

# How can the CFO be a valuable ally for innovation?

A multiple-case study on what current methods CFOs are using for fostering  
innovation in an organisation.

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# Abstract

Globalisation, digitalisation and rapid advancements in technology are creating faster business environments which demand organisations to be more innovative. At the same time, it has been proven difficult for companies to successfully manage innovation. To accomplish innovation, different resources are required from the organisation and the top management team. One key player in the top management team is the Chief Financial Officer (CFO), which is responsible for the financial ambit of a company. Traditionally, the CFO has focused on minimising risk, controlling budgets and delivering good financial figures in quarterly reports. CFOs tend to work with short time horizons, which doesn't support the longer term thinking often required for successfully designing and implementing innovation.

Research suggests that the role of the CFO has evolved during the recent decade and that the modern CFO possess bigger responsibilities for fostering innovation. However, contemporary reports also indicate that few CFOs understand exactly how their actions can promote innovation, and many think this responsibility is challenging. By providing a multiple-case example of six Swedish mid-sized and large enterprises, this report aims to provide an increased understanding of what methods CFOs are using for fostering innovation. Furthermore, the report will investigate how the found methods relate to five different elements of innovation; *innovation strategy, people culture and organisation, ideation, selection and implementation*. These elements are identified by the Pentathlon Framework for innovation.

The findings indicate that the CFOs of the case-companies have a rich understanding of innovation and experience having a large responsibility for these endeavours within their organisations. Furthermore, the results show that CFOs are more directly involved in the *selection and implementation* phase of innovation rather than the *ideation*-phase. For ideation, influence by the CFO is more indirect through higher-level tasks. Regarding innovation strategy, the findings show that separate strategies for innovation do not exist within the case-companies. Rather, innovation is incorporated in the overall business strategy. Regarding *people, culture and organisation*, the findings show that CFOs are concerned with promoting the right corporate culture and have direct influence over organisational structures i.e. through setting structure for reporting.

The methods which have been found in the research that CFOs use for fostering innovation are: Establishing a language for innovation to institutionalise a definition, use corporate culture as a control system, standardising internal processes, fostering a learning organisation, knowledge management through digitalisation efforts, exercising leadership that show failure is OK, participating in resource allocation that consider additional values, engaging in project management through financial control and lastly to impose measurements and surveillance systems in the overall business.

Keywords: *Innovation, Chief Financial Officer (CFO), Innovation Management, CFO methods for innovation, Pentathlon Framework, Innovation Control Systems.*

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# 1. Introduction

*The introductory chapter will provide the background of the research which is followed by a narrower problem definition. This segment includes the research purpose and states the two research questions formulated for fulfilling the research aim. Conclusively, the chapter present the research contribution, delimitations and disposition.*

## 1.1 Background

Megatrends of globalization, digitalisation, demographic shifts and rapid advancements in technology are changing the competitive landscape for organisations in all sectors. Additionally, developing technologies like *big data analytics*, *AI*, *robotics*, *3D printing*, *industry 4.0* and *cloud computing* are rapidly increasing the speed of the business landscape today. (Dhaundiyal, 2019) The need for being innovative, managing change, creating new products, methods and processes are consequently more critical for organisations today than ever. (Deloitte, 2016) Many companies think innovation is the best way to deal with the faster business environment and achieve growth. However, it has been proven greatly difficult for organisations to successfully manage innovation. (Goffin & Mitchell, 2017) Especially mid-sized and large companies struggle with the challenge of exploiting new businesses and innovate. This is because these companies must look at two directions at once, with one face towards the existing and the other towards seeking the new. (Garvin & Levesque, 2006) A large volume of publications has been issued within the field of innovation management with the aim of helping companies with the aforementioned challenges. (Goffin & Mitchell, 2017) Every new tool for innovation management has been promoted as the “one solution” to innovation issues. Companies, therefore, tend to fall into the trap of adopting whatever best practices that is on the innovation agenda at the moment. (Pisano, 2015). Instead, managers should adopt innovation management strategies and tools which are adequate to their company’s specific environment. (Goffin & Mitchell, 2017)

Another problem with innovation is that there is no consensus around the definition of the concept. Innovation entails various different bearings for different organisations, and it is easy to get confused with the concept. (Goffin & Mitchell, 2017) Therefore it is adequate to introduce a framework as guiding support for the meaning of innovation. Goffin & Mitchell (2017) have produced a perspicuous framework which distinguishes that innovation compromise five different elements. The framework is called the Pentathlon Framework for Innovation and it will be used in this research as a guide for the concept of innovation. The purpose of using the framework is to clarify what part of innovation that is being investigated. The Pentathlon Framework describes that for an organisation to be successful with innovation, it must manage five different elements simultaneously. These elements of innovation are generating innovative ideas (*ideation*), selecting an innovation portfolio (*selection*) and implementing innovations (*implementation*). On top of this, the organisation must decide upon an overall *innovation strategy* as well as create a *culture and organisation* for innovation. To

succeed with these five different elements, different support from the organisation is required. (Goffin & Mitchell, 2017)

### 1.1.1 The evolving role of the CFO

To underpin all the elements of successful innovation management, different resources must be available. Two of them being financial resources and adequate leadership from the top management team. One key player in the top management team, or C-suite, is the Chief Financial Officer (CFO). The CFO is an executive which is responsible for overseeing the financial ambit of the company. The position entails having responsibility for managing financial actions, including financial planning. (Hazel, 2014) Furthermore, the traditional role of the CFO entails conducting analyzes of the financial status of the company. Preferably, he or she should in relation also suggest actions to correct deviations from the business strategy. The CFO is responsible for managing the finance and accounting divisions as well as ensuring the accuracy of financial reports. The CFO is generally also a great support to the CEO of an organisation in providing forecasts, cost-benefit analyses and incurring funds for organisational initiatives. Although this description of what the role entails seems general, it is important to note that the CFO-role is very dependent on the context of the organisation. (Hazel, 2014) As with innovation, the responsibilities and scope of the CFO-role vary largely depending on the size of the organisation. (Deloitte, 2016) Therefore, it is appropriate to limit the scope of research with regards to the size of the organisation. This research will exclusively focus on mid-sized and large companies which are classified according to the European Union as enterprises with more than 50 persons employed. (Eurostat, 2016)

Another trend that determines the roles and responsibilities of a CFO is the digitalization. In particular, the digitalisation of the finance function. Automatization of processes in the finance department has implied that the role of the CFO and the requirements of the position have changed. The digitization of the finance function is expected to be ongoing and increase in the future. (Chandra et al., 2018) It is expected that 40 per cent of financial activities like cash disbursement, revenue management and general accounting can be fully automated, and another 17 per cent can be mostly automated. (Accenture, 2018) This development implies that CFOs can move away from being operational. Instead, they can work towards simplifying core internal transactions by establishing standardised reporting mechanisms and work more efficiently. For example, rather than taking time to generate standardised reports by hand, financial controllers can use automated information to engage in higher-level tasks, such as considering how to address red flags or strategic matters. The level of digitalisation of the finance function is a determinant for the extent of how much a CFO have time for engaging in the organisation's strategy. (Chandra et al., 2018)

The trend of digitalisation has had a dramatic influence on the role and responsibilities of the CFO during recent years. In a survey by Accenture (2018), it was observed that the current finance transformation allows CFOs to get away from day-to-day activities and focus on what strategically matters to the business (Accenture, 2018). Deloitte (2016) have investigated the role of the modern CFO and concluded that it comprises four different faces. Traditionally the role of a CFO involved to function as a *steward* and an *operator*, but today the role should also embrace the function of a *strategist* and a *catalyst*. This means that beyond controlling critical

assets and maintaining an efficient finance function, the CFO should provide financial leadership in strategic questions, as well as creating innovation endeavours. (Deloitte, 2016)

