be conducted on the subject, aimed to build a theoretical framework. The authors conducted an extensive literature review in phase two (Table 5) where they complemented out the current theoretical framework with literature relevant to what was identified during the field trip to San Francisco and Silicon Valley. The conduction of literature was done following how Bell et al. (2019) refers to a systematic approach. However, the approach was modified to some extent, where the authors performed a systematic approach in the way of going through relevant material published in specific databases. The authors complemented the theory for this study after the field study, also

after the interviews were conducted, it strengthens the choice of the chosen application of abductive research design. The databases used for conducting relevant theory were Business Source Premier, Google Scholar, and "Supersearch" from the Gothenburg University Library.

3.4 Data analysis

The semi-structured interviews conducted were fully transcribed in English shortly after the interview was held. Bell et al. (2019) states, this was a very time-consuming part of the thesis, but as they also expressed a key component. Therefore, lots of time was scheduled for the transcription part to assure it was as detailed as possible. When the transcription of all ten semi-structured interviews was done, the initial analysis of the data was conducted. This part is a very critical process of any qualitative research, where different methods of analysing the data will impact the level of quality, overall validity, reliability, and replicability (Bell et al., 2019). A common mistake is to end up in describing data instead of analysing data (Bell et al., 2019). The authors choose to follow restrictions on how to avoid this by applying a thematic analysis and coding method aa processing and analysing method.

3.4.1 Thematic analysis

The thematic analysis applied in this study was a process consisting of five steps. The initial step was the familiarisation of the data, which was done as presented above in 3.4. The second step was the initial coding-process, referred to as first-level coding (Bell et al., 2019), where the identification of interesting sections in the transcribed interviews was summarised into phrases and words. These phrases and words were helpful in the process of summarising the interviews. However, they did not result in any analytical activity. The first-level coding resulted in 599 codes. Further, during the third step, the authors used the 599 codes from the first-level coding and applied them to the second level of coding. Based on the 599 first-level codes' coherency and the relationship, the authors sorted them into 81 different concepts. The 81 concepts thereby include different amounts of codes which enabled a deeper understanding of the concepts generated (Bell et al., 2019). During the fourth step, the thematic analysis was beneficial to identify themes with the first level of coding and the second level of coding as a basis. The aim in this step was to identify themes which represented several concepts. The last and fifth step was initiated by reviewing and refining the themes, and lastly defining and naming them. Five themes were identified based on the 599 codes and 81 concepts in the earlier steps. The five themes are (1 Systematic way of working (2 Strategy (3 Leadership capabilities (4 Collaboration and communication (5 Common understanding.

The authors of this study have chosen to exclude the fourth theme: *Collaboration and communication*. This choice was made because the authors identified the fourth theme as outside this study's scope and available resources. The time limit of this study was suitable for focusing on four themes, excluding the *Collaboration and communication*-theme. However, since this theme is derived from the thematic analysis, it constitutes an exciting topic for further research.

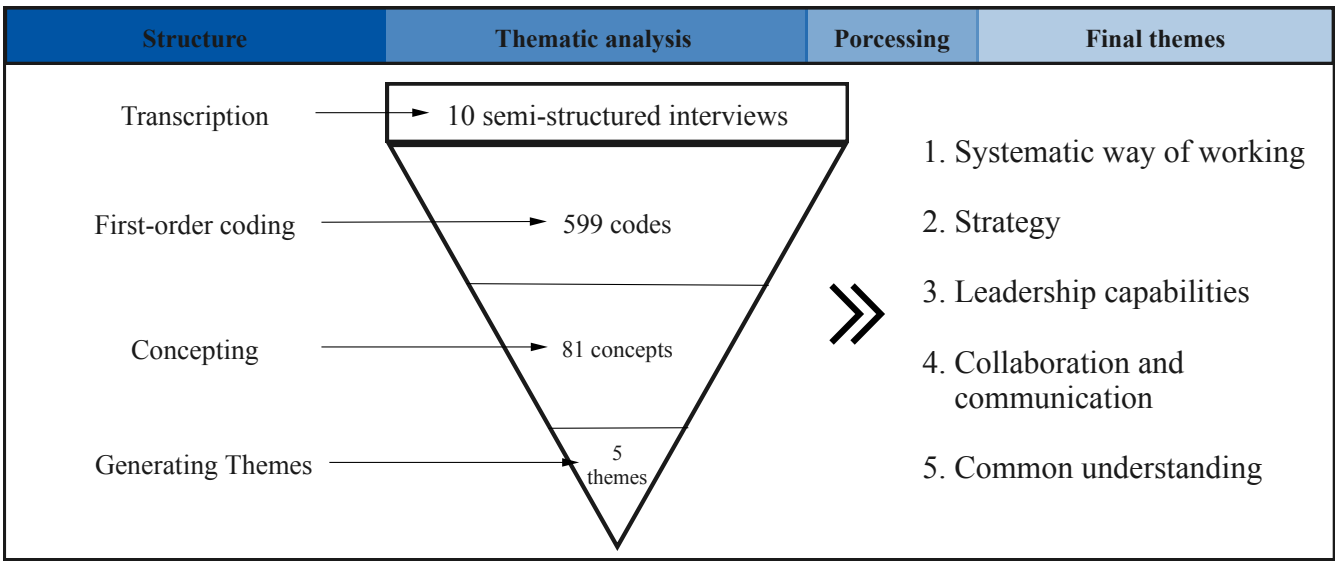

Figure 4 – The thematic analysis-process, designed by authors

3.5 Research quality

Internal validity is, according to Bell et al. (2019), whether or not there is a good match between researchers' observations and theoretical ideas. The internal validity will be confirmed by respondent validation. This will be done by sending the finished case study to Cybercom. Hence, Cybercom will have the possibility to comment on the paper and ensure accuracy.

Internal reliability is, according to Bell et al. (2019), whether or not the members of the research community agree about what they see and hear during the work. This was ensured by both of the authors attending the interviews. Further on, the interviews were transcribed by one of this study's authors, who also wrote the transcription draft of that specific interview. In order to assure a shared perspective, the reviewing of the draft was done in collaboration between the authors. By doing so, it allowed the authors to listen to the interviews several times, which was beneficial while differences in opinions emerged.

External validity is, according to Bell et al. (2019), the degree of which the research's findings can be generalised across social settings. This was difficult to ensure since qualitative researches commonly tend to employ case studies and small sample groups.
External reliability refers to the degree the study can be replicated (Bell et al., 2019). It was challenging to assure external validity because this study is qualitative. LeCompte & Goetz (1982, p. 395) states; *"It is impossible to "freeze" a* social setting and the circumstances of an initial study to make it replicable in the sense *which the term is usually employed*". Reliability appears the case since if the same study were performed in a different company, it would be different. However, with the theoretical framework, the authors will cover both organisational elements inside this specific organisation and external factors according to the theory, which will generate a solid base of general organisational elements transforming innovation management.

4. Empirical findings

This chapter will present the empirical findings from the ten interviewed leaders in Cybercom. The chapter is divided into five sections. These sections represent the themes derived from the thematic analysis. Hence, the four themes will be presented as headings. Furthermore, each theme includes several sub-headings that are derived from the empirical findings in relation to each theme.

4.1 Systematic way of working

4.1.2 Innovation management system

All ten leaders stated how Cybercom's' innovation capabilities and innovation results would benefit from a more centralised innovation management system. Half of the leaders initiated their interviews by discussing how Cybercom does not have an innovation management system today.

The leaders intended this due to Cybercom's legacy and nature of being an IT consultancy firm. Top Leader 3 indicated the lack of an innovation management system by arguing that Cybercom was initially selling knowledge and stated that they are currently only solving problems at the request of the customer. Top Leader 1 similarly expressed with Top Leader 3 how Cybercom is instead assisting in the innovation processes of their customers and therefore, the focus may lie in the customer's potential innovation management system rather than their own. Correspondingly was Mid Leader 2 arguing about an existing framework that could be seen as an innovation management system but was still to narrow and not yet structured, where the expressed direction was more towards opportunity identification but lacked in the focus of the leadership segment. Concerning the above, Top Leader 1 stated that innovation in Cybercom feels too ad-hoc today.

Further on, the majority of the leaders expressed a positive attitude towards a more systematic innovation management system as part of a more holistic and transparent innovation management tool. The same leaders further stated how there is a need for a common approach where one can show the current position and where the organisation wants to be long-term. They also claimed how this would enable the generation of milestones, which clarifies a common strategy and foster a more concerted organisation (Top Leader 1, Leader 1, Leader 3, Leader 4, Middle Leader 2).

Top Leader 1 further mentioned that one of the goals for Cybercom is to increase the systematics in innovation management across the group with a global structure and that a conventional innovation management system, innovation capabilities, innovation results and a framework like innovation excellence, are ways of enabling this structure.

> *"It is of great importance how the organisation has a common approach, common follow-ups and common goals which is adjusted to the local sites, so each individual can understand the overall structure and be able to see the progress around it."* – Top Leader 1

Despite the lack of a standard innovation management system, the majority of the leaders expressed that the implementation of it would be beneficial for the whole organisation in becoming more innovative. The majority also were consistent regarding how a centralised and common innovation management system, covering all Cybercom sites, would increase Cybercom's value offering. A common statement from Top Leader 1, Top Leader 2, and Middle Leader 3 was regarding how it would enable a more beneficial and effective way of working together with customers as a crucial part in increasing their value offering. Leader 6 supported this further by arguing how Cybercom sometimes is controlled even by the customer's customer and therefore would the iterative nature of a more systemised innovation management system ensure that correct values are targeted for the specific customer.

> *"A more systematic way of working with innovation would result in common definitions and procedures which all employees and customers would benefit from."* – Leader 4

Middle Leader 1 further expressed how Cybercom´s focus on generating internal Proof of Concepts is a bottleneck as they often are not realised into the market. Middle Leader 1 related this to how Cybercom as a technology firm is more skilled at the left side of ISO 56002 standard (2019) innovation management system than the right side (Appendix 4), which indicates more focus on technological development. Hence, Middle Leader 1 expressed how Cybercom's technological perspective on problems results in proof of concepts as the solution. In order to successfully commercialise innovation into the market, Middle Leader 2 expressed a need for Cybercom to implement a go-to market-strategy, an increased business-oriented view and a more systematic approach to innovation management since it would be beneficial for all leaders in the organisation.

4.1.3 Systematized process of measure and evaluate innovation performance

The majority of the leaders claimed that one of the crucial things the organisation lack is a systematic process for measuring and evaluating innovation capabilities and innovation results together. They further expressed how systematic measurements of innovation performance are not executed, and thereby the possibility of evaluating and improve themselves is not possible. Middle Leader 3 strengthened this by arguing how the organisation lack the possibility and ability to evaluating and following up on their innovation process, and how this hinders and sometimes eliminates the possibility of knowledge transfer between customers and Cybercom.

Top Leader 1 acknowledged further how Cybercom's organisational culture to foster innovation today but need a systematic approach in order to achieve a higher and more rewarding culture, as a systematic way of working was expressed to foster collaborations and a common mindset. In the same manner, Middle Leader 3 mentioned how a more systematic approach would be beneficial

for the organisation since the organisation do not follow up on the current innovation progress today.

> *"...we are bad at systematising our innovation processes, evaluating and following up on our innovation progress."* – Middle Leader 3

Throughout the interviews, the majority of the leaders expressed uncertainty regarding the current existence of key performance indicators on innovation performance in Cybercom. They were also aligned in their expressed confusion regarding how implementing key performance indicators for innovation performance could potentially help the organisation to be able to evaluate the outcome of increased and systematic innovation management. Mid-Leader 2 expressed that implementing key performance indicators for innovation performance would at least enable the organisation to make decisions based on data and thereby be able to develop from there.

4.1.4 Industry challenges

Several leaders at all levels, especially at the top leadership level, expressed how the organisation may face potential challenges in transforming to more systematic innovation management. Leader 3 stated a potential difficulty in combining the standard consulting offering, where one gets paid per hour with a new and emerging business model focused on designing and selling services.

> *"I see a difficulty in the transformation to start designing and selling services as a business model, as it would require different leadership capabilities, structures, processes, culture, and more. More similar to the start-up culture and its processes and tools."* – Leader 3

Further, Leader 4 expressed how the IT-consulting industry and Cybercom are in a paradigm shift from offering resources to start designing individual projects for customers. Leader 4 continued on the same path as Leader 4 and expressed how this is two different business models, but how there necessarily not is an excessive transition between them, which many may expect. Leader 4 further expressed, in the same manner as Leader 2 and Middle Leader 2, how this transformation of moving from resource-based consulting towards asset-based consulting is what management of Cybercom refers to as "scale beyond people". Additionally, half of the leaders mentioned how the implementation of an organisational innovation management system in Cybercom could be a potential enabler for managing this transformation towards designing their products, services and projects. Following above mentioned, Leader 4 showed a positive attitude towards the fact of Cybercom not having a systematic approach, as it facilitates an excellent opportunity for Cybercom to improve themselves and further develop as an organisation.

Moreover, Top Leader 2 expressed confusion about how Cybercom's value offering and business model would be utilised with existing resources if the organisation transformed to asset-based

consulting or scale beyond people took place in their strategy. For the potential transformation to be managed well, all the leaders expressed the need for a more systematic approach of innovation management, consisting of more precise goals, models and evaluation tools.

> *"I believe we can go from charging clients per hour to generate revenues from other sources, there are examples today, but our innovation management can be even clearer and managed more systematically."* – Top Leader 2

4.2 Strategy

4.2.1 Innovation vision

All the leaders agreed about the organisation's need for more strategic guidance to enhance innovation. The majority of the leaders expressed confusion regarding an existing innovation vision. However, Top Leader 1 was the only one mentioning that there is an existing innovation vision for the organisation. The majority of the leaders were aligned in their responses that the focus on innovation in Cybercom as an organisation does exist but is not part of the strategy.

> *"After all, we are successful in contributing innovation to our customers, in their innovation processes, but I do not feel that we have a vision for our innovation work.*"
> – Top Leader 2

Correspondingly, leader 3 claimed that a known and established innovation vision would facilitate the integration of innovation in the daily business and define Innovation Zone's role in the organisation. Top Leader 2 mentioned the need for an innovation vision regarding a long-term need-based approach, instead of the current short-term monetary approach, this in order to stay competitive tomorrow. Further, Middle Leader 2 discussed how top management must develop a shared innovation vision, which is based on the market need and a long-term perspective. All the respondents agreed that the implementation of a more strategic framework based on innovation capabilities and innovation results would benefit the organisation in the form of generating a more shared view on innovation.

4.2.2 Innovation strategy

All the leaders expressed the unclearness and lack of an overall innovation strategy for the organisation as one of the obstacles for successful innovation. Leader 3 even mentioned how Cybercom do not have a clear and common innovation strategy. More than half of the leaders expressed how they knew about an innovation strategy specifically for the Innovation Zone. However, some of the leaders expressed uncertainty regarding how much this strategy focus on innovation. Leader 5 further mentioned;

"I believe the strategy in the Innovation Zone today more is towards building knowledge among our employees, not striving for innovation." – Leader 3

Further, Top Leader 1 claimed how the innovation strategy needs to include more innovation activities to be an innovation strategy. Concerning this, a common challenge expressed throughout the interviews was the disconnection between Innovation Zone and the organisation, all leaders expressed how Innovation Zone, in some form, constitutes a hinder for implementing a common innovation strategy throughout the organisation. All leaders agreed on how this hinders the establishment of a shared innovation strategy and makes it difficult to see if there is a common innovation strategy throughout the organisation.

4.2.3 Innovation strategy's value in business strategy

Four of the leaders mention how the IT-consulting industry is heading towards a paradigm shift from resource-based consulting to asset-based consulting. Where the internal generation of innovation requires a business perspective among other approaches different from today, e.g. a more customer-centric approach, established innovation management system. Leader 4 claimed that a new efficiency focus is required to enable this transformation, where integration between technology development and business need to be closer. Further, Middle Leader 2 corresponded and expressed in terms of the innovation strategy that management needs to enable employees to connect the dots to enhance innovation. Correspondingly, all leaders agreed that the Innovation Zone needs to be more integrated into the daily business and not be standing on its own.

"Cybercom is not including the business perspective in their work with innovation as much as we should" – Top Leader 1

In line with the above mentioned, Top leader 1 stated how this could be done by integrating the innovation strategy into the business strategy. Then a common perspective can be obtained.

4.2.4 Key performance indicators

All the leaders said that they had existing key performance indicators (KPIs) for their specific department. Top Leader 3 and 10 also said that they had individual KPIs as leaders. However, the majority of the leaders expressed that they are not familiar with any KPIs for short-term or long-term innovation performance.

"I am not aware of any KPIs for innovation that we have. I know some of the IZ-leaders [leaders in the Innovation Zone department] have some, but around the business, we do not have any, or I am not aware of any." – Middle Leader 2

Further, all the leaders expressed a need for more KPIs as part of the needed innovation strategy. Top Leader 2 mentioned how a clear innovation strategy requires clear goals, and how Cybercom need clear KPIs to target to be able to ensure an inflow of ideas, and how to validate, prioritize, and act upon selected ideas.