### 1.1.2 The role of the CFO in Innovation

The evolving role implies that CFOs can possess a bigger responsibility in the work of fostering innovation in the organisation. A reason as to why innovation has landed on the table of the CFO can be traced to the knowledge that this role possesses. The knowledge of a CFO is useful when making strategic planning, including forecasting trends, creating strategic capabilities and looking for future opportunities. (Shelton & Percival, 2013) The insights provided by the CFO can be useful for linking financial investments, strategy to innovation. Consequently, the CFO can have a more important role in fostering innovation than the other C-suite members. (Accenture, 2018)

In a survey conducted by Shelton and Percival (2013) it has been described that few CFOs understand exactly how their actions can promote innovation, and many think this task is challenging. For example, it is not rare that financial investments are not understood by the overall business and therefore are questioned in the short term. Furthermore, commonly used tools of financial analysis can destroy a firm's capacity to do new things and innovate. (Christensen et al., 2008) To justify long term investments in innovation projects, it is the CFOs responsibility to make the business understand what the investments can lead to for the business to grow. (Shelton & Percival, 2013) An organisation often claim that they invest in the future, yet short-term financial goals are still prioritized. (Accenture, 2018)

The development of the role has created new opportunities for the CFO in advancing an organisation's innovation efforts. New skills and capabilities have been added to the innovation tool-box, but it has not been widely explored how these are being used in practice. (Deloitte, 2016) In a report by Global Finance (2019) it has been described that stimulating innovation in an organisation has become a balancing act for the CFO. Competing priorities must be balanced, such as continuously investing for future growth, but at the same time meet short-term revenue goals. (Accenture, 2018)

## 1.2 Problem definition

The role of the CFO has evolved because of technological advancements and particularly the digitalisation of the finance function. Today the role encompasses a variety of new responsibilities, and one following effect is that the CFO can become increasingly important for fostering innovation in an organisation. (Deloitte, 2016) Few CFOs understand exactly how their actions can promote innovation and think this additional responsibility is challenging. (Accenture, 2018) At the same time, more companies and managers recognize that innovation initiatives are necessary for responding to disruption driven by new technologies, and to compete in the long run. (Ciancio, 2019) However, innovation initiatives frequently fail and successful innovators cannot sustain their performance. (Pisano, 2015) Since managing

innovation has been proven hard to compass for organisations, and is recognized to be increasingly important, it is a topical subject for managers today. (Shelton & Percival, 2013)

In particular, it is interesting to study how CFOs at mid-sized and large companies are coping with the challenge of fostering innovation. The role of the CFO has evolved and the position requires balancing competing goals such as short-term financial results and investing for future growth. Nevertheless, how this is done today in Swedish companies, have not yet been widely explored. Likewise, there is not much contemporary academic research describing how CFOs should work for fostering innovation in organisations. The suggestions which have been provided are according to the authors' opinion somewhat incoherent, and not directed particularly to the role of the CFO. As previously described, many methods for innovation are presented as the "one-solution" for how the C-suite, including the CFO, should operate in order to be successful in innovation. Furthermore, according to several reports published by the biggest global consultancy firms, CFOs are struggling with how they should handle their increased responsibility for being successful in innovation.

### 1.2.1 Research purpose

Thus, the purpose of the research is to investigate what methods that are currently being used by CFOs in Swedish mid-sized and large companies for fostering innovation. In addition, the purpose is to compare the found methods with contemporary academic literature. Furthermore, this research will particularly investigate how methods used by CFOs to foster innovation can relate to the Pentathlon framework and the five different elements of innovation. The Pentathlon framework is therefore pivotal in the research.

By providing a multiple-case example with six different cases and insights from an innovation expert, the final objective with the research is to offer useful insights and an increased understanding of what methods CFOs can use to foster innovation in an organisation.

### 1.2.2 Research question

With regards to the background and described problem, the two research questions of this report have been formulated as follows:

1. What methods do CFOs use to foster innovation in Swedish mid-sized and large companies today?
2. How do the methods of CFOs relate to the five different elements of the Pentathlon Framework?

### 1.3 Research contribution

Innovation is required in a fast business environment to stay competitive. At the same time, it is a concept which definition can be difficult to grasp. Research suggests that modern CFOs have received a large portion of responsibility for innovation endeavours in organisations. However, many think this additional responsibility is challenging. This report will provide a perspective from CFOs in Swedish organisations and scrutinize if they are experiencing that they are responsible for innovation. If affirmative, what methods do they use to meet those requirements? By outlining those methods for fostering innovation, the research will contribute to an increased understanding of the role of the CFO and innovation, in Swedish mid-sized and large organisations.

### 1.4 Delimitations

Several delimitations have been determined to provide the study with boundaries for an adequate research scope. The delimitations shape inferences drawn from the findings.

It has been described in the background that the role of the CFO recently has changed, primarily as a consequence of the digitalisation. However, the research aims to look into what methods that are currently being used by CFOs to foster innovation. Thus, the first delimitation is not to investigate how the role of the CFO has changed. Rather, the research will assume that it has changed and that this development has implied a bigger responsibility for fostering innovation.

The second delimitation of the research is the organisations chosen for investigation. It has been described that "innovation" and "the role of the CFO" are two concepts which have different bearings depending on the size of the organisation. The largest differences are found between enterprises with less or more than 50 employees. (Thomson, 2013) Therefore, the

research will only include mid-sized and large organisations. The classification of the enterprise's size provided by the European Union and is defined according to the number of employees in the organisation. I.e. "mid-sized organisations" of 50 - 249 employees, and "large organisations" of 249 employees or more. Smaller enterprises have been excluded.

Since the aim is to empirically investigate what methods are currently used by CFOs today and compare with contemporary research, the research will not provide a general management-guide to a CFO. Instead, the objective is to provide reasoning around what methods can be used to foster innovation, and what insights must be made about the organisation to apply them.

## 1.5 Structure of the report

An introductory chapter has been outlined which have presented the current background of the study, problem discussion, research question, as well as the purpose of the study. The following second chapter explains the chosen research method, selection of respondents (the CFOs), the applied research approach, and the design of the research. Furthermore, how the data has been analysed is also explained in this chapter. The third chapter presents the literature review which covers contemporary research in the field. The fourth chapter outlines the empirical findings of the data gathering process. The fifth chapter will cover the analysis followed by a discussion based on empirical findings in relation to the literature review. The sixth and final chapter of the report consists of conclusions. This last chapter aims to summarise relevant findings and present them with regards to the research question, describe the contributions of the research together with suggestions for future research.

## 2. Methodology

*The methodology chapter provides an explanation of the methods used for conducting the research as well as the reasoning behind the choices made. Firstly, an outline of the research strategy will be presented. Secondly, the choices of research design are provided. Following an explanation of the actual methods for data collection. Lastly, an outline of the data analysis and discussion around research quality is given. To summarize, this research is a qualitative multiple-case study which follows an inductive approach that has collected both primary and secondary data.*

### 2.1 Research strategy

The choice of research strategy describes which general guidelines that have been followed when conducting the research. The first decision which had to be considered was to determine the relationship between theory and research, e.g. whether to adopt an inductive or a deductive approach. The research is exploratory, with limited previously given theory at hand since the relationship between CFOs and innovation not have been extensively researched on an academic level. This implies that the aim of the research is more general and appellate to generate descriptive evidence through observations. Rather than to test a produced and accepted theory published in the field. Therefore, the decision is to follow an inductive approach. The choice of the inductive approach implies that the generation of theory is attendant to the observations of the phenomenon studied (Bryman & Bell, 2011). It would be practically difficult to pursue a deductive approach, taking into account that limited research has been published on the topic and that the field of research, e.g. the role of the CEO and innovation is in an evolving stage.