> *"I do believe we should have more and better KPIs. When we have the visibility, we can see that we are doing something valuable, and we can make better decisions on where to allocate resources and define problems to start an iterative process. Then it is possible to build further on that and at least make some decision based on the data."* – Middle Leader 1

The majority of the leaders phrased how top management's decision making in designing common KPIs for Innovation Zone and Business Advisory is a crucial factor for integrating innovation in larger extend into the overall business strategy. Middle Leader 2 emphasized that there should be global innovation KPIs that should be well understood all over the organization. In relation, leader 2 claimed that global innovation KPIs should guide the local KPIs in becoming more aligned and focused on the global innovation strategy. All leaders mentioned that it would be beneficial to have shared KPIs as it would give the organization shared targets to work towards. However, Leader 4 also added the risk of having insufficient KPIs, where KPIs does not only produce positive effects, measuring the wrong things can give the opposite effect, as of measuring behaviours of employees could create irritation (Leader 4). Half of the leaders expressed the same attitude towards KPIs and claimed that there needs to be a balance between the number of KPIs and the quality of them, where Top Leader 1 expressed how it is not about having many KPIs, it is about having the right ones.

4.2.5 Customer-centric approach

A common approach discussed throughout the interviewees were that Cybercom needs a more customer-centric approach in managing innovation. Middle Leader 1 described Customer-centricity as an enabler where innovation happens, and how customer-centricity is a depending action for Cybercom's income and revenue stream. Top Leader 1 stated that customer-centricity is vital for successful innovation and to generate successful innovation and Cybercom has to focus on value creation instead of short-term satisfaction. The majority of the leaders mentioned the challenge of Cybercom being an IT-consulting company where employees tend to see everything as a "tech problem". Middle Leader 2 expressed that due to this view, employees have a hard time focusing on long-term value creation and instead focus on short-term satisfaction, e.g. creating proof of concept.

Furthermore, Middle Leader 1 mentioned the need to balance the perspective of short-term satisfaction and the long-term value creation to gain successful innovation. Top Leader 2 expressed that one could not only do as the customer says, if doing so, but only short-term satisfaction will

also be in focus. Instead, in agreement with the majority of the leaders, Top Leader 2 stated how customers could have unrealistic visions or short-term requirements. For Cybercom to continue their development as a company, the employees need to trust current strategies and use creative resources and to some extent let the customer be a participant in the work instead of the opposite (Top Leader 2). Middle Leader 2 said that even though value should be identified with the customer, it is essential to balance that with the company's own beliefs.

> *"You need to know your customer, their needs and the industry when you combine that with your knowledge and experiences from Cybercom than you can create innovation."*
> – Middle Leader 2

Top Leader 1 expressed the importance of continuously validating the innovation process with the customer. In accordance, Leader 1 mentioned that there had been cases where inventions have been generated without a validated need from customers. Hence, the invention was not realized to innovation because the customer did not perceive any value from it. Top leader 2 expressed the importance of continuously assure value creation.

> *"Why should we waste time on something that does not generate any value?"*
> – Top Leader 2

All leaders agreed that customers need to be involved earlier in the innovation process to enhance the development of Cybercom's innovation capabilities and gain higher innovation results. Leader 2 mentioned that the value should be the very first thing to identify and how this could be managed only by working close to the customer. Further, leader 1 claimed that including the customer earlier in the process and keeping them close during the process will ensure the value creation and be financially sustainable for both parties. All the leaders expressed that increased customer-centricity would enhance the organization's innovation capability and lead to higher innovation process results.

4.3 Leadership capabilities

4.3.1 Leadership's commitment to innovation

All leaders, except Leader 1 and Leader 5, expressed how they experience innovation not being Cybercom's focus. Hence, Leader 1 stated how leadership for innovation is advancing together with the organisational culture and implies how the CEO strives and drives innovation in processes daily, at the same time as establishing processes and structures has to set in order to advance leadership capabilities for driving innovation. However, Leader 1 continued and expressed the lack of clear guidelines for innovation management are the reason for why innovation is not receiving more focus into an organisation today, and how these guidelines have to be provided by the top management. Correspondingly, Leader 5 expressed how leadership for innovation in Cybercom

are four out of five because of the organisations' clear will and ambition together with its leaderships openness to changes together with the willingness of controlling innovation commonly.

> *"There is clear support from the CEO, which drives innovation. Though, we must work on processes and structures managing innovation… There are no clear guidelines, hence focus on innovation in the organisation is very low. Guidelines must come from top management."* – Leader 1

Middle Leader 1 discussed how leaders in different departments possess different levels of commitment to innovation. For instance, Middle Leader 1 concludes how leaders in the department "Innovation Zone" have suitable leadership capabilities for innovation, but how the overall leadership in the organisation does not focus on innovation. Likewise, Top Leader 2 raised the department "Innovation Zone" and stated it as innovation activates inside the organisation is limited to this department. Consequently, it is the overall leader's focus and priority for innovation absent.

> *"I find leadership for innovation within our organisation for innovation as bad. I do not feel that our internal innovation work is a priority. Today, innovation is either about Innovation Zone or helping the customer with innovation."* – Top Leader 2

Leader 4 continued to confirm leaderships' lack of commitment to innovation by describing how there is a difficulty in requiring leaders to deliver results daily, and at the same time demand leaders to design and build innovative businesses of tomorrow. To overcome this challenge, Leader 4 suggested how leaders' responsibilities can be divided into four groups, based on the Zone to win model, which enables some leaders to be responsible for different levels of innovation with different time perspectives.

4.3.2 Leadership's strengths and weaknesses

According to Leader 3, Cybercom's leadership does not have a high level of maturity in understanding innovation, something which is expressed by the majority of leaders in the IT-consultancy industry. Hence, Cybercom is part of the IT-consultancy industry, and it can be a potential explanation for why the organisation does not have a higher level of maturity in understanding innovation. However, Top Leader 1 emphasises that Cybercom is in a transformation from consultancy-based performance to designing and offer innovation, and how leaders will drive this transformation as the organisation has increased its resources allocated for the vision to transform.

"It is good that the top management is positive towards learning and have a long-term perspective. They see the benefits of doing this transformation. They do not have a straightforward strategy of doing it, but they are willing to go there." – Leader 3

Middle Leader 2 expressed how Cybercoms' leadership does not have any strengths within innovation, this because it focuses on efficiency and occupancy. Moreover, Middle Leader 2 also expressed how the organisational leadership capability for innovation is low on average. Leader 3 concurred and expressed how an innovation cycle requires different types of leadership styles, and this is something which has to be considered in enhancing leadership capabilities for increased innovation performance.

" I do not think we have it as a mind-set; we remain in the practical mind-set and separate innovation from it. We need to include innovation into our mind-set. However, we do not have the communication or the tools to realise it." – Leader 2

Middle Leader 3 was of a different opinion. The existing leadership capabilities are strong in managing workshops with customers and generating lots of new ideas. The challenges lie in realising these ideas into successful innovation. Several leaders concluded in how Cybercom's leadership is good at generating new ideas. Nevertheless, there exist challenges in how these new ideas are communicated throughout the organisation, especially to the top management. Middle Leader 1 expresses how leadership capabilities can be improved by increasing communication skills, internal sales skills and pitching skills in order to increase the probability for successful innovation. Middle Leader 1 continued to describe how leadership skills in selling new ideas internally and get people behind the idea are essential for successful innovation. Continuously, Middle Leader 1 stressed how the leadership capabilities of understanding people could be more important than business skills in this context. For example, Leader 2 expressed accordingly how learning about storytelling, how to create an entrepreneurial environment, Lean startup methodology and how to coach and how to follow up, would strengthen the individual leadership capabilities, are capabilities Leader 2 wished to improve. Likewise, Leader 3 stated how all leaders who drive innovation in the organisation need to be able to explain and pitch ideas to their manager, this in order to increase the probability for ideas to reach top management. Leader 5 instead focused on how Cybercom's leadership have to work hard, increase understanding and openness in order to achieve successful innovation. In comparison, Middle Leader 3 expressed how leadership capabilities have to be strengthened in order to mature in transform from an "operational spinning-loop" to managing an innovation management system.

"This transformation is something all organisational members has to contribute to in order for the organisation to succeed. – Middle Leader 2

4.3.3 Innovation management system

Middle Leader 1 stated how Cybercom does not commit to a structured or extensive innovation management system today. Middle Leader 1 studied the innovation management system (Appendix 5) and underlined how the lack of leadership is a challenge. Leader 4 and Middle Leader 9 continued to agree upon how one conventional innovation management system does not exist. Both Leaders expressed how different offices work in silos. The offices apply the local, instead of organisational perspective, and focusing on occupancy levels and operational activities instead of managing one central innovation management system. Leader 2 expressed how Cybercom has not identified suitable KPIs nor developed the appropriate leadership hitherto for implementing an innovation management system and work with it efficiently. For instance, the perspective on innovation differs a lot between different offices and departments. Also, working iteratively and validating development of new ideas is most common in the department Innovation Zone. Leader 2 further emphasised how Cybercom's current transformation from resource-based consulting to asset-based consulting will require other types of leadership, structures, processes etcetera in order to facilitate innovation accordingly. Besides, Leader 2 stated how Cybercom need to embrace a start-up culture, with its processes and tools in managing this transformation.

> *"To successfully go further with new ideas, it is important to have a structure for how to validate and follow up such ideas."* – Leader 2

The majority of the leaders emphasised on implementation of a central innovation management system is not on the leadership agenda. However, the majority of the leaders were consistent in how implementing a central innovation management system would strengthen leadership capabilities and hence the organisations' innovation performance.

> *"We need to have a better system to follow up on these [innovation results]. Every leader is responsible for following them up, but this leads to different result due to different levels of knowledge [managing innovation]."* – Top Leader 1

Leader 1 further stressed the lack of a complete innovation management system. Some parts as Innovation funnel, Stage gate, Leadership, Plan-Do-Check-Act cycle exists in some degree in projects, although this is limited to Innovation Zone. Moreover, Leader 1 continued to describe how an iterative process similar to the Plan-Do-Check-Act cycle exists in projects, but no systematic approach to innovation. Consequently, Leader 1 stresses how the organisation must work more efficiently with customers in order to establish innovative activities and bring new customers much earlier into an innovation process.

> *"With a better [Innovation] strategy and understanding [of innovation management Systems], we will achieve so much more. The competence level in the different Innovation Zones is very different. It is like a shoemaker without shoes."* – Leader 3

4.4 Common understanding

4.4.1 Common understanding of innovation

The definition of innovation was discussed and elaborated with the leaders, and it was clear that the understanding of innovation is widely spread throughout the organisation. However, regardless of level, all Leaders were consistent in expressing the importance of increasing the maturity level of innovation in the organisation to assure a common understanding. Leader 3 revealed that the creation of a shared understanding should constitute the first step to enhance the organisation's innovation capability. Accordingly, was Top Leader 1 arguing, who mentioned that a standard view and knowledge of innovation throughout the organisation would increase the organisation's innovation capabilities. Furthermore, Top Leader 1 was also arguing that a common understanding of innovation also would enable Cybercom to become more intertwined, which in turn would foster innovation in the daily business.

> *"If we do not have leaders that understand what innovation is about, people being led will not understand either. The first step towards an organisational understanding of innovation should be first to ensure that our leaders share the same understanding; only then we can increase our innovation capabilities."* – Leader 5

Middle Leader 3 explained in the same way but added that the confusion regarding the meaning of innovation might also be due to employees, even leaders, do not have innovation as a mind-set. Middle Leader 3 further described that many of the individuals within Cybercom might still be in the execution mind-set and tend to separate innovation from it.

4.4.2 The fundamental difference between invention and innovation

One challenge expressed by all leaders was the difficulty of separating the meaning of invention and what constitutes an innovation. They were all aligned in their arguments regarding that this challenge appears in most of the projects managed for clients. Correspondingly, Middle Leader 2 expressed that this problem of not having a shared view of innovation needs to be solved since innovation constitutes a large part of Cybercom's vision and has to be embraced by the organisation in order to stay competitive. Leader 3 further expressed how the confusion between invention and innovation is extra tangible during onboarding processes, where an introduction regarding the difference between innovation and invention is usually necessary. Corresponding to Leader 3 was Top Leader 1 and several other leaders arguing whom they believed that individuals with technical education or technical experiences tend to have more difficulties in understanding the differences between the two terms. However, Top Leader 1 further made clear that it is not only individuals with a technical background that find the definitions hard to separate and indicated how it is a common difficulty throughout the organisation.

Furthermore, the problem of separating these definitions was commonly expressed as more eminent in the innovation Zone department, as this area is referred to as the place where the leaders should develop innovation. In accordance, Middle Leader 2 described how the work in the Innovation Zone is the rather technical development of several proofs of concepts and should not be called innovation. The majority of the leaders expressed that innovation is instead a buzz word which indicates the name of Innovation Zone. However, all of the leaders mentioned, after being introduced to the definition of successful innovation, how technical development might be what is focused on, rather than focusing on the innovation process as a whole. Furthermore, Leader 3 gave another perspective of the confusion regarding the existence of innovation in Innovation Zone where Leader 3 expressed how the role of Innovation Zone is education, to build competence, and how its current state is not about building innovation. Leader 3 statement regarding Innovation Zone's role as being an area of education was aligned with several of the leaders, where Top Leader 1 stated that knowledge building is a large part of the purpose of Innovation Zone, which enables consultants between projects to educate further and develop themselves.

However, regarding the existence of innovation within the Innovation Zone, several of the leaders where consistently discussing the proof of concept (PoC) in connection to innovation, which Top Leader 2 expressed confuses the nature of the term. Further, Leader 3 mentioned how this might be because of the general excitement and satisfaction in technical circles for developing PoCs. Corresponding to Leader 3 was Middle Leader 1 stated how the high focus on PoCs in technical circles, and the excitements and satisfaction for it, generate a perspective were employees and leaders believe that innovation is the same thing as designing PoCs. Top Leader 1 conceded and expressed that employees and leaders tend to see innovation as something a PoC can solve. Leader 4 stated that PoCs constitutes a large portion of their revenue, although, it should not be confused with innovation since it is usually only technical development. What was commonly expressed by the leaders was how a common understanding needs to be established for the evolution of the Innovation Zone department. They were all aligned in their arguments that the understanding of the difference between invention and innovation have to be known on an organisational level as well.

4.4.3 Focusing on value creation

All the leaders were consistent in their answers regarding Cybercom's focus on occupancy, and how this results in leaders and employees having a primary focus of being problem solvers on behalf of the clients. Middle Leader 2 expressed how these are the actions of the old traditional IT consulting approach, where innovation is seen from a technological perspective. Several of the leaders described how the focus on actual value creation for the customers sometimes is forgotten due to the high focus on the technology part. An example, which was mentioned several times, was how a project starts with a customer need and a clear picture of what value a solution for this would yield. However, as the process goes, the leaders (Leader 4, Leader 1, Leader 2) expressed

how the focus on the value slowly goes away and are being replaced by them only focusing on the development of technology, e.g. proof of concept. They described how this contributes to projects not being optimally delivered as the value is missed out. The technology itself is usually of very high quality but as Leader 4 mentioned is it not directed towards long-term value creation, but rather a short-term solution.

Additionally, the majority of the leaders, regardless of their place in the hierarchy, stated how the organization has to work more with identifying, understanding, and delivering value for the customer. According to Top Leader 2, is it a waste of time, for all included in the process, if the projects they deliver does not generate any value for whom it concerns.

> *"...no innovation can be perceived valuable unless it is perceived as valuable by the customer."* – Middle Leader 3

Why innovation is not prioritized among Cybercom's local sites is expressed by Top Leader 2 because of the low level of understanding regarding what value innovation brings and how to obtain such value. The majority of the leaders were consistent in their expressions regarding the requirements of a broader business understanding in order to understand the importance of long-term value creation. Several leaders described how this could be managed by increasing closer collaborations between the Business Advisory department and the Innovation Zones', as this was expressed to enable knowledge sharing and increase the business perspective potentially. Furthermore, Middle Leader 1 gave another perspective and expressed how the bottleneck might be the lack of business understanding among leaders on the local sites. Middle Leader 1 continued and mentioned how increased business understanding at the leader level, as well as more frequent communication regarding value creation to their teams could enhance common understanding. In correspondence with several other leaders, Middle Leader 2 expressed how the creation of value should be the first thing to ensure while entering a project with a customer. Top Leader 1 indicated by arguing how Cybercom has to become better in identifying value much earlier in the processes with customers.

> *"If innovation is understood, the long-term focus will be allowed and not only the strive for short-term money. Then we understand that innovation has to cost a little to be able to generate value in the future."* – Leader 4

In the same way Leader 5 and Top Leader 1 stated that only the generation of a common understanding of innovation is a step towards being future competitive in the IT- consulting industry. The majority of the leaders expressed themselves in the same way and expressed how an implementation of a common innovation management system or Innovation Excellence concept depends on the understanding of innovation. If the employees and the leaders do not understand innovation, these concepts and tools will instead cause confusion and inefficiency.

4.3 Summary of empirical findings

This section presents a summary of key empirical findings (Table 7). The right side of Table 7 presents the four themes identified and developed in the thematic analysis 3.4.1. The left side of Table 7 presents key empirical findings related to the themes

Summary of empirical findings	
Themes:	Findings:
Systematic way of working	• Lack of a systematic way of working with innovation. • In need of systematic processes to work with innovation. • All leaders claimed that innovation management system can enable systematic. • More systematics can increase innovation capabilities and improve innovation results. • Systematic follow-ups, design, evaluation, iteratively improvement loops. • More systematic in interactions with customers is required.
Strategy	• The organisation needs to become aligned in their innovation management on organisational level. • Expressed need for one common innovation- vision and strategy. • Establish common objectives by accurate KPIs, across departments, offices and throughout the organisation. • Increase the strategic focus on customer-centricity. • Increase focus on measuring, evaluating and improvement throughout the innovation process.
Leadership capabilities	• Increase business competence and combine it with competence in technology. • Focus on long-term value creation. • Apply and manage different leadership styles. • Foster innovation culture. • Enable collaborations and thus synergy effects.
Common understanding	• Develop a common understanding of innovation throughout the organisation. • Increase the organisations maturity level to innovation. • Increase the understanding of how to transform to asset-based consulting, thus focus on long-term value creation. • Common understanding of collaborations, “connecting the dots”, and synergy effects.

Table 7 – Summary of empirical findings, designed by authors.

5. Analysis

In the following chapter, the empirical findings will be analysed concerning the theoretical framework. The conceptual model of the theoretical framework is related to the four themes in the empirical findings, resulting in the analysis model below. The analysis model will enable a holistic view of the analysis. The concepts from the theoretical framework are the main headings, and the four themes from the empirical findings are sub-headings to each concept of the theoretical framework.

5.1 Analysis model

The analysis model summaries the connections made by this study's authors between the empirical findings and the theoretical framework. The connections are based on the empirical findings from the respondents, compared with the concepts from the theoretical framework. The connections will be defined as *Strong, Medium* and *Weak.* This will give indications of the level of unity amongst the three leadership-levels when identifying connections between the empirical findings and the theoretical framework, hence form the basis of the analysis.

- The connection is ***Strong*** if all three leadership-levels (*Leader, Middle Leader and Top Leader)* are united in the empirical findings, compared to the theoretical framework.

- The connection is ***Medium*** if two leadership-levels are united in the empirical findings, compared to the theoretical framework.

- The connection is ***Weak*** if none of the leadership-levels is united in the empirical findings, compared to the theoretical framework.

Strengths of each connection in the analysis model below will provide the reader with a holistic perspective of the analysis, and simultaneously an indication of the identified connections strengths under each heading. This because the analysis will be structured following the structure of the analysis model. The structure of the analysis model is designed to build on the Conceptual model (Figure 3), which will all be analysed from the four themes derived from the thematic analysis (Figure 4), which resulted in the empirical findings.

An example, the connection between the theme *"Systematic way of working"* and framework "*Innovation management systems"* are ***"Strong"***. This demonstrates that all three leadership-levels are united in expressing a connection between *"Systematic way of working" and* "*Innovation management systems"*. The connection only demonstrates the level of unity amongst the leadership-levels. The unity does not state if the leaders have expressed a connection made between the theoretical framework and empirical findings as relevant or irrelevant. The strength of the connection is based on the leaderships-levels unitedness in the specific box (see boxes in

the analysis model below) between the themes and the theoretical framework, hence each box is represented by one primary connection. Also, the analysis model is constructed to simplify and fortify the relevance of the analysis, provide the reader with a holistic overview and enable an analysis focused to analyse the findings from the empirical findings concerning the theoretical framework.

The three levels of unity (*Strong, Medium* and *Weak)* gives both the analysis and the reader an indication of how the analysis can be structured. A *Weak* unity can indicate that the organisation requires structure derived from the theoretical framework or that the organisations leaders have not to vision effective innovation management practices following the concepts from the theoretical framework. A *Strong* connection can instead indicate that innovation management practices have been identified and not realised due to challenges or irrelevance.

The analysis model below has the empirical findings, categorised into the four themes in the horizontal heading. The theoretical framework is presented in the vertical heading, categorised into two frameworks and two concepts.

		Emprical findings			
		Systematic way of working	**Strategy**	**Leadership capabilities**	**Common understanding**
Theoretical framework	**Innovation management systems**	***Strong***	***Strong***	***Strong***	***Strong***
	Innovation excellence	***Medium***	***Medium***	***Strong***	***Weak***
	Customer centricity	***Strong***	***Strong***	***Strong***	***Strong***

Table 8 – Analysis model, designed by authors.

See Appendix 3 for the analysis model's working-version.

5.2 Innovation management systems

5.2.1 Systematic way of working

To increase an organisations' innovation management performance, innovation management should implement an innovation management system. This because a standardised innovation management system will support innovation management to function more systematically and

effectively (Karlsson & Magnusson, 2019; Mir et al., 2016). In comparison with theory, all leadership-levels expressed a real need for more systemised innovation management practices. However, leaders represented at all Leaders-levels expressed uncertainty if the organisation have implemented an innovation management system or not. The leaders who could determine specific segments of an existing innovation management system were the leaders from the Leadership-level in the Innovation Zone department and one Top Leader. Therefore, innovation management is not fully established, nor systemised across all leadership levels or leaders. The Middle Leaders unawareness of the existing segments of the innovation management system indicates that the existing innovation management practices can become more efficient by establishing a full innovation management system. Hence, all leadership-levels will have to increase awareness of managing this system effectively, and simultaneously acknowledge this systemised process as a common way of working.

The Innovation Zone department is identified by all leadership-levels to work with segments from an innovation management system. The Leader-level and Middle Leader-level expressed the way of working in Innovation Zone departments as working in silos. The Top Leader-level, however, emphasised that the Innovation Zone department has short weekly meetings where each Innovation Zone department presents its agenda, and longer meetings each quarter. Top management is responsible for establishing commitment, respect and responsibilities in an innovation management system ISO 56002 standard (2019). Therefore, if the organisation currently applies an innovation management system this would indicate that the Top Leader-level has not succeeded to establish commitment, respect or responsibilities for a standardised innovation management system. This could also imply that each department experiences challenges to practising an extensive innovation management system, which can hinder to establish a systematic way of working, according to the ISO 56002 standard (2019). This further implies that the implementation of an innovation management system has to be standardised and directed from the Top Leader-level to increase the systematic way of working throughout the organisation.

The organisations legacy of being an IT-consultancy firm can have implications on the organisation's systematic way of working. Leaders represented in all leadership-levels expressed that the way of working in the IT-consultancy industry is to sell knowledge and support customers in their innovation processes. This, instead of managing the organisations' innovation management practice. For instance, Leader 2 expressed that the existing parts of the innovation management system as narrow and unstructured. Hence, this indicates that the organisation's priority has not been in facilitating the organisation's management system.
Conversely, the focus implies to have been on supporting customers with innovative solutions and how to manage innovation in their organisations. The standardised system for innovation management can hence be advantageous to reduce barriers of an unclear internal innovation strategy, leadership focus and capabilities and other inefficiencies related to innovation management (ISO 56002 standard., 2019). Also, the literature and empirical findings indicated

that implementing a standardised innovation management system can exploit the existing competencies of supporting customers innovation processes and leverage these competencies into an internal systematic way of working.

The current transformation from resource-based consulting to asset-based consulting can be one crucial factor to clarify why the leaders expressed a need for a more systematic way of working. The leadership has expressed a need for a more systematic way of working can be partially clarified with the IT-consultancy industries transformation from resource-based consulting to asset-based consulting. This because the ongoing transformation will require new ways of working. Developing internal assets, instead of providing customers with resources, will require leaders to approach a more systematic way of working. To embrace the ongoing transformation, the literature implies that investing in this transformation can be crucial for survival, and to sustain and strengthen the market position (Christensen, 2013).

Furthermore, literature states that the current paradigm shift will result in increased development of assets in the IT-consultancy industry, and how these assets will become products offered to customers. This will require competent and capable leadership in managing innovative solutions (Volberad et al., 2006). Henceforth, leaders demand and experience new structures, capabilities, and a systematic way of working in managing innovation. The literature states that a standardised innovation management system can be one fundamental factor in generating a systematic way of working in managing innovation.

5.2.2 Strategy

According to literature, a successful innovation management system is highly dependent on leaderships' ability to create and establish common strategic guidance for the organisation. Millman & Wilson (1999) states that a leader's commitment to innovation activities are a cornerstone of organisations to facilitate a culture that supports innovation and its strategies. Respondents from all leadership levels expressed how the organisation has a strong commitment to innovation. The Top Leaders are clear in innovation being central for the organisation's success. Hence the commitment for innovation is not a constraint in managing innovation internally more effectively. Instead, leaders represented in all leadership-levels, expressed the importance for the Top Leaders to establish an established and shared innovation vision and strategy to effectively managing innovation. Mir et al. (2016) conclude on the importance for the top management to establish an innovation vision and strategy, which indicates that innovation management can be managed more effectively by Top Leaders establishment if an innovation vision and strategy.

The majority of the Leaders and Middle Leaders conceded that they were not aware of a common innovation strategy. Both the Leader and the Middle Leaders further expressed that innovation is restricted to the Innovation Zone departments. According to Mir et al. (2016) can the

implementation of an innovation management system support leaders in the establishment of an innovation vision and strategy, therefore aligning the organisation in its innovation activities. The Leaders and Middle Leaders unawareness of an existing innovation strategy and Top Leaders focus on innovation being central in the organisation, indicates on that a standardised system could be implemented in order to manage innovation more effectively. For example, the innovation-standards CEN-TS 16555-1 (CEN, 2013) and ISO 56002:2019 (ISO 56002 standard., 2019) can support the Top Leaders in establishing an innovation strategy together with an innovation vision, organisational commitment and policies (ISO 56002 standard., 2019). Hence, the Top Leaders focus on innovation, the leaderships desire for clarity indicates that a standardised innovation management system could provide a strategy, milestones and a common way of understanding and work with innovation.

The current transformation of the IT-consultancy industry-transforming to asset-based consulting, new flexible delivery models are required for organisations to be capable of meeting the rapidly evolving needs of clients (Nissen, 2018). Therefore, organisations' capability to allocate suitable competences to manage innovation effectively are increasing the probability of gaining competitive advantages (Volberad et al., 2016). Leaders from all leadership-levels expressed that the organisation possesses a high capability in delivering high-quality solutions for their clients. However, the leaders also discussed how this is done without a common innovation strategy or shared objectives. Therefore, the development of a shared innovation strategy, common understanding indicates how competitive advantages could be established.
Conversely, all leadership levels expressed that the organisation need to establish a shared innovation strategy, to develop competencies accordingly and enable synergies between different offices. This implies that implementing a central structure can be necessary for the organisation to decrease silos and establish synergies. An innovation management system implies to have the required qualities to establish an innovation strategy, objectives, milestones and iterative processes to foster synergies on an intermediate level (ISO 56002 standard., 2019). The central function of the innovation management system can hence decrease the organisations implied to be, fragmented process and increase the innovation performance and probability for gaining competitive advantages.

Furthermore, introducing an innovation management system in the organisation indicates to provide leadership with a more holistic perspective in managing innovation. It hence implies to benefit leaders' capabilities in evaluating and identifying improvements in managing innovation (Karlsson & Magnusson, 2019). The leadership at all leadership-levels could consequently share a common understanding of the innovation process and collectively work to foster successful innovation. The Top Leaders are central in establishing the innovation strategy and the commitment for all leadership-levels, and the empirical findings indicate how this is still not adequately managed by the Top Leaders compared to literature.

Thus, the lower leadership levels can adapt to the degree of employees' competence, areas of improvement and resources to align the organisational strategy with their local resources.
Leader 3 described how an established innovation vision and strategy would facilitate the integration of innovation into the daily business. Following the literature, the innovation vision and strategy together with its objectives and collaborative environments is of great importance for managing innovation effectively (Wilson & Woodburn, 2014).

Expressions' of the leaders is in line with how Wilson & Woodburn (2014) discuss regarding collaborations between departments, majorly between business and technology, which should be included in the innovation strategy (Wilson & Woodburn, 2014). The Leaders and Middle Leaders expressed that the department's Innovation Zone and Business Advisory, have a low level of collaboration, both at each site and also between different sites. The literature indicates how increased collaborations can result in increased knowledge-sharing and thereby increase organisational innovation performance (Kastelli & Takanikas, 2004). Therefore, the organisation implies to enable increased collaboration which can generate increased knowledge-sharing. The result of increased collaboration and knowledge-sharing could increase the efficiency of managing innovation. If managed successfully, this could indicate how not only development of the leadership's capabilities can emerge, but also increase the efficiency in managing innovation in the organisation and decrease the risk of innovation being restricted to only the Innovation Zone departments.

It is, therefore, of great importance to foster collaboration in the organisations, and literature implies how the organisation's leadership have to encourage employees and other leaders to connect (Wilson & Woodburn, 2014). Establishing connections indicates to allow employees and leaders in the organisation to share their experiences and competencies to a greater extend. Therefore, it is essential to ensure that leaders have the capabilities to communicate and establish a shared innovation vision and strategy. Doing so successfully, it is implied how a collaborative and knowledge-sharing environment can arise. This primarily because the transformation in the IT consulting industry, which literature state to result in an asset-based approach of consulting where different mindsets and competencies will be needed (Nissen, 2018). Correspondingly, leaders represented at all leadership levels in the organisation, expressed the transformation as a current and vital challenge to address and stresses the importance of managing innovation internally, unlike today (Nissen, 2018). Therefore, to addressing this challenge accurately and establishing an efficient practice of establishing an innovation strategy and managing innovation, an innovation management system is implied by literature to direct the organisation's focus and enable allocation of resources (ISO 56002 standard., 2019).

5.2.3 Leadership capabilities

Mir et al. (2016) state that an innovation management system will have positive impacts on the organisation's overall innovation capabilities and business performance. At the same time, the majority of leaders in Cybercom, regardless of leadership level, expressed that innovation is not the organisation's primary focus. Hence, the absence of the organisation's innovation-focus can, according to literature indicate to be an obstacle to obtain increased innovation capabilities (Carmeli et al., 2010; Beer et al., 2005; Wipulanusat, Panuwatwanich & Stewart, 2017). Therefore, the literature indicates that innovation-focus has to be established in order to increase innovation capabilities. The Leaders and the Middle Leaders expressed the absence of clear guidelines for innovation from the top management. This, despite the Leaders and Middle Leader's willingness to improve capabilities in manage innovation in a more standardised and efficient way. This indicates that an innovation management system and its standardised practices of managing innovation and improving innovation capabilities can be a cornerstone in both increasing the focus on innovation and to support the leadership in improving capabilities to manage innovation in a more standardised and efficient way. This because innovation management systems are designed to support leaders to navigate complex processes of innovation, systemise their activities and enhance the efficiency of the managing innovation (Mir et al., 2016). However, leaders from all leadership levels expressed that leaders have different levels of commitment to innovation. One potential explanation made by a Middle Leader is that the leadership's continuously balancing act can explain leaders' absent commitment between achieving operational goals and 'designing businesses of tomorrow'.

Moreover, regardless of leadership level, the leadership were aligned that achieving operational goals are currently prioritised in the organisation. Literature implies that the top management has to establish directions, measurements and structures which supports innovation management, to provide leadership with the capability of managing innovation successfully, (Karlsson & Magnusson, 2019). If this is not managed successfully, it indicates how the leadership's priority will be on operational goals, instead of 'designing businesses of tomorrow'. Therefore, it can be vital that the top management establishes directions, measurement and structures, which balance the operational goals and innovation management practices. It can, therefore, be vital to understand how existing leadership capabilities may be more capable of achieving operational goals than managing innovation. Hence, to establish directions in line with literature, measurements, and structures is vital. However, the leaderships transformation from focusing on operational goals to 'designing businesses of tomorrow' can require investments in leaderships capabilities to manage innovation effectively, initiated by Top Leaders. However, to manage innovation effectively, it is of great importance to establish coexistence, collaboration, collaborative culture and operation-oriented mind-set (Homburg, 2002; Brady, 2004; Nystrom et al., 2002).

Furthermore, leaders at all leadership levels confirmed that the implementation of the innovation management system would strengthen the overall leadership capabilities and hence the

organisational performance. Still, the same leaders conceded how the implementation of an innovation management system is not on the leadership agenda, despite the Top Leaders stated focus on increased innovation management practices. Therefore, leaders at all leadership levels imply to have a strong willingness and commitment to innovation, which, according to literature is vital to manage a culture that supports innovation (Millman & Wilson, 1999). Consequently, this indicates that the Top Leaders are more likely influencing the leaderships agenda than the Leaders and Middle Leaders, therefore indicates literature on that Top Leaders can set more effective innovation management practices on the leadership agenda, as the innovation management system. This because it implies to facilitate Leaders and Middle Leaders willingness and commitment, and to foster a culture which is supportive of innovation.