The next issue considered when determining the research strategy was whether to use a qualitative or quantitative approach. Again, with considerations to the evolving stage of the research area, the research is more of an investigation carried out to provide descriptive findings. A qualitative approach was therefore found to be the most suitable method to employ. According to Eriksson and Kovalainen (2015) the qualitative methodology approach is most adequate when the aim is to answer an identified question and the complexity that surrounds it within a certain context. In this case, it is the role of the CFO for fostering innovation within the context of their organisation. Similarly, a quantitative method is suitable when pursuing a deductive approach, usually through testing theories at the base of some defined hypothesis. When the data being studied is quantifiable and can be categorized in numbers a quantitative research strategy would be more suitable. (Bryman & Bell, 2011)

Furthermore, qualitative approaches are more suitable when exploring the organisation, which is appropriate since this research adopts the focus of the organisation and the organisational role of the CFO. Adding to this, the qualitative study enables the researcher to collect and investigate different sources including the study of real-world cases and the story of its participants. The investigation considers the experiences and knowledge of CFOs in organisations and the reliability of the research is increased because of this. The research

strategy allows for theories to emerge during the way, as more data is being collected by qualitative interviews and by compiling existing data. (Bryman & Bell, 2011)

Criticism towards the qualitative approaches is that the research is difficult to replicate and conclusively, the results cannot be generalized. Despite this, the qualitative approach will still be the most suitable for this research since the aim is to gain insights and not to develop a general theory. Another criticism that must be considered before pursuing the qualitative approach is the risk of the research results being subjective. To reduce the subjectiveness is something that has been taken into aspect when setting up the research design and research methods. The measures which have been taken for reducing subjectiveness are explained below, primarily in chapter 2.5.

## 2.2 Research design

The research design that is conducted for this research is a multiple case study, which is a common choice in business research where a qualitative approach is adopted. A multiple case study is an extension of the single case study, which use only one source for empirical findings. On the contrast, the multiple case study uses several sources to investigate a contemporary phenomenon within a real-life context. (Bryman & Bell, 2011) Since the relationship between CFOs and innovation is unexplored, the method is considered the most suitable for this research. When using several cases to create the empirical findings, another research design presented by Bryman and Bell (2011) can be used, this is the cross-sectional design. Since the focus of this research is on the specific cases and their unique contexts the multiple case study is a more suitable method. If the emphasis instead would be on producing general findings with little regard for the unique contexts of the individual cases, a cross-sectional design would be more suitable.

To get insights and thoughts from several CFOs, we chose to interview six CFOs from different organisations, about how they work with innovation and foster this in their organisations. In addition, an interview was conducted with an expert in the field to get more knowledge about innovation and how innovation works in an organisation. The choice of study multiple cases was made because it increases the generalizability of the research. (Bryman & Bell, 2011)

## 2.3 Research methods

### 2.3.1 Data collection

The research has involved both processes of collecting primary- and secondary data. For the secondary data, a comprehensive literature review was conducted consisting of scientific articles and previous studies on the field of innovation and the role of the CFO. This was done with the aim of obtaining a pre-knowledge of the research topic before studying it in practice.

Qualitative semi-structured interviews were held with CFOs from six different organisations to create the empirical findings of the study which together with the literature review will answer the study's research questions.

### 2.3.2 Secondary data collection

A narrative literature review was with the aim of gaining more knowledge of the subject before starting with the task of collecting primary data. It is necessary according to Patel and Davidsson (2003) that this is done to chart the research field's current state and to get a view of the field from different author's perspective before a process of collecting primary data is started. The literature search is a systematic process of identifying existing knowledge on a certain topic (Collis & Hussey, 2013), and the knowledge obtained from the literature review gave the benefit of having greater flexibility to modify the research boundaries during the sequential study. This is beneficial in a multiple case study.

When conducting a literature review, it is important to be source-critical and not rely too much on the literature presented in the field, but rather see the subject from other spectrums as well. (Patel & Davidsson, 2003) To get a comprehensive and full overview of the research field, the literature review did not only involve academic publications. Consultancy reports from professional services companies were also used to obtaining a comprehensive overview of the research field. Despite these reports having the risk of being biased, they are considered to be contemporaneous and up to date with their publications and observations. This is because they rapidly seize trends in the actual business environment, and including these perspectives in the research will, therefore, contribute with an up-to-date perspective for the research. However, to ensure the trustworthiness of the information, consultancy reports exclusively published by the six largest professional services companies in the world was used. These consists of Deloitte, Ernst & Young, KPMG, PricewaterhouseCoopers, Boston Consulting Group, Accenture and McKinsey. Furthermore, these reports were read with an awareness of that the conclusions in the reports can contain ulterior motives. Primarily facts and figures were therefore used from the consultancy reports and brought into the research, rather than citations of conclusions.

It was important that the literature review was made as exhaustive as possible. The main databases for collecting secondary data was: Google Scholar, Emerald, Business Source Premier, JSTOR, Sage Journals Online and "Supersök" by the University of Gothenburg.

We also studied references to consultancy reports and references of articles, to find additional sources that would be useful in the research. This was done to get a deeper immersion into the research field. The number of citations was deliberated when the ranking of the different articles and reports were made. Before the process of collecting data, different inclusion- and exclusion criteria were decided upon to ensure transparency in the process, these are summarized in the table on the following page.

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> <li>• Peer-reviewed journals</li> <li>• Articles published in academic journals</li> <li>• Articles published by an official executive body (i.e. Eurostat)</li> <li>• Articles published by consultancy firms (exclusively published the big 4, BCG and McKinsey)</li> </ul>	<ul style="list-style-type: none"> <li>• Sources that do not cover “innovation, innovation management”, “management control systems” or “CFOs”.</li> <li>• Not written in English or Swedish.</li> </ul>

*Table 1: Summary of inclusion and exclusion criteria.*

### 2.3.3 Primary data

Several semi-structured interviews were performed to collect the primary data for the research. Using semi-structured interviews was useful since the aim is to find out “why” rather than “how many” or “how much” (Fylan, 2005). Furthermore, using semi-structured interviews allowed a focus on a specific set of topics, but also a large degree of flexibility in integrating further insights. (Bryman & Bell, 2011) The semi-structured interviews were conducted in different ways. The initial intention was to conduct the interviews with the respondents in face-to-face settings. This would provide the best quality of data since it enables a more nuanced way of communicating. What is said in dialogues is partially expressed through body language and facial expressions. In a face-to-face setting, these nuances can be adequately captured. (Bryman & Bell, 2011) However, with regards to the outbreak of the Corona-virus during the research period i.e. spring 2020, the possibilities to meet face-to-face with respondents were highly restricted. Therefore, only two of seven conducted interviews were held face-to-face, while the remaining interviews were held in a virtual setting. Conducting the interviews through a virtual setup, however, was not considered to compromise the quality of data. In fact, there can also be advantages of having the respondent located in a comfortable setting during the interview. For example, the respondent may not feel as stressed as during a physical meeting (Bryman & Bell, 2011).