5.2.4 Common understanding

The establishment of an innovation management system is dependent on all leadership levels' understanding of innovation. Regardless of the leadership level, all leaders have to develop an understanding for innovation, especially for how an invention is not an innovation because an invention has not generated any added value for the customer (Hakkarainen & Talonen, 2004). The majority of leaders represented at all leadership-levels expressed that they understand the difference but emphasised that the majority of employees do not have the same level of understanding for how innovation is defined. Literature states that innovation has to be commercialised in order to be defined as innovation. Hence an invention has not added any value to customers and can, therefore, not be defined as innovation (Stevens & Burley, 1996). Also, the innovation's related investments should be returned by the innovation together with its indications of profit. The literature, therefore, supports the authors of this study's definition of successful innovation and can thereby imply a need to establish in the organisation in order to establish an understanding.

The Leaders and Middle Leaders further expressed how the Top Leaders lack the understanding of innovation and how this is something the Top Leaders will have to address in order to manage innovation management practices more effectively. This indicates how Top Leaders may lack the fundamentals of innovation, which can generate barrier in managing effective innovation practices because it is the Top Leaders who have to establish commitment, strategy, vision for innovation (Beer et al., 2005; ISO 56002 standard., 2019). Therefore, the literature implies how the Top Leaders and the organisation can decrease the barriers to managing innovation more effectively by establishing fundamental structures for how to manage innovation. If Top Leaders facilitates the fundamental structure for understanding and managing innovation successfully, the literature indicates that innovations may not be misinterpreted as inventions, and a common understanding of successful innovations can result in increased innovation performance.

To increase the organisation's level of common understanding, the first fundamental segment is according to literature to understand the organisation's context. This because the organisational context is where innovation is managed and the frame to identifying new opportunities and deploy solutions (ISO 56002 standard., 2019). The organisational context can enhance individual learning and provide space for creativity by establishing a discussion around the collaboration between departments and leader's engagement level in the organisational climate (Nystrom et al., 2002). Leaders at all leadership levels express in line with literature the importance of a collaborative environment and further clarified how a collaborative environment can result in common understanding amongst different departments. However, as previously mentioned by Leaders and Middle leaders, different departments in different offices are working in a silo-like environment with varying levels of internal communication.
In comparison with literature, a discussion around collaboration can foster individual learning and creativity. However, a discussion around collaboration can be complicated to establish with varying levels of internal communications and in a silo-like environment. This further indicates that knowledge-sharing is low, hence complicates to establish a collaborative environment. Also, the literature states that technology and business have to work side by side in organisations to develop new value offerings in the IT-consultancy industry (Nissen, 2018). Hence, this implies that the organisation can start collaborative engagements by introducing technological and business competence to each other, for instance, inducing collaborations between the Innovation Zone department and Business Advisory department.

Leaders expressed the difference between invention and innovation as an organisational challenge. This because many inventions are defined as innovations, and often not commercialised. Increasing collaboration between the organisations technological and business competence indicates, therefore, in line with the literature, that the collaborative efforts can establish more innovations. The literature further emphasises the importance of facilitating collaboration between different parts of the organisation because of its effect in facilitating access to, and sharing of knowledge (Homburg et al., 2002; Brady, 2004). The leadership in Cybercom implies that the collaborative efforts and knowledge sharing are a challenge to manage innovation more effectively, which indicates in line with literature that a common understanding can increase by increasing collaboration and knowledge-sharing.

5.3 Innovation excellence

5.3.1 Systematic way of working

The Top Leader level expressed that working more systematically in managing innovation is one of the organisations primary goals. The Leader level and Top Leader level both stated that the organisation possess a high level of competence for managing innovation but require a structure to allocate competencies and resources more efficiently. This indicates, in line with the literature, that innovation excellence can support the organisation to work more systematically and structured

and strengthen organisations innovation capabilities at the same time (Adams et al., 2006). Increasing the organisation's innovation capabilities is one necessity in order to strive for best practice innovation management, which is referred to innovation excellence (Adams et al., 2006; Dervitsiotis, 2010). This implies that the leadership in Cybercom has not exploited the leaderships existing competence efficiently in order to strengthen innovation capabilities and establish more effective innovation management practices. Therefore, allocating resources more effectively, and identifying a more systematic way of working as with innovation excellence, can transform the organisation to manage asset-based consulting and hence sustain and strengthen the market position (Christensen, 2013). The literature, therefore, implies that Cybercom's way of working can hinder to increase innovation capabilities and strengthen the current market position. Thereby, increasing the systematic way of working, as with innovation excellence, implies to increase the organisation's innovation capabilities and innovation performance.

Moreover, leaders at all leadership levels expressed a need for a more holistic framework in order to work more systematically with innovation management. Literature implies accordingly that more advanced measurement techniques can transform existing challenges to innovation metrics (Kanji, 2002). This because metrics can be evaluated for identifying causal relationships. Hence, the literature and leaders' expressions indicate that the organisation's leadership can move from a less systematised way of working with innovation management, to more holistically with advanced metrics. Likewise, the leadership's focus on operational goals and silo-like practices implies to benefit from a more advanced metric-centric perspective. This because more collective efforts and systematic structures could be established by more advanced metrics and a more holistic perspective. Also, introducing more advanced metrics, as in innovation excellence practices, indicates to provide the organisation with a more systematic way of working, hence indicates to increase their capability to explore new opportunities and identify improvements iteratively.

Regardless of leadership level, many leaders expressed the inefficiency in the exploitation of competence in innovation as an essential challenge to address. The Middle Leaders further stressed this to be a critical factor for innovation being managed more efficiently and resulting in more innovations. The Boston Consulting Group (2009) verifies that there is a general dissatisfaction in the IT-consultancy industry regarding the output in terms of innovation concerning the investments being made. Thereby, this implies that the top management of Cybercom not only have to exploit the leaderships competence more effectively, but also provide the leadership with capabilities and investments in practices that support the leadership to measure and evaluate the outcome of investments in innovation in a more systematic process. Accordingly, with the organisation's leaders, to master this process more systematically, the organisation needs to identify factors that support or hinders innovation progress, when striving for innovation excellence (Bassiti & Ajhoun, 2016; Dervitiotis, 2010). Therefore, it is fundamental to understand how existing competence for innovation can be exploited more effectively. However, without a more systematic process in managing innovation, further progress is implied to be constrained. Thus, to support the innovation

progress, establishing a more systemised process of measuring innovation performance and to exploit existing competence more effectively is advantageous. This implies, in line with the literature, that identifying factors that hinder and supports a more systematically way of working can give advantages in the strive of innovation excellence. To exemplify the importance of a systematic way of working, Bassiti & Ajhoun states (2016, p.1): *"what is not measurable cannot be neither managed nor improved."*.

5.3.2 Strategy

The framework for assessing a firm's level of innovation excellence (Figure 2) states the central importance of managing a successful innovation strategy as one vital innovation capability. The framework by Dervitiotis (2010) therefore provides an organisation to assess and improve its level of innovation excellence. However, it is essential to address the difference of innovation strategy managed in the innovation excellence framework (Table 3) and the innovation management system (Table 1) (Dervitiotis, 2010). The aim of the innovation strategy in the innovation excellence framework is to be applied extensively and guide the organisation in targeting great innovation achievements (Adams et al., 2006). The innovation management system and its innovation strategy are instead a standardised process to establish an innovation strategy but do not directly target great innovation achievements (Dervitiotis, 2010). Therefore, the innovation excellence framework target to assess the organisation's innovation capabilities and innovation results to achieve significant innovation achievements (Adams et al., 2006; Dervitiotis, 2010). The leaders represented at all leadership levels in Cybercom stated a need for a more systematic approach to managing innovation, as mentioned previously. The Leader level and Middle leader level introduced that an innovation strategy, covering all organisational units, can facilitate a more systematic approach to managing innovation, throughout the organisation. Hence, in line with the literature, the innovation excellence framework indicates that Cybercom could establish a more systematic approach by assessing and improving its innovation capabilities and innovation results and striving for great innovation achievements at once (Adams et al., 2006; Dervitiotis, 2010). Also, this implies that an innovation strategy, including the elements of the innovation excellence framework, can provide the leadership in Cybercom with a more structured, holistic and strategic way of working.

Moreover, the innovation strategy and innovation excellence framework can benefit by being complemented by other innovation management practices as well to manage the strategy more effectively, for example, an innovation management system (Adams et al., 2006; Dervitiotis, 2010). This indicates that Top Leaders in Cybercom could design an innovation strategy, including effective management practices in order to satisfy the Leaders and Middle Leaders expressed the need for a more systematic way of managing innovation. Hence, this implies that an efficient strategy itself can foster a strategic way of working, instead of Top Leaders potential efforts in

establishing a systematic way of working in order to accomplish the innovation strategy's objectives.

Regarding aligned objectives, Dervitiotis (2010) states the importance of measuring and evaluating the innovation achievement in order to improve in the pursuit of innovation excellence. Regarding the current state of Cybercom, the empirical findings stated that no KPIs on innovation performance existed throughout the organisation. Instead, KPIs for innovation performance on individual performance and specific department level is to some extent being measured, according to most leaders at the Leader level and one leader at the Top Leader level. Thereby, the literature indicates that implementing common objectives by establishing KPIs for the whole organisation could result in accelerating innovation performance and establishing a higher degree of innovation achievement.

Adams et al. (2006) and Dervitiotis (2010) further emphasises the importance of not only doing the right kind of innovation but doing the right kind of innovation right. This amplifies both the effectiveness and efficiency of the innovation process, which calls for ways of measuring and evaluating in order to understand what is effectively and efficiently (Adams et al. 2006). Hence, the literature implies that doing the right kind of innovation right could be facilitated by ensuring accurate measurements to evaluate the innovation process effectiveness. Common organisational KPIs could create a more effective and efficient innovation process by departments as the Innovation Zone department, and Business Advisory department can measure and evaluate common KPIs. Additionally, the implementation of shared KPIs targeting Cybercom's innovation performance instead of the current individual-based KPIs, can in line with literature generate a higher level of visibility and reflectiveness of how innovation is measured, what the outcome is and how to improve the outcome. The innovation strategy, therefore, indicates to benefit from facilitating an iterative approach, where measures are evaluated and improved, and KPIs are standardised.

5.3.3 Leadership capabilities

Innovation and creativity are of high value for business models today (Koch, 2014). The leader's capability in supporting the organisational context and fostering innovation are of great importance (Gumusluoğlu & Ilsev, 2009; Rousseau et al., 2013). In contrast, Middle Leader 2 expressed that Cybercom's organisation and its leadership are not capable of managing innovation. This because the organisation and the IT-consultancy industry have focused on selling resources, not developing innovation internally. The focus on occupancy-levels and short-term results have hence resulted in low leadership capabilities to manage innovation. Leaders represented at all leadership levels expressed that the organisation is currently in a paradigm shift, moving from providing customers with resources by resource-based consulting to designing projects and products presented to customers by asset-based consulting. Accordingly, managing innovation effectively will be vital

in gaining competitive advantages and sustain and increasing the market shares in the current paradigm shift in the IT-consultancy industry (Christensen, 2013).

Furthermore, the literature implies that leadership capabilities are essential to foster innovation. Thereby, investments in increased leadership capabilities can be needed in order for Cybercom to foster innovation. Leaders represented at all leadership levels expressed that the focus is on allocating resources effectively to support customers in their processes. This further implies that the transformation to asset-based consulting demands new leadership capabilities to be developed. Otherwise, the leadership in Cybercom may not have the accurate leadership capabilities to foster innovation or survive the paradigm shift due to obsolete leadership capabilities (Gumusluoğlu & Ilsev, 2009; Rousseau et al., 2013; Christensen, 2013). The Top Leaders can, therefore, acknowledge the need to invest in leadership capabilities to manage innovation, and potentially transform the leadership's capability in designing innovative projects and products. Also, the Top Leaders expressed to understand the benefits of managing this transformation successfully. However, the effects of investing in increased leadership capabilities for managing innovation and organisational alignment can require time. This implies that the time between investments and a successful transformation can be the differences between gaining competitive advantages or being disrupted away (Tidd et al., 2005; Christensen, 2013). Therefore, the literature and Leaders indicates that investments in leadership capabilities are necessary for future survival, hence should not be ignored or postponed.

Furthermore, investing in increased leaderships capabilities for innovation has to be managed in a structured and streamlined process (Dervitiotis, 2010). Thus, approaching the innovation excellence framework can provide the organisation with a tool for managing innovation capabilities. Adams et al. (2006) present six innovation capabilities and Dervitsiotis (2010) eight innovation capabilities to focus on targeting innovation excellence. Both Adams et al. (2006) and Dervitsiotis (2010) state leadership capability as one vital innovation capability. Thereby, the literature indicates how Cybercom's Top Leaders can approach the development of innovation capabilities, and other vital capabilities for innovation, in structured and standardised practice. Managing the innovation capabilities effectively will increase the organisation's capability for achieving innovation excellence and thereby, great innovation achievements (Adams et al., 2006; Dervitsiotis, 2010). Top Leaders, in collaboration with leaders at the Leader level and Middle Leader level, can hence be supported in identifying and analysing existing levels of innovation capabilities, hence determine how to allocate investments efficiently. Thereby, in line with the literature, applying the established standard for managing the innovation capabilities can provide the organisation with an efficient framework to transform to asset-based consulting and increase the possibility of gaining competitive advantages (Tidd et al., 2005; Christensen, 2013).

Moreover, the organisation's leadership are stated to be influential in developing new ideas. However, the expressed challenge is to realise the ideas into innovation successfully. The

leadership identified several leadership capabilities as areas of improvement, to effectively realise the ideas/inventions and achieving successful innovation. Examples of these capabilities expressed by leaders represented all leadership levels was openness to innovation, understanding of innovation, storytelling, how to design and establish an entrepreneurial context and Lean start-up. This indicates that Cybercom's leadership are aware of specific competencies to develop to increase leadership capabilities. Many of the leadership capabilities presented as areas of improvements above are fundamental for managing innovation; for example, leaders' openness and understanding of innovation (Karlsson & Magnusson, 2019). Therefore, in line with the literature, the understanding of, and openness to innovation is one vital area of improvement to address to increase the leadership capabilities. However, it is essential to address that leadership is one of several vital innovation capabilities (Table 3) which has to be invested in simultaneously in order generate an aggregated innovation capability for the organisation (Dervitsiotis, 2010). Hence, in line with the literature, to develop leadership's capabilities in manage openness and understanding of innovation is not enough to achieve successful innovation (Adams et al., 2006; Dervitsiotis, 2010; Boston Consulting Group, 2008, 2009; McKinsey Quarterly, 2008, 2009). The innovation capabilities presented in Table 3 are more comprehensive, and will also require innovation results to strive for, measure and improve to achieve innovation excellence (Adams et al., 2006; Dervitsiotis, 2010). Also, to ensure the development of relevant leadership capabilities, amongst other innovation capabilities, implies to result in diminished biases as a misunderstanding of the difference between invention and innovation, increased collective efforts, and hence increased organisational performance.

Successful innovation is only successful if it is introduced to the market and returning investments made into the development of the innovation (Burley, 1996; Hakkarainen & Talonen, 2004). Therefore, this indicates that it is fundamental for an organisation to ensure strong innovation capabilities in being capable of manage and understand innovation successfully. Although, possessing innovation capabilities requires efficient innovation results to strive for to achieve innovation excellence (Adams et al., 2006; Dervitsiotis, 2010; Boston Consulting Group, 2008, 2009; McKinsey Quarterly, 2008, 2009). Hence, innovation excellence is reached by establishing efficient innovation capabilities and innovation results. Therefore, the leadership capabilities should be developed to manage the organisation's innovation capabilities effectively and increase the innovation results. Besides, the leadership have to be capable of evaluating the outcome of the innovation results and adjust the innovation results accordingly (Adams et al., 2006). Thus, it indicates that it is of great importance for all leadership levels to develop relevantly and act upon insufficient leadership capabilities in order to facilitate relevant leadership capabilities for innovation management. If not investing in relevant leadership capabilities, it could constitute one great barrier for organisational alignment, which is difficult to overcome (Beer et al., 2005). Consequently, this indicates that the innovation excellence framework can function as an instrument for the organisation to validate existing leadership capabilities continuously, and to follow up on investments effectiveness in developing relevant leadership capabilities.

5.3.4 Common understanding

Nissen (2018) describes that the consulting industry is facing considerable challenges as their business environment is rapidly becoming more competitive, both due to the increasing digitalisation, but also due to changes and growing requirements from the customers. Parakala (2015) claim how the playing field of IT consultancy firms is becoming global, as digitalisation converges IT-consultancy firms' offerings, which makes the industry very exchangeable in terms of price reduction (Nissen, 2015).

Leaders represented at all leadership levels gave indications of being aware of the paradigm shift towards asset-based consulting. Regardless of leadership level, the majority of leaders expressed that technology will increase the competitive environment and change the current way of doing businesses. Although they seemed to be aware of these future challenges, concerns regarding the adaption towards a potential transformation were expressed. Leader 3 mentioned how Cybercom would have difficulty in starting to design and sell services as a business model, as it would require innovation capabilities different from today. Leaders at the Leader-level expressed how another mindset has to be developed, and a shared understanding of what value should be targeted in transformation.

Regarding how Dervitiotis (2010) states about innovation excellence, one vital part is the ability of management to communicate the meaning of innovation and how it has to be separated from the term of quality to the organisation. The term quality refers to the organisation's current capacity to generate value for stakeholders with already existing products and business models (Dervitioits, 2010), it can be discussed to relate to the traditional resource-based consulting.

Instead, this indicates that the leadership in Cybercom should focus on how Dervitioits (2010) explains innovation in the implementation of innovation excellence. Dervitiotis (2010) distinguishes innovation as the organisation's inherent capability to generate new value propositions for stakeholders. Thus, gives indications of being highly relevant for Cybercom since Dervitioitis (2010), following Adams et al. (2006), states how this is essential in rapidly changing times where the value provided by existing offerings are being less attractive by customers. To further elaborate, based on empirical findings, leaders represented at all Leadership levels in Cybercom need to generate a common understanding throughout the organisation regarding the challenges of the transformation towards asset-based consulting. In contrast, the understanding of how Dervitioits (2010) describes how innovation has to be understood as the generation of new value propositions should constitute the first step. Leaders have established a shared understanding and a shared view of how the industry will evolve. However, it is further necessary to create a shared understanding of what is required to succeed in these new circumstances. Adams et al. (2006) discuss how the firm's innovation capability is dependent on its innovation system variables, and further dependent on the innovation enablers presented as innovation capabilities in Table 3. Adams et al. (2006) stated how these innovation enablers first need to be identified.

However, what could be implied is that Adams et al. (2006) misses that developing a fundamental understanding of why these innovation capabilities are needed will further enhance the identification of them. Thus, this indicates that establishing an understanding of why and what value these enablers bring should be ensured before settling them to enhance the innovation process.

Additionally, as the innovation capabilities need to be understood before enabling identification of them, the same counts for a common understanding regarding why to measure innovation results. Since Cybercom are aiming to enhance work with innovation not only at the organisational level but also locally, this indicates a need for a standard way of measuring core results in the innovation process. Following Adams et al. (2006), a broader framework constituted as a guide could align how the local offices measure their progress. This indicates that a more systematic way of improving innovation processes across the organisation can be envisaged, and leaders at all levels will be able to make decisions based on data rather than guessing projections. However, as the same understanding of the value of innovation capabilities is required, it may indicate how the same understanding of measuring innovation results is equally important. This indicates that the leader's ability in Cybercom to understand why and what factors to measure can eliminate time loss in measuring the wrong things

Consequently, this gives indications of the need for a common framework for innovation management that allows the organisation to have a common understanding of why innovation capabilities and innovation results are of value to the organisation. The presented framework of innovation excellence (Dervitiotis, 2010) and reflections made by Adams et al. (2006) indicate to constitute a potential solution for aligning the understanding throughout the organisation. Such a centralised framework could benefit Cybercom's establishment of innovation capabilities and innovation results. It also provides indications of increasing the level of maturity in order to understand innovation and thereby improve the achievement of successful innovation.

5.4 Customer centric approach

5.4.1 Systematic way of working

The legacy of the IT-consultancy industry has resulted in Cybercom focusing more on providing resources to the customer rather than developing assets that the customer wants to utilise. Hence, the empirical findings showed how providing customers with resources resulted in the way of working to be more focused on time, competencies and money. Results in Cybercom are more focused on short-term efficiency and occupancy-levels than managing innovation internally and systematically. Consequently, as the IT-consultancy industry is transforming from the traditional way of working (Nissen, 2018), being close to the customer has never been more critical (Parakala, 2015). Consequently, organisations capability to manage and identify customer's needs and further being capable of satisfying customer's needs is determining the competitiveness of IT-consultancy

firms (Piller et al., 2011). All leadership levels expressed the importance of increasing and managing a customer-centric approach. However, leaders at the Leader-level expressed different ways of working for managing a customer-centric approach. Leader 1 identified a procedure of including customers earlier in the internal projects; Leader 2 identified a need of better match projects and customers and Leader 4 identified the challenge of aligning Cybercom's and customer's visions and short-term requirements. Consequently, this indicates that the problems for establishing an efficient customer-centric process are many. This is further complicated as all leadership levels not are aligned in how to work efficiently in managing an efficient customer-centric process.

A more organisational perspective was expressed by leaders at the Top Leader-level, regarding how a customer-centric approach requires a systematic way of working and the organisation has to focus on generating long term value in its processes, instead of short-term returns. Thus, this indicates that by using the innovation framework for innovation it can enable the organisation to identify innovation capabilities and results, which are validated and supported by a customer-centric process. This to continually increase the organisation innovation capabilities in managing the customers efficiently. Being capable of measuring and evaluating the results of these actions indicates to improve the organisation's innovation capabilities to deliver innovative results in a more customer-centric process and with a long-term perspective.

Furthermore, the customer-centricity approach is about to consider the customers as individuals. The main operational goal is to deliver unique value to each customer. Hence, a systematic and common way of working to satisfy customers' need in an efficient customer-centric process indicates to generate innovative solutions (Piller et al., 2011). The innovative solutions can be a direct consequence of organisations' effort in identifying a solution to the customer's expressed need (Piller et al., 2011). However, an organisation with an established efficient customer-centric innovation process can recognise customer's needs before the customers have recognised the need themselves (Nissen, 2018). Thus, this indicates how it is of great importance that leaders closest to the innovation development validate the customer need continuously. If not, the innovation may never be realised nor successfully, which can result in organisational investments made into an invention and is more likely not generating any return on investment.
Consequently, efficient solutions for all leadership levels indicate to exploit internal assets, partner up with customers, dividing the risks of specific projects (competencies, time and money), and together in a systemised process develop solutions following real needs (or validated future need). By further analysing, a systemised way of working indicates to decrease the risks of customers having unrealistic visions and short-term returns in mind when paying the organisation for resources. Leaders at the Top-level and Middle level expressed concerns regarding this risk and the potential outcome of developing obsolete competencies and other assets. This because customers are paying for resources to fulfil their unrealistic visions, and thus rarely pay for realised or successful innovations. This could be related to the transformation to asset-based consulting,

where the organisation can develop assets to support the customers in a systematic way of working, instead of the current resource-based consulting, where customers hire the organisation's resources to perform their visions in specified assignments.

5.4.2 Strategy

Keeping the customer close during the innovation process is expressed to be understood by all leadership levels. Additionally, the value of involving customers earlier in projects and sustain a close interactive relationship throughout the process, as well as after the launch of the innovation, was expressed to be less understood. According to Piller et al. (2011), innovation management should include a systematic and iterative customer-centricity approach as it validates the intended value before the development of the product has started. It enables the organisation to keep the customer close during all stages of development, which allows for feedback and evaluation, essential to ensure that the value is not set aside. By sustaining the relationship after the product is delivered, insights and evaluation of later issues or possibilities can allow for further development, and new projects can emerge. Piller et al. (2011) also discussed how customer-centricity could be applied on different organisational levels, depending on the intended purpose. A customer-centric approach at the strategical level can foster orientation and the mindset of employees to be more open and share interdependencies and values with customers over the long-term (Piller et al., 2011). Applying customer-centricity at a strategical level at Cybercom indicates to make the organisation closer to the customer and thereby become more aware of customers context. This would enable a deeper understanding of the customer, which simplifies the identification of their potential needs. Accordingly, after analysing the literature in comparison with the empirical findings, the tactical level presented by Pine (1993) indicates to be more appropriate for Cybercom's challenge in transforming into asset-based consulting. Customer-centricity at the tactical level means that Cybercom should focus on aligning their activities and processes with their customers' convenience instead of focusing on the convenience of their operations (Pine, 1993).

The tactical level indicates support to prevent the issue expressed by leaders at the Leader-level, where projects have been developed with no customer validation until later in the process. Due to the lack of customer involvement and too much focus on the convenience of operations, it showed how the product, in the end, did not generate any perceived value for the customer. This also indicates the importance of balancing customer involvement and Cybercom's own beliefs. To manage the balance, it could be implied that Cybercom has to include customer-centricity in innovation- strategies and objectives, but also establish strategy and goals on how to work with customer-centricity in innovation management. According to leaders at the Top-level, customers sometimes find it difficult to see the long-term value. Consequently, this indicates how Cybercom, as the provider, has to believe in their competencies and avoid being affected by customers, strive for short-term satisfaction. Still, to avoid time waste, it can be discussed that close interactions

with the customer are essential to ensure alignment between customers intended value and development by the organisation.

In this case, it can be implied how Cybercom would benefit from customer-centricity at the tactical level. It could also be discussed how the organisation currently does this to some extent. However, as the issue expressed by top leaders still occurs, an expressed need for alignment of current innovation processes and activities indicates to be even more directed towards the convenience and necessity of the customer.

5.4.3 Leadership capabilities

The paradigm shift in the IT-consultancy industry requires new leadership capabilities (Parakala, 2015). The innovation development inside organisations will become vital to obtain future competitiveness (Nissen, 2018). Consequently, managing new business models, innovation management, and customer-centric processes are examples where new leadership capabilities have to be developed in order to maintain competitive advantages (Nissen, 2018). The majority of leaders at all leadership levels stressed the importance of working close to the customers because of the organisation's dependency on serving customer's need. However, the transformation to asset-based consulting will require new business models where new internal assets are designed and provided to customers differently (Nissen, 2018). Thus, it can be implied that instead of serving the customer's expressed need inside their organisations, Cybercom's in-house assets can be developed internally with the customer. The assets can thus be validated iteratively by customers and owned wholly or partly by Cybercom. This could indicate that the finalised solution/asset can, after that, fulfil the customer's specific need and simultaneously be scalable to meet several customer's needs. Therefore, it could be interpreted how the transformation in the IT-industry will require different leadership capabilities in managing a new customer-centric innovation process. For example, this indicates that leaders at all leadership levels will have to develop skills in managing innovative solutions internally, identifying how current needs can be satisfied in a customer-centric process.

Moreover, some of the current capabilities at the leadership levels are focused on managing resources to fulfil customers specifications. In comparison with literature, identifying a value for a solution indicates to be the first thing led by leaders, not identifying accurate resources to satisfy customer specification (Nissen, 2018; Piller et al., 2011; Parakala, 2015). If no value can be determined, the solution cannot be defined as innovation (Hakkarainen & Talonen, 2004). Therefore, to manage innovation effectively, leadership capabilities in identifying a value for customers has to be ensured regardless of leadership level. Consequently, if leaders are not capable of detecting a value for customers, it may indicate how the organisation will not be capable of managing to innovate solutions (Hakkarainen & Talonen, 2004).

Identifying unique value for each customer can only be obtained by working close to the customer from the very beginning (Piller et al. (2011). Hence, managing innovation can be conducted efficiently by ensuring a customer-centric process, where a customer validates the value in each new process. However, expressed by leaders at the Top Leader-level, leaders stressed the importance of balancing the customer's visions and intentions with the organisation's competence. The leaders exemplified how customers can ask the organisation to develop unrealistic visions with short-term perspectives and needs. Consequently, this indicates that all leadership levels need to be capable of understanding the importance of identifying the value and listen to the customers. Additionally, it also indicates how they have to be capable of managing innovative solutions effectively to turn unrealistic visions and short-term perspectives to realistic visions long-term perspectives. This because both the organisation and the customer will gain from successful innovative solutions and competitive advantages in a long-term view, then un-realised short-term visions.

5.4.4 Common understanding

As mentioned in the previous section, Cybercom's legacy of the classic resource-based consulting approach enhances the risk of developing their competence following customers vision, even if the customer's visions are unrealistic and not validated on the market. This could end in Cybercom developing inaccurate competencies, which can be a costly and time-consuming process, resulting in an obsolete business model (Christensen, 2013).

By analysing theory and empirical findings, it can be discussed how increasing common understanding of customer-centricity in innovation management can be essential to achieve successful innovation and thereby enhance the transformation to asset-based consulting. Piller et al. (2011) and Pine (1993) states the importance of implementing a customer-centric approach, by analysing the empirical findings it became evident that these theories miss the importance of creating a shared understanding of customer-centricity before implementation. This indicates that Cybercom has to ensure the establishment of a shared understanding of customer-centricity before it can be applied. This to provide employees with the competence of why and how to work close to customers.

Consequently, if Cybercom can include customer-centricity earlier in their development of inventions, the invention can be validated by the customer iteratively throughout the process, and thus be developed following existing customer demand. Defined by the authors of this study and supported by Hakkarainen & Talonen (2004) and Steven & Burley (1996), to fulfil the condition of successful innovation, an invention has to be commercialised, return investments and indicate for future profits. By involving the customer from the beginning of a project and iteratively validating the progress, it can indicate how the invention faces a higher probability of being

commercialised and further successful, thus giving indications of higher chances of successful innovation.

Another critical aspect considering Cybercom's capability to prosper in the current paradigm shift is the understanding of balancing customer-centricity. Three main factors could be identified as easy to understand while talking about customer-centricity. The three factors identified was competence, time and money. Leaders represented at all leadership levels in Cybercom have to communicate to employees why a customer-centricity approach is beneficial and to some extent, essential. These three factors are interpreted to be easy to understand while explaining the essentialness of customer-centricity. By demonstrating scenarios, where the customer are not included in the process, can be a waste of time and waste of money, as the development without customer participation increases the probability of unsatisfied delivery. Consequently, involving the customer too much can instead lead to how competencies of employees are not fully optimised and thus prevent organisational learning.

Thus, this indicates how long-term investments in developing new innovative- products and competences by following customers need can enhance innovation management in Cybercom. Additionally, further indications of a shared understanding of approaching customer-centricity successful are vital and can be understood by evaluating time, money and competence.

6. Conclusion

The conclusion aims to answer the study's research question and thereby fulfil the overall purpose. First, a short background to answer the research question will be presented. Second, the research question will be answered. Thirdly, a conceptualization together with a more extensive answer will give further support in answering the research question.

6.1 Background to answering the research question

Before each interview, all leaders were introduced to the author's definition of successful innovation and the innovation management concepts: i) innovation excellence ii) innovation management systems iii) common way of measuring iiii) customer-centricity iiiii) asset-based consulting. The thematic analysis resulted in the empirical findings and the four themes which is applied throughout this study: i) a systematic way of working ii) leadership capabilities iii) strategy iiii) common understanding.

The analysis model (Table 8) targets to identify connections between the theoretical framework and the empirical findings, which the study's analysis is derived from. Subsequently, the conclusion is the result of the analysis based on the theoretical framework and the empirical findings, in the strive to answer the study's research question, and thereby fulfil the overall purpose.

6.2 Answering the research question

The purpose of this study is to explore effective innovation management practices from a leadership perspective in an IT-consultancy organisation. This is managed by initiating a case study at the IT-consultancy firm Cybercom. Based on the purpose of this study, the following research question was formulated:

What is considered as effective innovation management practices from a leadership perspective in an IT-consultancy firm?

The answer to this study's research question is that several intertwined processes and concepts manage effective innovation management practices. Hence, establishing one innovation management practice managed at one leadership level is not enough to manage innovation as effectively as possible. However, this study confirms previous research that the achievement of effective innovation management practices can be supported by a standardised and iterative process to manage innovation, that is an innovation management system entails to be central for effective innovation management practices. Additionally, the findings of this study indicate that the innovation management system can advance its effectiveness in fostering and facilitating innovation management practices by introducing the complementary practices i) investing in

innovation capabilities ii) ensure accurate innovation results iii) facilitate a customer-centric approach iiii) measuring and evaluating to improve.

Combining above innovation management practices indicates to provide an organisation with an iterative and effective system that supports the leadership in developing the innovation capabilities to strive for, evaluate and pivot the innovation results accurately. Likewise, the innovation management practices imply to be streamlined by an increased customer-centricity approach, where the customer-centricity approach is iteratively evaluating the rewards and drawbacks by the factors: i) time ii) competence iii) money.

The leadership are central in managing effective innovation management practices. Hence, the leadership perspective is essential to analyse. This study has applied three leadership levels: i) Leaders ii) Middle Leader iii) Top Leaders. The results from this study demonstrate that different leadership levels have different levels of mandate to influence the innovation management practices, and collaborative efforts between the leadership levels imply to benefit the effectiveness of the innovation performance. Increasing the effectiveness of the innovation performance can thereby result in increased probability for successful innovation and hence increase the organisational performance.
Additionally, the Top Leaders implies to possess a more significant mandate to influence the innovation management process and are therefore central in facilitating change and implement more useful structures. For instance, this study identified that the Leader-level and the Middle Leader-level expressed a great willingness to improve innovation capabilities and manage innovation more effectively. The Top-Level are the leaders who have to facilitate this change and can implement new structures.

Furthermore, to support collaborative efforts and productive structures, this study indicates that an innovation strategy is fundamental to enable more effective innovation management process. Hence, an innovation strategy can be the enabler for a more effective innovation management process, but also central in supporting an IT-consultancy firm in the current paradigm shift. Development of effective innovation management practices can consequently be related to strengthening the IT-consultancy firm's market position. If the development of effective innovation management practices is not managed effectively, it can result in obsolete competencies.

To conclude, this study implies that increasing the effectiveness of innovation management can be managed by complementary and centralised innovation management practices (Figure 5). The conceptual model includes effective innovation management practices which support the development of innovation capabilities, the possibility to measure, evaluate and improve innovation results and facilitate a more effective customer-centric innovation process.