Collecting primary data through qualitative interviews was suitable since it enables focus on the respondents’ opinions and opens for answers with much detail. All the interviews were recorded and transcribed since it improves the objectivity in the data collection. Furthermore, an iPhone App called Voice memo was used to record the interviews, to ensure that the dialogues were adequately captured. This enabled that the interviews could be listened to again. Also, the playback function was essential for the further transcription of interviews.

Conducting interviews with both CFOs and an expert meant that two different interview guides had to produce, which were adapted according to the role and context of the respondent. In the interview guides, we tried to make sure that there was room for flexibility, but also a structure to ensure that relevant topics were included. The two interview guides can be found in Appendix 2 and 3. To avoid difficulties during the interviews, we tried to be as prepared as possible and both the interview guides were tested in trial versions with a pilot-respondent. The pilot-respondent was asked about feedback to modify or delete questions included in the

interview guides. It was also valuable for us to get an insight into what answers the questions would result in. Doing a pilot interview made the formulation of the questions better, the interview process was improved and the outcome of collecting primary data. The respondent of the pilot-interview was selected based on its role as a business controller since it was important that the occupation of the respondent was similar to that of a CFO.

## Sampling

When determining who to interview, a purposive sampling strategy was applied. This decision was made with regards to the context and nature of the research. The purposive sampling strategy was suitable since it allows gathering information from specific actors which can help in reaching the research objectives. The purposive sampling is based on previously decided criteria about who to interview, for example, what profession the person has or what knowledge the person possesses. (Bryman & Bell, 2011) Even though the purposive sampling strategy potentially is biased (Ilker et al., 2016) it was nonetheless the most suitable for this research, since the knowledge of the selected respondents would help in answering the research question.

The criteria used when searching for interview objects were that the respondent had to work as a CFO. Furthermore, the CFO should be occupied in the area of Gothenburg, since the initial ambition was to conduct all interviews face-to-face. Additionally, a requirement was that the CFO should be operating in an organisation with more than 50 persons employed i.e. be an SME or Large organisation. The organisational size was a determinant since being a CFO entails many variations depending on the size of the organisation. For instance, a CFO in a smaller organisation is typically more operational in his or her profession and perform more activities of a business controller. (Blanchard, 2014) A limitation regarding what industry the case company should operate in was not made. Stipulating such a requirement was not considered to help in reaching the objectives of the research, but rather limit the scope of findings around the role of the CFOs and innovation.

To obtain a more comprehensive view on the concept of innovation, an innovation-expert was included in the research. The criteria when searching for an innovation-expert was that he or she should not be occupied as a CFO. Instead, the person should be experienced in working with innovation in another position. The aim was to include real-life experience of how organisations work with the concept of innovation. Furthermore, the expert should provide knowledge about how organisations look at innovation, not from the perspective of a financial manager. We had previously been in contact with Staffan Davidsson, who is an innovation consultant that have been working with innovation in different organisations for the last 25 years. He has been working as an innovation manager at Volvo Cars (large-cap car manufacturer), and most recently, as an innovation consultant at NM66 with clients of different sizes. Therefore, he fit the profile of our requirements and was contacted. The expert provides with contributions and accounts of what has worked for being successful with innovation through real examples. Furthermore, the expert has in his role countered the interception of innovation and the responsibilities of a CFOs in organisations. Another important motivation for including the innovation expert is to obtain a nuanced picture on the role of the CFO, from a person that is not occupied as a financial officer, to have a less biased view.

## Interview guides

Before conducting the interviews, two different interview guides were created with the research questions and literature review in mind. The guides can be found in Appendix 1 and 2, and consists of an introduction of the researchers and the field of study and what focus the research has. Further, it is explained how the interviews are structured and how the different sections of the interviews are set up. We chose to structure these in six different segments, starting with broad and introductory questions about the CFOs role at the specific organisation. This was done to provide a context and background of the respondent. The second part involved questions regarding the innovation strategy that may be present in the organisation and the third part concerned the people, culture and organisation in relation to innovation. The fourth part was about how ideation is stimulated in the organisation and what role the CFO has in this work. The fifth part concerned the selection process of creative ideas and the final part involved questions regarding how innovation is implemented.

To get as much out of the interviews as possible it was found valuable to spend much time on formulating the questions in a way that would be easy for the CFOs to understand. To fulfil this, the questions were designed to be open and neutral. (Bryman & Bell, 2011) Even though the interview guides consisted of many questions, there was still room for discussion and follow up questions, which is recommended by Bryman and Bell (2011).

## Interview process

The interview process started with a search for suitable respondents. Having the sample requirements in mind, approximately twenty CFOs in the area of Gothenburg were approached on the social media platform LinkedIn. The CFOs which responded was then contacted by e-mail (Appendix 5). When the request for an interview was accepted, a date was agreed upon for the following interview. The settings of the interviews are presented in table (2) and as can be seen in the table, all interviews were held in Swedish. The interviews were then recorded and the focus could thus be fully directed towards the respondent during the interview, which is recommended by Bryman and Bell (2011). Having a presence in the interview made it easy to ask follow-up questions and much information out of the interviews.

Transcriptions were made after the interviews and it was then possible to start coding and analyzing the data. Kvale and Brinkman (2014) emphasize that when making transcriptions, predetermine rules should first be established to enable consistency and comparability in the transcribing. It was therefore decided to transcribe the interviews word by word, i.e. exactly what has been said was written down, without adding any element of interpretations in the transcription phase. Furthermore, having accurate transcriptions was especially important since the interviews were held in Swedish and thus had to be translated.

Coding of the transcriptions was conducted according to the process described in detail in section "Data Analysis 2.4". Respondent validation was carried out to seek corroboration and increase the credibility of the findings. When interviewing people from specific organisations there is always a risk for subjectivity, though this is decreased by having the respondents validating the information presented in the empirical findings. The final report was sent by email to the respondents for validation before the research was published.

Interviewee	Role	Appointed (year)	Number of Employees	Date and duration	Location	Language
Joakim Wahlberg	CFO at Pulsen AB	2019	1403 (2019) i.e. large enterprise	2020-02-27 1 h 12 min	Face-to-face	Swedish
Fredrik Sjudin	CFO at Platzer Fastigheter AB	2018	67 (2019) i.e. mid-sized enterprise	2020-03-02 1 h 05 min	Face-to-face	Swedish
Susanne Hartog	CFO at Estrella AB	2018	186 (2019) i.e. mid-sized enterprise	2020-04-17 48 min	Virtual meeting (Phone)	Swedish
Carl Björnfors	CFO at Findwise AB	2017	87 (2019) i.e. mid-sized enterprise	2020-04-16 59 min	Virtual meeting (Skype)	Swedish
Mats Wittholt	CFO at Liseberg AB	2018	1112 (2019) i.e. large enterprise	2020-04-18 56 min	Virtual meeting (Skype)	Swedish
Esko Österbacka	CFO at New Bubbleroom Sweden AB	2019	51 (2019) i.e. mid-sized enterprise	2020-04-23 50 min	Virtual meeting (Microsoft Teams)	Swedish
Staffan Davidsson	Innovation Consultant at 66NM Design AB	n/a	n/a	2020-03-16 49 min	Virtual meeting (Skype)	Swedish

Table 2: Interview setting with respondents

## 2.4 Data Analysis

Thematic analysis has been conducted for analysing the data, which according to Bryman and Bell (2011) is the most used method in qualitative research for data analysis. The thematic analysis involves detecting major trends in the data. The trends are identified and categorized into themes according to the frequency of their occurrence in the data. It is, therefore, a flexible application and suitable for explorative research. The coding process of the research can be found in Appendix 4.