The conceptual model (Figure 5) implies to provide the IT-consultancy firm with a holistic perspective and streamlined innovation management practices from Top Leaders to Middle Leaders and Leaders. Thus, it indicates to enable practices to manage local offices and departments more effectively. The conceptual model further implies to decrease the existing silos between offices and departments, contributing to shared objectives and foster a common way of working with managing innovation.

6.3 Conceptualising effective innovation management practices

This section will fulfil the research question and purpose with a deeper understanding of the interrelation of effective innovation management practices identified in this study. The conceptual model (Figure 5) is directed to consolidate the identified effective innovation management practices to provide a more holistic answer to this study's research question. Moreover, the conceptual model (Figure 5) aims to clarify the interrelations between and understanding of the presented effective practices to manage innovation. Thus, the conceptual model (Figure 5) can contribute to already existing research on the topic of innovation management.

The outer dotted line defines the organisation's context. The line is dotted because of the organisational context's necessity of being externally influenced, both in identifying new opportunities and providing the external environment with successful innovation. The next, inner circle represents the complementary and organisation-wide innovation management practices. This circle contains effective innovation management practices identified by this study. All the blue boxes and circles inside the innovation management practices-circle represent one specific concept of identified effective innovation management practices: i) innovation capabilities ii) customer-centricity iii) innovation management system iiii) measuring and evaluating iiiii) innovation results.

Moreover, the arrow from opportunities intent into the innovation management practices-circle represents the organisations opportunity indent, to identify and acknowledge new ideas in the external environment. The organisation, by its leadership, can thereby influence the innovation management practices that facilitate the innovation process by inspiration from the external context. The inspiration does counter some level of friction while it is introduced to the innovation capabilities. The innovation capabilities of the organisation are the difference between the inspiration by the external context will be further explored or not.

Based on the theoretical framework, the empirical findings and the analysis, this study implies that lacking a holistic approach to managing innovation can be a consequence of the organisation's inadequate ability to ensure innovation capabilities. This indicates that Top Leaders in an organisation has to ensure innovation capabilities to enhance effective innovation management practices. This study further focuses on four innovation capabilities (Table 4), which represents the innovation capabilities in the conceptual model (Figure 5). The arrow between the innovation

capabilities and the innovation management system illustrates the iterative process between the practices. If the innovation capabilities not are optimised or improved to manage the innovation management system, the arrow indicates that the leader will have to pivot and increase the innovation capabilities to be able to manage the innovation management system more effectively.

Leadership's capability to identify and strengthen areas of improvements can be improved by effective practices and thereby increase the effectiveness in the innovation process. The double-sided arrows present the iterative process between the innovation management system and the innovation capabilities and innovation results. The double-sided arrows thereby symbolise the leadership process of evaluating and improving the innovation results and identifying and developing innovation capabilities accurately, both concerning enhancing the effectiveness of the standardised innovation management system.

The curved arrows symbolise the importance of the interwovenness of the four practices jointly weight to influence the innovation management system to become more effective. The conceptual model further implies the importance of the customer-centricity approach for the leadership in an IT-consultancy firm. This study demonstrates that a customer-centric approach can be applied to increase the effectiveness of managing innovation by reflecting on the reward and loss in terms of the factors i) time ii) competence iii) money. Hence, an increased customer-centric process has to be managed effectively regarding the above factors, or the loss can be higher than the reward.

To increase a customer-centricity approach by introducing more customers, earlier in the organisation's innovation process, is implied by this study to increase the possibility for successful innovation. This because the customers have the power to validate the need and hence contribute to an organisation's innovation process can be managed more effectively and successfully. Moreover, a customer-centric approach provides the conditions for an organisation to educate itself, which indicates to be advantageous in the transformation to asset-based-consulting. This because an organisation thereby can establish the prerequisites to transform from fulfilling customers specifications to get the understanding of the new need of new value propositions – to designing projects and innovative solutions/products for customers instead. This knowledge-sharing between an organisation and its customers can further be advantageous for all parts, especially for an IT-consultancy firm and its current transformation.

Furthermore, measuring and evaluating practices should be applied throughout the innovation process. The two double-sided arrows demonstrate the importance of the iterative process between establishing metrics, evaluated and improve the metrics managed in the process set by the innovation management system. This further illustrates that the progress and performance within the centralised innovation management system should be continuously evaluated and measured in order to avoid waste of resources and to establish continuous improvement. Also, the iterative

process of measure and evaluate the four innovation management practices in the boxes, are determined by the in the circular arrows that link all four practices.

To be capable of balancing an appropriate level of a customer-centric approach, the evaluating and measuring process can focus on analyse the outcome of the previously specified factors i) time ii) competence iii) money. Measuring and evaluating an organisations innovation activity can support the organisation to visualise the process of innovation more holistically. Leaders capabilities in communicating the measurements across the organisation could foster a common perspective of an organisations status in managing innovation management practices effectively or not. Also, a common perspective of an organisation's innovation progress is indicated in this study to foster alignment in the leadership and its effort to manage innovation more effectively.

Lastly, there is an arrow extending from the innovation results to successful innovation, which this study has introduced to be the ultimate goal of the innovation process and its innovation management practices. To reach to successful innovation, this study implies that all previously mentioned innovation management practices must be managed successfully and simultaneously. Increasing the effectiveness of the innovation management process by enabling certain practices, can leverage an organisations progress to achieve successful innovation.

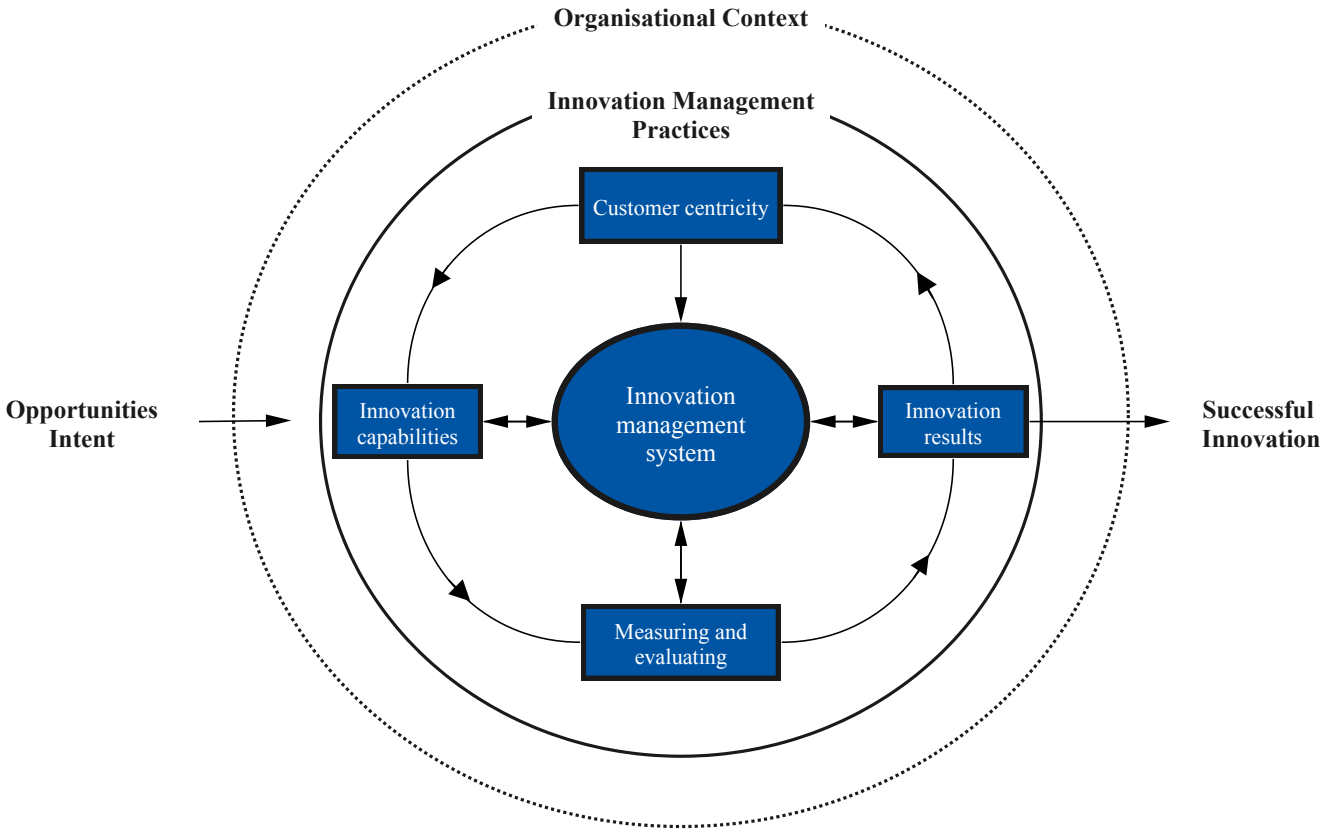

Figure 5 – Conceptual model of the conclusion, designed by authors

7. Practical recommendations for Cybercom

This section will provide practical recommendations directed to the case-study company Cybercom. The recommendations are derived from the study's conclusion and focus on practical steps to guide the leadership in the case-company to manage innovation more effectively.

7.1 practical recommendations

Given the case-study, the authors have three main recommendations for Cybercom. These recommendations are based on the context where the IT-consultancy industry have to effectively manage the current transformation from resource-based consulting to asset-based consulting to stay relevant. As a result, it is vital to empower and invest in effective structures that foster organisational capabilities that provide customers with innovative and attractive offerings and simultaneously give the organisation competitive advantages and prosperity.

The authors have concluded three main recommendations from this study. The recommendations are:

First, establishing effective innovation management practices should be primary in Cybercom's strategy. This because the implementation of effective innovation management practices can enable a collaborative environment, common understand and decrease silo practices. Moreover, it can provide prerequisites for transforming to asset-based consulting and overall prosperity.

Secondly, Top Leaders mandate and commitment to innovation are fundamental for Leaders and Middle Leaders to practice innovation management effectively. Hence the Top Leaders stated focus on increasing innovation practices has to be realised. Not at least, Top Leaders can apply their decision-making mandate in managing innovation to invest in leadership capabilities. This indicates to be fundamental in establishing effective innovation management practices. Also, the willingness to invest in innovation should be strong because of innovation's vital role in the organisation's future prosperity.

Lastly, establishing innovation management practices in a centralised practice can provide the organisation with a holistic perspective in managing standardised innovation practices. Also, introducing several innovation management practices can mutually reinforce effectiveness. The conceptual model of effective centralised innovation management practices (Figure 5) is, therefore, what this study has implied as mutual effectiveness.

8. Further research

Innovation management is not a new phenomenon. Nevertheless, innovations are continuously emerging as the human mind, with technology as an enabler continuously identify new opportunities and realise these to successful innovations. Therefore, to facilitate and manage future innovations will be a continuous challenge, which leaves an enormous room for future research to be applied.

The authors of this study have only focused on the IT-consultancy industry, which leaves room for other industries to be studied. Also, this study is limited to an internal perspective and does not implement any customer perspective or benchmark due to time constraints. Thereby studying the IT-consultancy industry more broadly, together with an external perspective of the customers or a benchmark is interesting.

Furthermore, this study has performed interviews of the leadership in one specific IT-consultancy firm. It would, therefore, be engaging with further research of study the IT-consultancy industry in general and draw a more generalisable conclusion from it. The analysis model used in this study could be applied in a broader context and potentially generate more extensive answers on how to manage innovation more effectively. Applying the analysis model in a broader context can further enhance existing literature on the subject of innovation management.

Lastly, the theme collaboration and communication generated from the thematic analysis in this study was decided not to be studied. The decision was grounded based on that the theme was outside the authors intended subject to explore, thus considered as too time-consuming to investigate further. However, based on the empirical findings, collaboration and communication are expressed to be two influencing factors of how the leadership managing innovation management effectively. Therefore, it would be interesting for further research to investigate to what extent effective innovation management is affected by the level of collaboration and the degree of communication within organisations.

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Appendix 1 – Interview guide

GÖTEBORGS UNIVERSITET
HANDELSHÖGSKOLAN

Interview Guide for Master Thesis

Topics:

Innovation Management, Leadership & Successful Commercialized Innovation

Purpose:

Our purpose is to identify good Innovation Management practices from a leader-perspective and analyze how the Innovation Management process is practiced by leaders in an IT-consultancy firm.

Authors definition for Innovation:

The definition the authors will apply for successful innovation is a combination of Hakkarainen & Talonen's (2004) definition of how Innovation has to generate some level of added value together with Stevens & Burley's (1996) definition about how innovation is successfully commercialized when the innovation has accomplished to return its investments.

Hakkarainen & Talonen's, 2014

"Innovation is a term that may refer to a process, an attribute, or an end result. Many confuse innovation with invention. Fire was not invented by humans, but using it as a source of heat and light, and for preparing food, is certainly an innovation."

Stevens & Burley's, 1996

"...not just mean that someone is buying the product or licensing the concept, but that the concept is providing economic profit to the parent company. In other words, the money returned is greater than all the money invested in creating that product, including the cost of capital (both depreciation and opportunity cost), raw materials and manpower used throughout the entire project."

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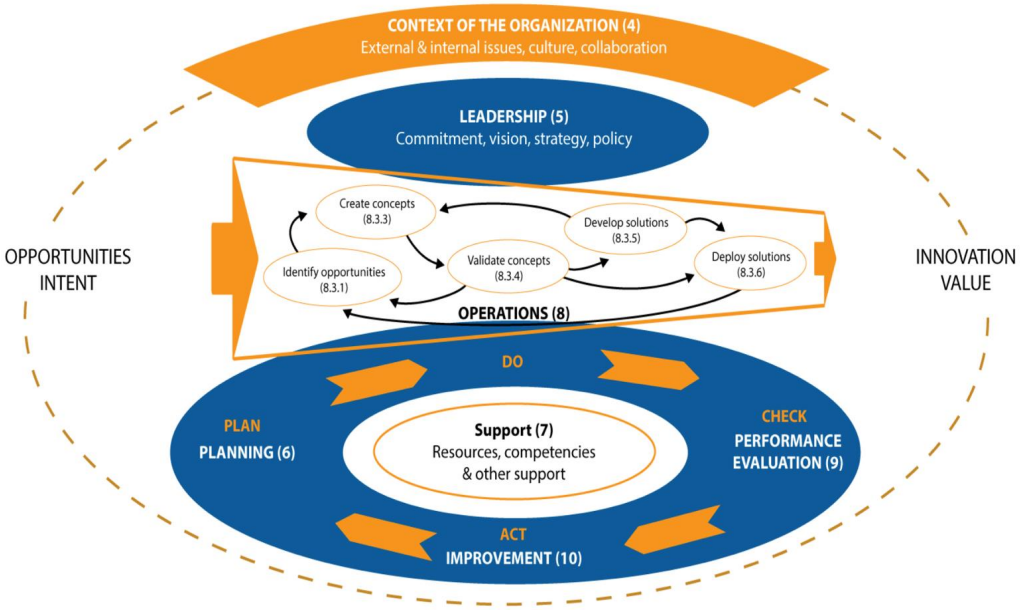
1. **Do you use a common *Innovation Management System* throughout the organization?**

(see definition of Innovation Management System from ISO below)

Definition:



Innovation Management System (IMS) by ISO 56002:2019

Above IMS process is assembled to start at Opportunity Intent and finish at Innovation Value.

The Context of the Organization, Leadership, Idea Funnel (middle) & Plan-Do-Check-Act cycle (bottom) are all simultaneously ongoing organizational processes when moving from Opportunities Intent to Innovation Value.

Source: https://www.iso.org/obp/ui#iso:std:iso:56002:ed-1:v1:en

Questions:

- If yes, do you see any similarities?
- If yes, do you see any differences?
- If yes, do you see/know any areas of improvement?
- If yes, do you have any key factors for innovation becoming successful commercialized*?*

- If no, which parts are missing, and which is applied today?
- If no, why do you think you aren't applying a full common organizational *Innovation Management System*?
- If no, can you see any benefits such as increased innovation success if implemented?

2. **How do you apply the *Innovation Management System* in your role as a manager?**
   (Not managing role: **How does your manager apply the *Innovation Management System* in his/her role as a leader?**)

Questions:

- Which leadership factors do you relate to as successful commercialized innovation?
- Which leadership skills can be improved in order to increase the level of successful commercialized innovation?
- Do you use any *Key Performance Indicators (KPI)* on innovation performance? (short term and long-term)?
- Do you believe more or less measures of performance can increase successful commercialized innovation?

3. **Would you say that the customers are a vital part of Cybercom's Innovation Management System today?**

Questions:

- Do you believe it is important/or not so important to work closely with the customer for a successful innovation outcome?
- Do you believe working close/or not close to the customer has advantages or disadvantages on the organizational resources as employees, money and time?

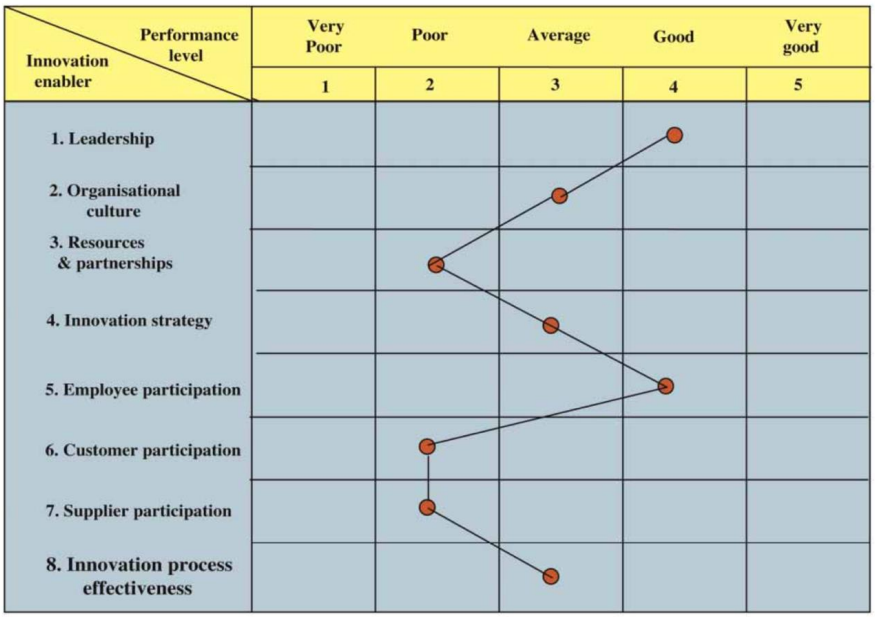
4. **Cybercom's Innovation Capability.**

Question:

This question is about rating the eight factors below from 1-5 during the interview. The goal is to analyse factors for Cybercom's Innovation Capability. Since we are conducting a qualitative research, we would like you to motivate each rate in some words. Below is an example of a scorecard with the eight "Innovation enablers" and "Performance levels" together with definitions for each factor.

Level one is "Very poor" and level five is "Very good".

Definition:



An organisation´s innovation capability profile by Dervitsiotis (2010)

Dervitsiotis (2010) eight enablers which determine an organisations Innovation Capability:

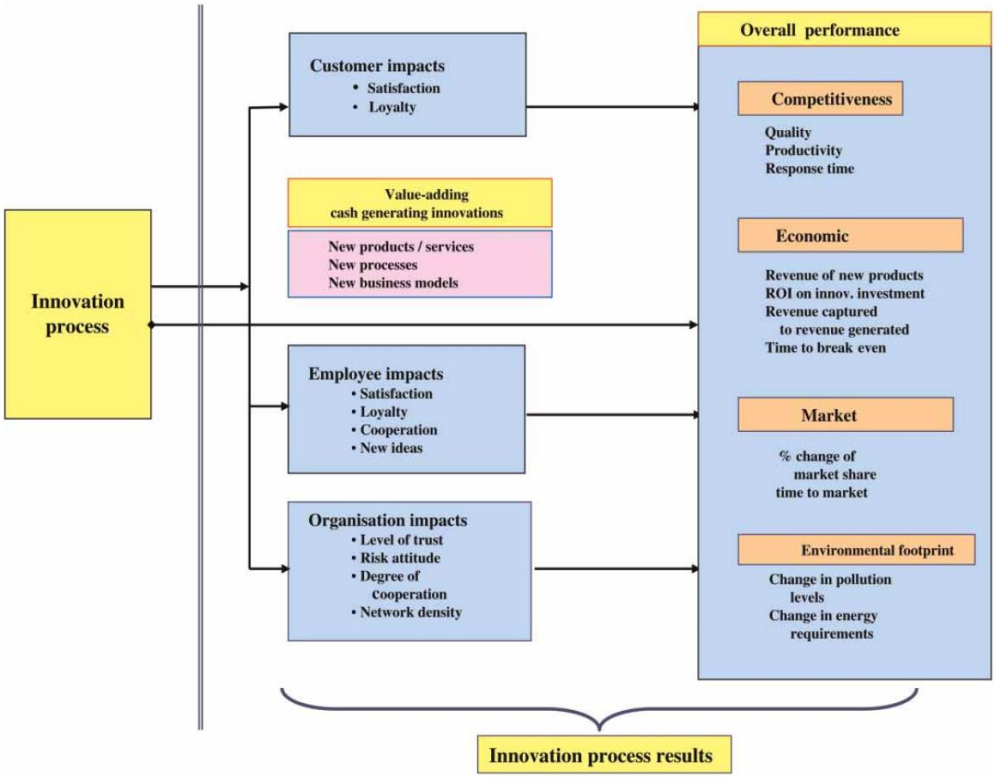
1. **Leadership –** Leadership capabilities in designing and establishing the vision, shared values, incentives for key stakeholders.
2. **The organizational culture –** Engage creative talents, foster creative an environment and manage ideas effectively. Establish risk awareness and trust in accepting experiments with new ideas, accept failure provided by educational- and ethnical diversity and willingness to share and cooperate.
3. **The innovation resources & partnership –** Internal resources are available for competence. External partnerships can complement, and strengthen organization's skills, knowledge or uniqueness.
4. **Innovation strategy** – Identifies and acts upon new opportunities. Reflects on the portfolio of innovation projects, aiming to balance risks and benefits from short-term and long-term innovation investments.
5. **Employee participation –** Valuable input for ideas and constant improvement supporting the innovation strategy.
6. **Customer participation –** Continuously generate feedback on the satisfaction of performance and products.
7. **Supplier participation –** Exploit expertise, competencies and support from partners in the development of new profitable ideas and products.
8. **Innovation process effectiveness –** Utilises all the above inputs to select the best ideas for the development of new value-adding products, effectiveness in time to market, return investments in innovation and become new streams of revenues and profits.

5. Cybercom's Innovation Results.

Below is a model from Dervitsiotis (2010) which the previous six Innovation Capabilities (see question 4) can result in or be beneficial for the organization if managed right. The Innovation Results are Customer impacts, Employee impacts, Organisation impacts & Overall performance. Also, Value adding & cash generating innovations are an established Innovation Result.

See clarifications for concepts below!

Definition:



Dervitsiotis (2010) Innovation process results

Dervitsiotis (2010) Innovation Results processes – Customer-, Employee- and Organization impacts:

1. **Customer impacts** – Impact on customers as customer's satisfaction-level from products, along with ensuring loyalty.
2. **Employee impacts –** Impact on employees' level of satisfaction, loyalty and cooperation within the organisation.
3. **Organizational impacts –** Impact on levels of trust, risk awareness, degree of cooperation, functionality and effectiveness of networks to facilitate the exchange of valuable information and tacit knowledge.

Dervitsiotis (2010) Innovation Results processes – *Overall performance*

1. **Competitiveness –** regarding quality, productivity, and response time.
2. **Economic terms** – as measured by the revenue from new products, the time to break even, the return on total investment for innovations and most critically the revenue captured relative to the revenue generated from innovations;
3. **Market performance –** as measured by the percentage (%) change of market share and time to market;
4. **Sustainable Goals (Environmental Footprint)** – as measured by the change in pollution levels and the change in requirements for energy or other critical resource from the use of the innovations. The 17 Sustainable Development Goals (UN, 2015) and the progress in each goal are a way of measuring success. Cybercom are having an internal goal of education all employees in the course "Digital Sustainability" at KTH.

Questions:

- Are you evaluating and analysing the results of the total innovation efforts? (see model above)
- If yes, is there an established model for evaluating innovation results? (see model above)
- If yes, are there any key areas that are being looked at? (see model above)

- If no, do you have any thoughts on why not?
- If no, do you believe start evaluating and analyzing the results of the total innovation efforts can have any positive effects on Cybercom's innovation performance?

6. **Are you working with the combination of both *Innovation Capabilities* (see Q4 above) and *Innovation Results* (see Q5 above)?**

Definition:

Innovation Capabilities (IC) + Innovation Results (IR) = Innovation Excellence

(Innovation Excellence is the sum if IC + IR)

Questions:

- Do you know if Cybercom analyzes *Innovation Capabilities* and *Innovation Results* together?
- If yes, how are the organization managing this analysis? And at which level?
- If no, do you believe it can be advantageous for the organization to start doing this analysis?

Appendix 2 – Thematic analysis – 81 concepts derived from 599 codes, designed by authors

	THEMATIC ANALYSIS									
	CONCEPTING LEVEL									
	Based on 53 codes	*Based 55 codes*	*Based on 67 codes*	*Based on 65 Codes*	*Based on 59 codes*	*Based on 87 codes*	*Based on 25 codes*	*Based 73 codes*	*Baed on 52 codes*	*Based on 63 codes*
CONCEPTS:	**Leader 1**	**Mid. Leader 1**	**Leader 2**	**Mid. Leader 2**	**Leader 3**	**Top Management 1**	**Mid. Leader 3**	**Leader 6**	**Leader 4**	**Top Management 2**
1	**CC need to implement an IMS**	**Customer Centricity** is where innovation happens. Our income and revenue source. (Balance CC and customer perspective thou). (Two perspectives to balance for sucesful SCI. Cust.Cent: 1. Cust. Perspective 3. CC perspective. (Innovation happens wuth our customers - invention vs. innovation).	**Increse clearity of CC communication** – communicate vision, goals, strategies clearer and more frequent to the organisation.	**Need of more systematics in the innovation process**	**Increase common/CC understanding of innovation** – increase the maturity level of innovation in CC.	**Increase innovation-activites & tools in daily processes** – IIB enable agile teams to include innovation in daily processes.	**Increase top management communication of visions & KPI's** – Align understanding of CC vision, strategy, goals. Make common understanding of what is targeted.	**Increase systematic approach at CC-level** – Use terms do define areas, iterative processes, validate competence to assure right competence at right place.	**Lack of structure and an systematic approach to IMS.** We try to work with all parts, and it is at some extent an overall description of our organisation but not in a structured way, we work towards this IMS. (CC must become better in delivering a systematic I-process as this is demanded by customers. (Imovation will give incentives for younger abilities to apply for CC.) IE would be benifitial for whole CC.)	**An systematic approach is key for SCI** (if scale-beyond-people is part of the strategy, we need a clearer communicated strategy, clearer goals, models, and how to evaluate. To reach our goals, a systematci change is required, and digitalization is an enabler.)
2	**CC & Local IZ needs systamatic processes to work with innovation.**	**No established/systematic process for following up KPI** (Unclear if for KPI innovation exists in CC. We need more KPIs to see if I-work valuable. We can then become more data driven in our decisions.)	**More systematics innovation process** – IMS. Systematic design & follow ups.	**Establish "connecting the dots"-perspective in CC for SCI** – Both globally & locally. Leadership must facilitate CtD.	**Clearer directives from top management** – Innovation vision, I-strategy, KPI´s to get there, follow up on these and improve.	**Generate common CC understanding of innovation** – will enable and foster innovation in daily business. Show relation between customers and business.	**Succesful innovation is also good branding** – Show customers & employees what we do good. This will also foster CC culture.	**Increase meaning of, and evolve freedom for IZ** – freedom to further develop delivered solutions for customer needs. Take in closed cases and improve, share knowledge.	**Innovation resource constraints. Great challange to find time working with innovation.** (Ideas wont move further because lacking resourser. Occupancy-level is in focus which makes it impossible to spend time on things who arent generating money directly. IZ-L only evalutate What has ben done, not reflecting upon How the process has progressed.)	**Not aware of any existing IMS on CC-level** (lack of communication if IMS, KPI or innovationstrategy/vison exists. PDCA has nothing with innovation to do, this is feedback and evaluation in everyday operations.)
3	**Increased customer centricity in I-process.** (Increases SCI. Target to include the customer earlier in the I-process. Good having a specifier, also financially sustainable)	**The POC bottleneck.** (POC:s often not realized - need to take to market -go-to-market-strategy is needed) As tech-company good att left I MS-side, bad at right side. As tech-company we see everything as a tech-problem = POC is solution.Tech-problem view today, we also need Business view for SCI.	**Redesign leadership competencies** – Different processes requires different leadership styles. Ex: development and go to market.	**Increase current leadership involvement & communication** – Be involved in the daily business, clear communication regarding vision & goals. Create common understandings throughout the org. Align leaders as extended arm.	**Org. culture** – unclear guidelines gives unclear culture. Allocate resources to enable creativity.	**Indentify common KPI´s for BA and IZ (generate synergies)** – Common KPI´s will foster such collab. Innovaiton is both development and business, should not be separated.	**Icrease IZ Systematic approach, also include other departments** – idea generation, follow-ups, iterative processes, open up for departments outside IZ. Balance money, employees, and time.	**Become smarter in identifying and designing offerings** – Find more efficient ways of identifying the real value and work towards it. Validate simultaneously to improve.	**Silos for IZ-sites around CC. We use much resources to synk with other IZ-sites.**	**Its not clear how CC works with an I-strategy noir I-vision** to effectivise CC-operation. We target to become succesful in contributing with I to our customers, in their I-processes, but I don't experience that we have any vison/strategy for our I-progress. (Innovation-vision does not exist, its not clear and arent communicated throughout the organisation.)
4	**CC Leadership should increase common understanding for SCI.**	**Leadership CC** needs to establish a more systematic approach to I-work. Iterative processes established in operation though. (Foster Leadershipskills is communication-, internal-sales- & pitching internal skills. Goos that our culture accept failure)	**Implement a common CC understanding of innovation** – The organization should share the same understanding of the importance of innovation.	**Org culture** – foster collaborations between sites, departments, leaders etc. to gain synergies effects.	**More business perspectives/thinking** – seeing beyond tech problems, integrate innovation in more departments.	**Increase & clarify internal CC communication** – Top management have to communicate to get the org on the same road. Clear vision, strategy, global KPI's etc.	**Apply & manage different leadership styles** – assure right person at right place. Enable knowledge sharing.	**Transform focus & competence for CC-leadership for SCI** – from Resource-based-, to Asset-based consulting, make CtD possible and give tools and time. Balance between explore and exploit.	**Focus on specializing on specific customers systems, not on how consultants may share experiences and develop I in IZ.**	**Need clear Leadership i.e. goals & milestones (KPI) to reach SCI.** (Their have to exist a clear vision of why certain goals exists, and how it is of great importance to follow them, otherwise no idea. E.g. transformation from asset-based-consulting to scale-beyond-people. Their is a value for CC to having more central I-KPI:s. I-work requires goal and evaluation were the goal is to selling an MVP to the customer. --> A clearer innovationprocess requires cleares goals, we need a clearer goal and be able to ensure a clearer inflow of ideas, and how do we value those ideas, how do we prioritize them and how do we act on those we choose, and how do we accelerate outcomes? we make it a result of that?)
5	**IZ generates silos in CC today, and works uneffectively.**	**Unclear if for KPI innovation exists in CC** (We need more KPI:s to see if I-work is valuable => We can then become more data driven in our decisions. No established/systematic process for following up KPI).	**Foster innovation culture** – Enable space for creativity, access to leaders, ok to fail, invest in individual ideas to foster motivation.	**Increase meaning of, and evolve IZ** –Make it part of core business, get rid of the mark as being "bus stop". Give incentives to develop, e.g KPI: managers bonus decrease if hours spent in IZ not utilizes. Enable knowledge transfer.	**Define & evolve IZ's role in CC** – IZ role today is to strive for increased knowledge, not innovation. Integrate IZ in the daily business.	**Increase systematic processes** – common approach, common followups, adjustable locally but towards same vision and goals. Structure for all above. Measure performance and results and evaluate.	**Increase BA & IZ collaboration (synergies)** – Vital for SCI, need common KPI´s, work together, be evaluating together. Learn from eachother.	**CC should become ustomer centricity experts** – About knowing your customer, look at value creation potential not solutions for problem, not following their strategy. You should guide not be guided. Important when heading towards ABC.	**SCI has to allow an long-term focus, and not only strive for short-term money.** (It is very important to carry out the innovation work going forward. In the short term, it does not make money, so there must be a long-term perspective in what we do. One must be prepared that it must cost a little to be able to make money in the future. There is a great openness to it in the company, both from the owner and the management, which is a security.)	**If CC realizes the value of innovation, then it will be prioritized.** (today innovation is not prioritized due to resource constrainsts and CC not understanding the value of it. (breaking out I-work from the org. can generetate in a more systematic approach. (i.e. IZ?))
6	**IZ is currently increasing local IZ-collaborations.**	**Leaderships main focus is not innovation** (too few leaders foucs on innovaiton. We lack I-strategy, focus on POC instead. Tech-problem view today, we also need Business view for SCI).	**Global & Local KPI's** – Set clear and reachable global KPI's, let them direct local KPI's.	**Develop common CC understanding of innovation** – The value of letting innovation permeate every project. Innovation vs. Invention.	**Increase systematics in the innovation process** – KPI's directed to performance, common KPI's globally, and similar but few more locally. Follow up more frequently, internal and with customers.	**More space in org. culture required** – Give space for realization, motivate and invest, long term view.		**Increase network-denisity** – Both supplier, employees and partners, enable knowledge sharing.	**Leaders has to understand innovation, which demands hard work.** (Educating staff in I result in more I-discussions with customers --> The importance of a common understanding of innovation)	**IZ should focus on radical-, infront of incremental innovation & CC:s offer products/services** (IZ does not work with CC:s offer or product/service innovation. Identifying new revenue-streams with radical effect. What is the difference between business consulting and incremental innovation?)
7	**Local & CC I-KPI:s** (Each IZ-L has 7 KPI:S, also a CC I-sumit from Management. Each quater all IZ-L present and discuss IZ KPI:s)	**Innovation is not ROI.** (We invest in R&D, but low level of SCI)	**Increase customer centricity in CC** – Include the customer earlier in the process, start with identification of value.	**Clearer and more focused KPI's** – Global and local level. Global KPI's should be understood all over the org. Local should be aligned across sites and CC-	**Customer centric approach** - Focus on value creation from the beginning.	**Increase customer centricity processes, if managed correctly** – Good for SCI. We have to focus on value creation instead of short term satisfaction.		**Merge innovation-, and business strategy** – shared goals, shared KPI's, measure common performance.	**"How to prove our value to customers?"** (today we want tu build long-term relations with our customers. We want to show our capacity, not only follow their requirements but also declare we understand their needs, not only the techn, this to better than they do to be able to deliver more valuable solutions for today's and tomorrow'sbusiness.	**Customer centricity is everything when working with SCI.** Why should we waste time on something which does not generate any value? (Customers can have unrealistic visions, where we have to trust our strategy and resources, but we still ned to validate our i-progess). (Koppla till Tarmos customer centricity?)
8	**Organization culture** (The culture should be including and fun. It is also branding.)(Relate to the creative space? occupancy-thinking? Asset-based consulting vs. Scale beyong people?	**Lacking idea-champions** (No idea-owners, no bad-guys driving ideas forward even if managment does not agree. We need this.) We are not bad att generating ideas, but bad at communicating them thru out CC (citera)	**Evaluate CC innovation** – Globally and Locally, same effort should be put on the performance and the results, as the idea generation.	**Customer centricity managed with balance** – focus on value when developing, keep customer close early, balance expectations with own beliefs.		**Increase cross-site collaboration** – cross functional collab. between sites key for SCI.			**Trend of customers asking what CC can offer.** (often IZ design a POC to present a potential solution. Also, hard to attract new cusotmers.)	**We need a long-term need-based approach, instead of short term monatary approach to stay competetive tomorrow. Market will change.** (relate to transformation asset-based-consulting vs. scale-beoynd people, occupancy-level & creative space. To be perceived as an trusted business partner, we need to develop our own organisation).
9		**Our IMS-approach is a bit narrowed, and not yet structured.**	**Widen, and increace competence in IZ.** Let IZ become part of core business. Not just competence development			**Increase meaning of, and evolve IZ** – more employee participation, integrate to core business, set goals and measure performance.			**Creative space for employees is important.** (The more people manage to get involved, generating a sense of greater freedom among our employees. It is important to get to express ideas on daily-basis, which gives a feeling of a little luxury in everyday work --> gives a higher employee satisfaction.)	**Current org. cultur fosters innovation, but lack an systematic approach to.**
10		**Genreating more I for our csumters would make us more competiable** (They still want there "daily" problems to be solved, but if we are able to contribute more to theirs problem we might take on more market shares. (+IR)).								