Pursuant to Bryman and Bell (2011), there is no right or wrong when doing a coding process, it can be done in only a few steps or by using several. We chose to follow an approach presented by Gioia et al. (2012), which structures the primary data in first-order concepts, second-order themes and lastly in aggregate dimensions. When doing the coding for this research, we chose to only use the two first steps presented by Gioia et al. (2012), since the structure of the interview guides gave us the aggregate dimensions. As can be seen in Appendix 4, the aggregated dimensions consist of: *Level of digitalisation of the finance function, Description of the CFO role, Definition of innovation, Measuring innovation, Innovation strategy, People culture and organisation, Ideation, Selection and Implementation.*

In the first-order concepts, the respondents' phrases were in focus and create the concepts, these can turn out to be many and a feeling of confusion can arise in this first step of the process. As the process progresses, similarities, differences and repetition are looked for among the

concepts and create themes. (Gioia et al, 2012) According to Bryman and Bell (2011), repetition is essential to search for, but it should not be used as a criterion when identifying different themes. The themes are helpful in order to understand the collected data by describing what has been observed in the research. (Gioia et al, 2012) When creating themes, it was important that these were pertinent to the research to be useable in the report. The coding process creates a structure of the collected data and by showing it in a visual table it is easier to follow the process and its different steps, from raw data to different themes that are later used when conducting the analysis.

It is beneficial to do a thematic analysis because it makes the data organised and important details can be sorted out, at the same time as the data becomes more transparent. It is a flexible method and by using coding the data can be quickly overviewed (Appendix 4).

## 2.5 Research quality

An assessment of the research's quality is done by looking at *reliability* and *validity*, which are important aspects that have been considering to achieve high quality. It is maintained through continuous work with the aspects throughout the whole research. It is essential to look at the objectives of the two aspects to get an overview and therefore reliability and validity are discussed in more detail below.

### 2.5.1 Reliability

The reliability concerns the research replicability, if the research is done several times, it should in as large extent as possible result in the same results. To ensure reliability the information in the study should be collected by reliable methods. As the research is of qualitative character, it is not possible to measure how reliable the research is by quantitative methods, it is rather about how data has been collected and further how this has been processed. (Bryman & Bell, 2011) By using semi-structured interviews the replicability can be weakened, but since standardised interview guides were used, the replicability is strengthened. To strengthen this, even more, all steps taken in the collection of the primary data, e.g. the interviews have been explicitly outlined and presented as detailed as possible to increase the trustworthiness. In general, the results of qualitative research should according to Bryman and Bell (2011) not be replicated, this is though not the purpose of the research, it is rather to offer useful insights and an increased understanding of what methods CFOs should use to foster innovation in an organisation. This is done by using a multiple-case study of six different cases, why the results can not be replicated. (Bryman & Bell, 2011)

When discussing reliability, an important aspect to consider is the credibility of the research. This can be negatively affected by both the respondents of the interviews and by the authors. (Bryman & Bell, 2011) To eliminate the risk of decreased credibility, the recordings from the interviews have listened to several times and the important parts were written down. If misinterpretations were discovered, the respondents were given the opportunity to change the content before this report was published.

## 2.5.2 Validity

Validity concerns whether the research identifies observe or measure what it claims to do. (Bryman & Bell, 2011) Since the research is of qualitative character it becomes extra important to illustrate the research field in a decent way. (Silverman, 2004) To ensure good validity, the starting point was to create a logical connection between the research questions and the purpose of the research. This was done by selecting relevant literature based on the research's purpose, which also served as a necessary base for constructing the interview-guides. The approach ensures that deviations from the field being studied are avoided. Internal validity as being described by Bryman and Bell (2011) is a measure of how good the findings of the literature review connect to the empirical findings. Good internal validity was achieved by keeping contact with an expert in the field of innovation throughout the research.

For the external validity to be high, it should be possible to generalise the findings of the research to a large extent. (Bryman & Bell, 2011) Though when considering qualitative research, complete validity can never be achieved, instead one should strive for a certain level of validity. In this research, the findings are only applicable to this specific research. The research involves a limited sample of CFOs being interviewed, why the generalisability is considered low. Rather than presenting generalisable results, the findings create an increased understanding of how CFOs can foster innovation by providing insights.

### 3. Literature review

*This chapter covers key concepts and frameworks which will be useful for developing a general understanding of the topic innovation. Furthermore, the section will recite what previously published academic theories have presented in the subject of CFOs and innovation. The content outlined in this chapter is crucial to building up the guidelines for data collection and the reasoning of data analysis. In the first part, “the role of the CFO” will be described as well as an explanation of how it has recently developed. The second part will explain the subject area “innovation”. Lastly, an outline of “methods used to foster innovation” will be given. Contemporary academic research has identified numerous practical methods for how a CFO can foster innovation in an organisation. The methods fall under the two categories “leadership” and “control systems”. Lastly, a summary table of these methods will be provided.*

#### 3.1 The CFO

The CFO is the senior executive which oversees the finances of a company and decides on what associated actions to take. There are many different opinions about what the role of the CFO should entail. On a general level, common responsibilities are tracking cash flow and financial planning. (Hazel, 2014) Furthermore, the CFO usually conduct analyses of the company’s financial strengths and weaknesses. The role is in somewhat similar to a business controller in that the CFO is responsible for managing the finance function and division of a company. This includes ensuring that the company’s financial reports are accurate. The traditional role of the CFO entails responsibility for ensuring that a company conformed to accounting practices and compliance. (Blanchard, 2014) While these responsibilities and tasks are still important for the CFO, the role has been extended because of the ongoing digitalisation. Especially, the digitalisation of business and financial processes in organisations. (Deloitte, 2016)

Because of the digitalisation, Proctor (2014) has identified a trend implying that CFOs today tend to function in other tasks, that were previously not related to the traditional work by the officer of the finance department. Such responsibilities include formulating business strategies. (Proctor, 2014) CFOs have evolved into strategists which have the responsibility of keeping their companies positioned for growth opportunities. They have seen their influence in strategic decision-making increase, particularly as their role has expanded into providing insightful analytics. (Blanchard, 2014; Shipman, 2017) It can be concluded that because of the digitalization, the CFOs role is more fast-paced, far-reaching and broader in impact across the whole organisation. (Accenture, 2018) The modern CFO must effectively and strategically manage an increasingly complex financial system, and it is a tough balancing act. (Proctor, 2014) Managing internal complexity includes dealing with for example legacy systems, needs of stakeholders, business risks and support operating models. (Blanchard, 2014)

Furthermore, CFOs are expected to add value through blending financial reporting with analysis and insights needed to develop a dynamic, realistic corporate strategy. On top of this, the CFOs is today also expected to take a larger responsibility in creating innovation by giving

their organisation the right resources to innovate. Considering the changed responsibilities of the CFO, the position today represents a more important role for fostering innovation. It is therefore crucial that the CFO understand the concept and what it entails for the organisation. (Gabriel, 2019) This complexity around the definition of innovation requires the CFO to discard preconceptions about what innovation means. (Shelton & Percival, 2013) As previously discussed in this report, innovation has different bearings for different organisations and the concept can, therefore, be difficult for a CFO to grasp. (Gabriel, 2019)

## 3.2 Innovation

Even though CFOs can have difficulties in comprehending what innovation means for their organisation, they still recognize it is becoming increasingly important for competing in the long run. (Deloitte, 2016) Innovation is associated with benefits like providing strategic value, increase revenue, efficiencies, evade competition, reducing financial risk and increase customer satisfaction. (Klapalová & Škapa, 2018) Being successful in innovation has been proven difficult for organisations to encompass. (Goffin & Mitchell, 2017) According to a study by Deloitte (2016), about 95% of innovation attempts fail to return their capital. High failure rates and innovation initiatives which frequently fail might discourage organisations. To compromise things further, research has shown that successful innovators have a hard time sustaining their performance. Furthermore, measuring the progress of innovation output is difficult and there are not always sufficient tools at hand for evaluating a potential market (Pisano, 2015). The dilemma is that innovation is unpredictable by nature, and cannot easily be quantified. Going into a new market space or doing something that has never been done before is difficult to estimate with any degree of confidence. (O’Sullivan, 2009)

As there is no single definition of innovation, it is useful to introduce a classification of the concept. Defining innovation is difficult since it comes in a different variety of forms, and have a lot of separate stakeholders. Therefore, there are several different definitions to choose from. One definition of innovation provided by the Oslo Manual (OECD 1997) describes that: “An ‘innovation’ is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations (Oslo Manual OECD, 1997)“. The Cambridge English Dictionary simply defines innovation as “the use of a new idea or method”. (Cambridge Dictionary, 2020) These definitions of innovation are broad, and it is difficult to know what is referred to when discussing innovation with such a wide definition. Therefore, a classification model of innovation is useful. One that has been widely adopted was first established by Tushman & Anderson (1986) and differentiate innovation in two categories. The categories are different according to the degree of innovation novelty. In this classification, innovation can be either incremental or radical. Incremental innovation involves making improvements to existing products, services and processes, or new products or services that address the same existing markets. Doing what is already done, in a better way. Radical innovation is about developing new products or services for markets that do not yet exist, or new business models that transform markets. (Goffin & Mitchell, 2017) Radical innovations are more rare and difficult to develop. They have a higher risk profile, often involve a longer time horizon and unexplored markets. (Kristiansen et al, 2018)

A common misconception about innovation is that it is only about new products, usually created within the research and development space. (Shelton & Percival, 2013) However, innovation rise from different sources. For example, customer interactions or bottlenecks, and they compromise not only products but also new services, processes and business models. There are different dimensions of innovation and except being products, services, processes or business models. These are examples of different dimensions of innovation. (Goffin & Mitchell, 2017)

### 3.3 The Pentathlon Framework

As presented in the background, the Pentathlon Framework for Innovation introduced by Goffin & Mitchell (2005) will be used in this research as a guide for the concept of innovation. The purpose of using the framework is to clarify what part of innovation that is being investigated and discussed. The Pentathlon Framework identifies that innovation management involves five different elements, namely: *i) innovation strategy, ii) people, culture and organisation, iii) ideas generation, iv) selection and v) implementation.*

The Pentathlon Framework describes how innovation is compared to a funnel, “the innovation funnel” which starts with an idea and then goes through the process of selection and implementation. All stages are supported by an overall innovation strategy, as well as enabled by the right culture, people and organisational structure. (Goffin & Mitchell, 2017) Within the different elements of innovation, there are different types of risks to consider. Furthermore, to succeed within the elements of innovation, different resources and capabilities are required. Therefore, to achieve growth through innovation must successfully manage all the different elements, and cannot just be successful in one part. (Goffin & Mitchell, 2017)

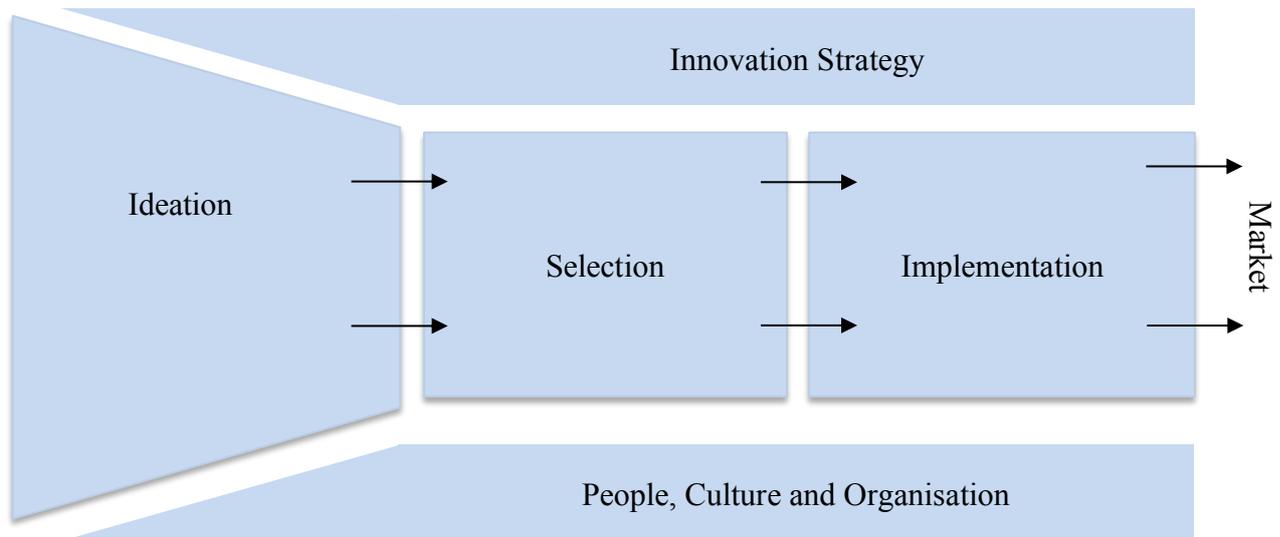


Figure 1: Illustration of the Pentathlon Framework, compiled by the authors.

### 3.3.1 Innovation Strategy

Creating an innovation strategy is a profound element of the Pentathlon Framework as it is shaping and influencing the other elements. It guides the elements of the innovation funnel e.g. the idea generation, project selection and implementation phase. (Goffin & Mitchell, 2017) Determining the innovation strategy involves that managers must assess the future, to clarify their options and choose a robust path. Furthermore, the innovation strategy should determine when and where innovation is required to meet the aims of the organisation. (Goffin & Mitchell, 2017) The innovation strategy can be part of the overall business strategy or separated. In an interview made by Deloitte (2014), Geoff Tuff talks about the CFOs involvement in the strategy process. Tuff describes that innovation strategies preferably should be part of budgets, forecasts and other areas of responsibilities that the CFO usually has. In a survey conducted by HSBC and CFO Research in 2019, it was shown that out of 236 CFOs in the U.S a large portion (57%) of the CFOs said that they were highly involved in formulating a strategy for defining and creating a high-value finance team that could support innovation initiatives. (Muskett, 2019) The CFOs were identified in the research as key stakeholders in the development of the company's innovation strategy. Pisano (2015) identified in an article published in Harvard Business Review that an organisation's capacity for innovation stems from an innovation system. I.e. a coherent set of interdependent processes and structures that dictates how the company searches for novel problems and solutions, synthesizes ideas into a business concept and product designs and selects which projects get funded. (Pisano, 2015)

### 3.3.2 People, culture and organization

It is the people, teams and organisational culture that make innovation happen. Senior managers and CFOs need to accurately diagnose their organisational culture, encourage the right employee behaviour and give employees the means to drive innovation. (Goffin & Mitchell, 2017) As with the element *innovation strategy*, the element of people, culture and organisation also constitute a support for the process of the innovation funnel, e.g. *ideation*, *selection* and *implementation*. Having the right people, culture and organisational structure is, therefore, a keystone for successful innovation endeavours. (Goffin & Mitchell, 2017)