Appendix 3 – Thematic analysis – 5 themes derived from 81 concepts, designed by authors

THEMATIC ANALYSIS

THEMES

	Top Management 2	Mid. Leader 1	Top Management 1	Leader 4	Leader 3	Leader 6	Leader 2	Mid. Leader 3	Mid. Leader 2	Leader 1
1	**An systematic approach is key for SCI** (if scale-beyond-people is part of the strategy, we need a clearer communicated strategy, clearer goals, models, and how to evaluate. To reach our goals, a systematci change is required, and digitalization is an enabler.)	**Customer Centricity** is where innovation happens. Our income and revenue source. (Balance CC and customer perspective thou). (Two perspectives to balance for sucesful SCI. Cust.Cent: 1. Cust. Perspective 3. CC perspective. (Innovation happens wuth our customers - invention vs. innovation).	**Increase innovation-activites & tools in daily processes** – IIB enable agile teams to include innovation in daily processes.	**Lack of structure and an systematic approach to IMS.** We try to work with all parts, and it is at some extent an overall description of our organisation but not in a structured way, we work towards this IMS. (CC must become better in delivering a systematic I-process as this is demanded by customers. (Innovation will give incentives for younger abilities to apply for CC.) IE would be benifitial for whole CC.)	**Increase common/CC understanding of innovation** – increase the maturity level of innovation in CC.	**Increase systematic approach at CC-level** – Use terms do define areas, iterative processes, validate competence to assure right competence at right place.	**Increse clearity of CC communication** – communicate vision, goals, strategies clearer and more frequent to the organisation.	**Increase top management communication of visions & KPI's** – Align understanding of CC vision, strategy, goals. Make common understanding of what is targeted.	**Need of more systematics in the innovation process**	**CC need to implement an IMS**
2	**Not aware of any existing IMS on CC-level** (lack of communication if IMS, KPI or innovationstrategy/vison exists. PDCA has nothing with innovation to do, this is feedback and evaluation in everyday operations.)	**No established/systematic process for following up KPI** (Unclear if for KPI innovation exists in CC. We need more KPI:s to see if I-outcome is valuable. We can then become more data driven in our decision-making.)	**Generate common CC understanding of innovation** – will enable and foster innovation in daily business. Show relation between customers and business.	**Innovation resource constraints. Great challange to find time working with innovation.** (Ideas wont move further because lacking resourser. Occupancy-level is in focus which makes it impossible to spend time on things who arent generating money directly. IZ-L only evalutate What has ben done, not reflecting upon How the process has progressed.)	**Clearer directives from top management** – Innovation vision, I-strategy, KPI's to get there, follow up on these and improve.	**Increase meaning of, and evolve freedom for IZ** – freedom to further develop delivered solutions for customer needs. Take in closed cases and improve, share knowledge.	**More systematics innovation process** – IMS. Systematic design & follow ups.	**Succesful innovation is also good branding** – Show customers & employees what we do good. This will also foster CC culture.	**Establish "connecting the dots"-perspective in CC for SCI** – Both globally & locally. Leadership must facilitate CID.	**CC & Local IZ needs systematic processes to work with innovation.**
3	**Its not clear how CC works with an I-strategy noir I-vision** to effectivise CC-operation. We target to become succesful in contributing with I to our customers, in their I-processes, but I don't experience that we have any vison/strategy for our I-progress. (Innovation-vision does not exist, its not clear and arent communicated throughout the organisation.)	**The POC bottleneck.** (POC:s often not realized - need to take to market -go-to-market-strategy is needed) As tech-company good att left IMS-side, bad at right side. As tech-company we see everything as a tech-problem = POC is solution.Tech-problem view today, we also need Business view for SCI.	**Indentify common KPI's for BA and IZ (generate synergies)** – Common KPI's vill foster such collab. Innovation is both development and business, should not be separated.	**Silos for IZ-sites around CC. We use much resources to synk with other IZ-sites.**	**Org. culture** – unclear guidelines gives unclear culture. Allocate resources to enable creativity.	**Become smarter in identifying and designing offerings** – Find more efficient ways of identifying the real value and work towards it. Validate simultaneously to improve.	**Redesign leadership competencies** – Different processes requires different leadership styles. Ex: development and go to market.	**Icrease IZ Systematic approach, also include other departments** – idea generation, follow-ups, iterative processes, open up for departments outside IZ. Balance money, employees, and time.	**Increase current leadership involvement & communication** – Be involved in the daily business, clear communication regarding vision & goals. Create common understandings throughout the org. Align leaders as extended arm.	**Increased customer centricity in I-process.** (Increases SCI. Target to include the customer earlier in the I-process. Good having a specifier, also financially sustainable)
4	**Need clear Leadership i.e. KPI & milestones to reach SCI.** (Their have to exist a clear vision of why certain goals exists, and how it is of great importance to follow them, otherwise no idea. E.g. transformation from asset-based-consulting to scale-beyond-people. Their is a value for CC to having more central I-KPI:s. I-work requires goal and evaluation were the goal is to selling an MVP to the customer. --> A clearer innovationprocess requires cleares goals, we need a clearer goal and be able to ensure a clearer inflow of ideas, and how do we value those ideas, how do we prioritize them and how do we act on those we choose, and how do we accelerate outcomes? we make it a result of that?)	**Leadership CC needs to establish a more systematic approach to I-work.** Iterative processes established in operation though. (Foster Leadershipskills is communication-, internal-sales- & pitching internal skills. Good that our culture accept failure)	**Increase & clarify internal CC communication** – Top management have to communicate to get the org on the same road. Clear vision, strategy, global KPI's etc.	**Focus on specializing on specific customers systems, not on how consultants may share experiences and develop I in IZ.**	**More business perspectives/thinking** – seeing beyond tech problems, integrate innovation in more departments.	**Transform focus & competence for CC-leadership for SCI** – from Resource-based-, to Asset-based consulting, make CID possible and give tools and time. Balance between explore and exploit.	**Implement a common CC understanding of innovation** – The organization should share the same understanding of the importance of innovation.	**Apply & manage different leadership styles** – assure right person at right place. Enable knowledge sharing.	**Org culture** – foster collaborations between sites, departments, leaders etc. to gain synergies effects.	**CC Leadership should increase common understanding for SCI.**
5	**If CC realizes the value of innovation, then it will be prioritized.** (today innovation is not prioritized due to resource constrainsts and CC not understanding the value of it. (breaking out I-work from the org. can generetate in a more systematic approach. (i.e. IZ?))	**Unclear if for KPI innovation exists in CC** (We need more KPI:s to see if I-work is valuable => We can then become more data driven in our decisions. No established/systematic process for following up KPI).	**Increase systematic processes** – common approach, common followups, adjustable locally but towards same vision and goals. Structure for all above. Measure performance and results and evaluate.	**SCI has to allow an long-term focus, and not only strive for short-term money.** (It is very important to carry out the innovation work going forward. In the short term, it does not make money, so there must be a long-term perspective in what we do. One must be prepared that it must	**Define & evolve IZ's role in CC** – IZ role today is to strive for increased knowledge, not innovation. Integrate IZ in the daily business.	**CC should become customer centricity experts** – About knowing your customer, look at value creation potential not solutions for problem, not following their strategy. You should guide not be guided. Important when heading towards AR	**Foster innovation culture** – Enable space for creativity, access to leaders, ok to fail, invest in individual ideas to foster motivation.	**Increase BA & IZ collaboration (synergies)** – Vital for SCI, need common KPI's, work together, be evaluating together. Learn from eachother.	**Increase meaning of, and evolve IZ** –Make it part of core business, get rid of the mark as being "bus stop". Give incentives to develop, e.g KPI: managers bonus decrease if hours spent in IZ not utilizes. Enable knowledge transfer.	**IZ generates silos in CC today, and works uneffectively.**
6	**IZ should focus on radical-, infront of incremental innovation & CC:s offer products/services** (IZ does not work with CC:s offer or product/service innovation. Identifying new revenue-streams with radical effect. What is the difference between business consulting and incremental innovation?)	**Leaderships main focus is not innovation** (too few leaders fouca on innovaton. We lack I-strategy, focus on POC instead. Tech-problem view today, we also need Business view for SCI).	**More reflective space in org. culture required** – Give space for realization, motivate and invest, long term view.	**Leaders has to understand innovation, which demands hard work.** (Educating staff in I result in more I-discussions with customers --> The importance of a common understanding of innovation)	**Increase systematics in the innovation process** – KPI's directed to performance, common KPI's globally, and similar but few more locally. Follow up more frequently, internal and with customers.	**Increase network-denisity** – Both supplier, employees and partners, enable knowledge sharing.	**Global & Local KPI's** – Set clear and reachable global KPI's, let them direct local KPI's.		**Develop common CC understanding of innovation** – The value of letting innovation permeate every project. Innovation vs. Invention.	**IZ is currently increasing local IZ-collaborations.**
7	**Customer centricity is everything when working with SCI.** Why should we waste time on something which does not generate any value? (Customers can have unrealistic visions, where we have to trust our strategy and resources, but we still ned to validate our i-progess). (Koppla till Tarmos customer centricity?)	**Innovation is not ROI.** (We invest in R&D, but low level of SCI)	**Increase customer centricity processes, if managed correctly** – Good for SCI. We have to focus on value creation instead of short term satisfaction.	**"How to prove our value to customers?"** (today we want to build long-term reltations with our customers. We want to show our capacity, not only follow their requirements but also declare we understand their needs, not only the techn, this to better than they do to be able to deliver more valuable solutions for today's and tomorrow'sbusiness.	**Customer centric approach** - Focus on value creation from the beginning.	**Merge innovation-, and business strategy** – shared goals, shared KPI's, measure common performance.	**Increase customer centricity in CC** – Include the customer earlier in the process, start with identification of value.		**Clearer and more focused KPI's** – Global and local level. Global KPI's should be understood all over the org. Local should be aligned across sites and CC-	**Local & CC I-KPI:s** (Each IZ-L has 7 KPI:S, also a CC I-sumit from Management. Each quater all IZ-L present and discuss IZ KPI:s)
8	**We need a long-term need-based approach, instead of short term monatary approach to stay competetive tomorrow. Market will change.** (relate to transformation asset-based-consulting vs. scale-beoynd people, occupancy-level & creative space. To be perceived as an trusted business partner, we need to develop our own organisation).	**Lacking idea-champions** (No idea-owners, no bad-guys driving ideas forward even if managment does not agree. We need this.) We are not bad att generating ideas, but bad at communicating them thru out CC (citera)	**Increase cross-site collaboration** – cross functional collab. between sites key for SCI.	**Trend of customers asking what CC can offer.** (often IZ design a POC to present a potential solution. Also, hard to attract new cusotmers.)			**Evaluate CC innovation** – Globally and Locally, same effort should be put on the performance and the results, as the idea generation.		**Customer centricity managed with balance** – focus on value when developing, keep customer close early, balance expectations with own beliefs.	**Organization culture** (The culture should be including and fun. It is also branding.)(Relate to the creative space? occupancy-thinking? Asset-based consulting vs. Scale beyong people?
9	**Current org. cultur fosters innovation, but lacking an systematic approach.**	**Our IMS-approach is a bit narrowed, and not yet structured.**	**Increase meaning of, and evolve IZ** – more employee participation, integrate to core business, set goals and measure performance.	**Creative space for employees is important.** (The more people manage to get involved, generating a sense of greater freedom among our employees. It is important to get to express ideas on daily-basis, which gives a feeling of a little luxury in everyday work --> gives a higher employee satisfaction.)			**Widen, and increace competence in IZ.** Let IZ become part of core business. Not just competence development			
10		**Genreating more I for our cusumters would make us more competiable** (They still want there "daily" problems to be solved, but if we are able to contribute more to theirs problem we might take on more market shares. (+IR)).								

5 THEMES BASED ON CONCEPTS AND CODES
SYSTEMATIC WAY OF WORKING
STRATEGY
LEADERSHIP CAPABILITIES
COMMON UNDERSTANDING
COLLABORATION & COMMUNICATION
CONCEPT CONSTITUTES OF MORE THAN ONE THEME

Appendix 4 – Analysis model, designed by authors

Analysis model – Exploring relationships between Theoretical frameworek & Empirical Findings in Innovation Management from a Leadership perspective

Empirical findings / Theoretical Framework	Systematic way of working	Strategy	Leadership Capabilities	Common understanding
INNOVATION MANAGEMENT FRAMEWORKS				
Innovation Management Systems (IMS)		**L1, L1, ML1, L4, ML9, Majority, TM**		**ALL**
Leadership (Innovation- vision, strategy, commitment & policy)	ALL	(ALL) TL1, L5, ML9, TL3	ALL (- L1 & L5) L1, L5, ML1, TL2, Tl1, L3, L2, ML1, L2	ML9
Context of organisation (external & internal issues, collaboration)			TL2	Majority
Stage Gate + Funnel			ML3, L2	
Plan, Do, Check & Act-cycle			ML1	
Innovation Excellence (IE)				ALL
Overall Innovation Capability level (IC)	ALL	L1, TL2, TL1, L2, Majority, TM1, L3		
(IC) Leadership (overall capabilities level)	TL1,TL3		ML1, L3, TL1, L2	(ALL)L5,TL3,L4,ML9,L2,ML2,
(IC) Organisational culture	TL1		L1	ML8
(IC) Resources & Partnerships			L2	
(IC) Innovation Strategy	TL3,L5,L6,ML9,L10	(ALL)ML2,TL1,ML9,L7,L6,TL3	TL1, L3, L3	ML9,TL3,
(IC) Employee Participation				TL1,
(IC) Customer participation				ML9
(IC) Supplier participation				
(IC) Innovation process effectiveness	TL3,L5,L6,ML9,L10			ALL
Overall Innovation Results (IR)	ALL		L2, Majority, TM1	
(IR) Employee impacts	L6,			
(IR) Organisation Impacts	L6,			
(IR) Overall performance	TL3,All except ML9			L5,TL3,L4,
INNOVATION MANAGEMENT CONCEPTS				
Customer Centricity	ALL	(All)ML2,TL3,ML9,TL1,		(ALL)TL1,ML8,L6,L10,L7
Measuring & Evaluating	(Majority) ML8,ML2,		L4	
Towards Asset-based consulting	L5,L6,TL1 (Half of the Leaders)		L2	

Appendix 5 – The ISO Framework (ISO 56002 standard., 2019), illustrated by authors