### 3.3.3 Ideas Generation

The first phase of the innovation funnel identified in the Pentathlon Framework is the the “ideas generation phase”, or “ideation phase”. In this first stage of the innovation process, it is important that the organisation manage to produce ideas for innovative projects. Having a business environment that motivates employees to come up with innovative ideas, without feeling the fear of failure is crucial in the early phases of the innovative process. Having an environment where employees get blamed for bad ideas will never lead to a desired innovative culture. (Goffin & Mitchell, 2017) Pursuant to an article published by PwC (2013), it is not unusual for CFOs to bury ideas in an early phase, because of the eagerness to play the role as devil's advocate when new ideas are brought up. The CFO should instead encourage idea generation by asking supplementary questions that promote the idea proponents to develop their ideas further. (Shipman, 2013)

### 3.3.4 Selection

The sequential phase following the ideation phase in the innovation funnel of the Pentathlon Framework is the selection phase. This phase involves selecting the most promising ideas for innovation and evaluating possible risks and returns related to the different projects. (Goffin & Mitchell, 2017) The CFO knows what drives the business finances, and therefore constitute as an adequate person for deciding which ideas are worth pursuing. (O’Sullivan, 2009) Selecting the best ideas involves three challenges. The first is to decide which individual project or idea that is interesting in themselves. The second challenge is to choose the set of projects that best meets the overall needs of the organisation and the strategy. Choosing the set of projects is called creating a portfolio. The third challenge is to keep the engagement of the people involved, and especially those whose projects are not bet on. (Goffin & Mitchell, 2017)

### 3.3.5 Implementation

The last part of the innovation funnel is the implementation stage. Implementing innovation involves a change of gear in the organisation, which now must be able to turn an innovative idea into reality. Goffin & Mitchell (2017) have identified that the process of making an innovative idea come alive should be treated as a project. Furthermore, each implementation project should have its own objectives, resources and leadership. Therefore, successful innovation implementation requires good project management with cross-functional cooperation. (Goffin & Mitchell, 2017) More radical innovations require other resources from the organisation than the standard ones. The requirements from the organisation must be recognized by the top management, and by the CFO. (Langley, 2015)

## 3.4 How CFOs can foster innovation

Several methods have been found in contemporary research for how CFOs can foster innovation in practice. According to the theoretical findings, a CFO foster innovation primarily in two ways, through” leadership” as well as through implementing” control systems” for innovation. Within these two categories, several topics have been found which contains different methods for fostering innovation. The suggestion of topics and methods provided in this section is not exhaustive. However, it provides an overview of suggestions for methods which a CFO can use for fostering innovation. The methods and their practical implications are compiled in a table at the end of this section.

### 3.4.1 Leadership for innovation

About leadership for innovation

*For a CFO to successfully foster innovation in an organisation, having adequate leadership is essential. (Smith et al, 2008) The following section describes an academic proposition of what leadership for innovation entails for a CFO. The research has identified that “permissive leadership” or using “sponsorship” could be important methods for fostering innovation.*

### Permissive leadership-style

A CFO in an organisation has a key role in establishing the tone at the top around the innovation culture. The CFO can actively encourage innovation through his or her daily actions as a top manager. (O'Sullivan, 2009) Leaders and CFOs face contradictory challenges when it comes to leading for innovation. They might be under pressure to improve existing products incrementally, and at the same time invent radically new products based on business models (Smith et al, 2008).

An article published by Smith (2012) about innovation-driven leadership identifies that leaders should drive innovation through their daily actions. Obstacles to innovation is according to Smith (2012) failure to understand stakeholders, aversion to risk-taking and poor execution of ideas. Leaders play an important role and the leadership-style must create the circumstances that encourage innovation. Leaders activities should inspire people to question assumptions, think differently, dare to experiment and acquire the help they need to get the job done. (Smith, 2012) Employees often feel scared to express new ideas which are why many good ideas are never brought up. Having an environment where employees feel that they can express themselves is necessary for innovation, rewarding lessons learned is therefore important. (Goffin & Mitchell, 2017) Fear of failure is one of the greatest enemies of innovation. Showing it is okay to make mistakes will have a great impact on employee behaviour. (Smith, 2012) Therefore, as part of a permissive leadership-style, the CFO should notify and appraise what has been learned, even in failed projects. (Goffin & Mitchell, 2017)

### Sponsorship

One way for CFOs to engage in the best ideas and chose these for the business to focus on is to work with sponsorship. According to a study by Deloitte (2017), the CFO needs to give much thought into which activities to engage in and encourage, which can be done by using sponsorship. Instead of taking the role as a leader of a project for a new idea or solution, the role includes more of an indirect leadership for the CFO. The method implies that the CFO takes the responsibility of choosing the context of a new project, but have others lead and steer the project. In this way, the CFO select the best ideas for the business but also let other in the business get the responsibility of developing the ideas into successful projects. The activity can contribute to new behaviours that the CFO wants to manifest in the organisation and the ideas that the CFO wants to develop further and implement in the business can be amplified by using sponsorship. (Deloitte, 2017)

## 3.4.2 Control Systems for innovation

### About control systems for innovation

One important job of the CFO is to ensure that the company conform to accounting practices and compliance with regulations and strategies. To perform this task, the CFO can apart from having adequate leadership also use several different control systems. A control system can be described as a set of formal and informal input, process and output controls that are used by management, e.g. the CFO to achieve organisational goals. (Chenhall & Moers, 2015) There are several management control systems which have been identified to promote innovation if they are applied in the most adequate way. Applying a contextualised control system is

essential for facilitating innovation in an organisation. (Chenhall & Moers, 2015) Different control systems are required at different stages in the innovation work (initiation, ideation, elaboration, implementation). However, limited research is done on the differences in control system design for the innovation stages. This section presents a review of what control systems methods a CFO can use for fostering innovation, identified in the academic research.

#### Portfolio management and resource allocation

The modern CFO has an important role in determining what innovation projects to allocate resources to. CFOs must bring their knowledge about risk and return in day-to-day operations to the innovation portfolio strategy. (Goffin & Mitchell, 2017) The task of allocating resources is particularly complicated since many of the traditional tools used by a CFO in financial analysis has been proven to destroy a firm's capacity to innovate. (Christensen et al., 2008) There are in particular three common financial tools which have been identified to create a systematic bias against innovation through their application. These are the discounted cash flow (DCF) and net present value (NPV) models. The calculation of fixed and sunk costs, as well as the emphasis on earnings per share (EPS). These common financial tools are inappropriate for making judgements of investments with longer time-horizons and they compound to the CFOs conflict of meeting short vs. long term goals. (Christensen et al., 2008) It is important that finance leaders consider innovation when they apply capital investment tools. New ideas sometimes take a while before they generate earnings. The CFO must then afford a short-term loss in earnings to develop the idea. Often the potential loss of short term earnings ends up having a chilling effect on the willingness to innovate. (Helton, 2019) Other guidelines than the traditional tools might, therefore, be useful when determining what projects or investments to allocate resources to. In fact, as identified by O'Sullivan (2009) resource allocation is a big dilemma challenge for the CFOs. They must figure out how to fund the innovation and future growth while ensuring that the company even makes it to the future. Innovation goals must be protected without exceeding the resources (O'Sullivan, 2019).

One rule that can be used as a guide for the CFO when determining viable innovation projects is the "70/20/10/ rule"; 70% of all money being distributed on initiatives related to innovation should be concentrated on a firm's core business. (Nagji & Tuff, 2012) The 20% should be spent on adjoining possibilities, and 10% should be distributed to projects that could be revolutionary for the organisation and that could be of large impact for the market in a broader perspective. (Deloitte, 2014) Another method is the scoring tool where important factors are identified for an innovation project and ranked to create an overall score for the project. (Goffin & Mitchell, 2017)

#### Reward and recognition systems

Another method that the CFO can use to keep their staff innovative, is to work with recognition and reward programs. This involves not only rewarding success, but also a failure. (Goffin & Mitchell, 2017) Employees must be protected in failed projects, and organisational learning experiences should be rewarded, even in innovation failures. (Deloitte, 2015) Reward and recognition systems can be used to signal the importance of innovation. A CFO must recognize that financial reward is not the only motivating factor and individual rewards can compromise

collaboration. There are several decisions to be made concerning reward and recognition: the amount and type of rewards; current performance and sort of behaviour that is desired; the type and recognition to be given. Examples of rewards are i.e. *pay increase, bonus payments, time and resource for personal projects, extra holidays or paid education*. Examples of recognitions are i.e. *deserved praise from management, project completion celebrations, certificates or peer recognition*. (Goffin & Mitchell, 2017)

### Project Management

According to Goffin and Mitchell (2017), implementing innovation should be treated as a project. The implementation stage of innovation management revolves to a large extent around “project management” (Goffin & Mitchell, 2017). It is not that a CFO should be personally involved in the projects. In fact, the CFO can benefit from not being personally involved with the development of projects since he or she then can look at the economics and investment decisions with reasoned distance. (O’Sullivan, 2009) However, the CFO must recognize that project management is an organisational competency that requires active participation. It is a structured approach to drive results with strategic focus and a powerful tool for CFOs, whether they act as stewards of their organisations’ finances or additionally as a strategic advisor to the CEO. (Langley, 2015) Financial chiefs should consider a project’s outcome, budget and timeline (O’Sullivan, 2009) Goffin and Mitchell (2017) have suggested that a manager, or CFO, should recognize that to improve the company’s implementation of innovation, applying the right style of project management is crucial. “The right style” implies that the managers receive good and appropriate training for their task, and have the active support of senior managers. (Goffin & Mitchell, 2017)

There is no “one project management style fits all” but seven elements have been identified as fundamental to successful project management throughout the innovation process and particularly during implementation: i) Clear aims ii) a breakdown of the work into small manageable elements. iii) a scheduling plan that ensures that tasks are undertaken in the right end at the right times. iv) a resource plan to ensure that people facilities will be available to do the tasks as required, v) clear understanding and management of risks, vi) an objective staged review process, vii) active management of stakeholders. (Goffin & Mitchell, 2017)

### Measurements and internal surveillance systems

According to Deloitte (2016), the CFO should ensure there are guard rails to protect the core business through systems for internal control. Internal control comprises a wide significance. It is all steps taken by a company to make sure it does not fail. A central part of the internal control architecture is constructing and following up on budgets. (Zosya, 2011) One way to do so is to use *diagnostic budgets* for monitoring the operations. A concrete method which the CFO can use to monitor and measure innovation is to use diagnostic budgets which serve the conventional purpose of evaluating performance. Furthermore, diagnostic budgets attribute responsibilities for outcomes to organisational functions or members. They compromise a strong focus on financial targets and corrective action is taken because of feedback received about performance. (Cools et al., 2017) The use of diagnostic use of budgets is not only

constraining. On the contrary, research has shown that monitoring processes can help in identifying problems which help managers to achieve their goals, often through novel means. (Chen & Clara, 2017) Even though the use of too-tight budgets can have a hindering influence on creativity, people are often inquired and actionable when they know the prerequisites of a project. The budget gives the framework, timeframe and prerequisites within which the team members can act. (Cools et al, 2017)

Another concrete method which can be applied by CFOs to measure innovation is to select Key Performance Indicators (KPIs) for innovation. (Kristiansen et al, 2018) KPIs are measurable variables that quantitatively measure how effectively a company is achieving key business objectives, in this case, objectives related to innovation. The purpose of measuring innovation is to present the relation between input and output of innovation. Measuring innovation has been proven difficult, especially for radical innovation. A numerous of KPIs have been suggested and not all have been effective. Contemporary research suggests that different KPI's are suitable for incremental innovation and radical innovation. Examples of KPIs used for incremental innovation are the *return of investment (ROI)* or *time-to-market*. For radical innovation, KPIs like *potential of market* or *new market needs* could be more suitable. The explanation is the higher risk-profile, longer time horizon and unexplored markets which often are associated with radical innovation. (Kristiansen et al, 2018)

#### Standardising processes

It is important to remember that to develop radical innovation, the traditional business must also be protected and efficient. Attending to product and processes of the past is key to gaze forward. (Tushman and O'Reilly, 2004) Therefore it is important to ensure that current business processes are efficient. To have an organisation which successfully can foster innovation, the organisational structure for innovation must be considered. Tushman & O'Reilly have identified that the best structure for succeeding with both incremental and radical innovation is to have organisationally distinct units that should be tightly integrated at the senior executive level. This is described in their article about Ambidextrous organisations. The executives must be sensitive to the needs of different kinds of business; to develop radical innovations, and be successful in the core business. (Tushman and O'Reilly, 2004) When adequate distinct units are entrenched, processes for innovation can be standardised. One way to achieve this standardisation is to implement it in a control system called the Balanced Scorecard (BSC). The BSC supplement traditional financial measures with further criteria that measure performance from additional perspectives (Kaplan & Norton, 1996) It also standardise The BSC enables companies to track financial results but at the same time monitor progress in building the capabilities. (Kaplan, 2009) The BSC can be used interactively to mobilize innovation and change through executive leadership; translate and align innovation to the strategy, motivate employees to make innovation their everyday job, and cover to make innovation a continuous standardised process. Applying the BSC is one method of standardising processes for innovation since it makes innovation part of the daily agenda. (Kaplan, 2009)

## Design thinking

Especially at the beginning of an innovation process, the aims of an innovation project can often be quite loosely expressed. Turning a loosely defined innovation project into a commercially implemented innovation has been proven very difficult. (Goffin & Mitchell, 2017) In fact, about 95% of innovation attempts fail. (Deloitte, 2016) Design thinking can constitute as a guide in the fuzzy nature of innovation. Design is the term describing a process that turns customer needs into commercial products or services, taking into account the experience users will have in interacting with them. (Goffin & Mitchell, 2017) A core aspect of the design is that the users shape and control the choices that are made to turn the innovation into something that will satisfy the users' needs. Users are accessed through market research and having a design thinking approach when implementing innovation will increase the likelihood that the innovation project is successful (Davis et al., 2016).

Liedtka, J. (2018) described in her article that the reason as to why design thinking works for implementing innovation is that it addresses the biases and behaviours that hamper innovation. The tools and clear process steps provided by design thinking help teams break free of human tendencies that get in the way of innovation. (Liedtka, 2018) Design thinking helps to bring a structure from research to roll-out. Structure is created when immersion in the customer experience is done, primarily through conducting market research and engaging with the users. This produces data, which is transformed into insights and following actions. This help teams agree on design criteria. Further prototype testing gives insight into what solutions that are critical for success. The process provided by design thinking is especially useful in innovation projects since it lower costs and risks, increases employee buy-in and solutions tested on end-users. Combined this provides a higher chance of success in innovation implementation. (Liedtka, 2018)

## Corporate culture

Having the right culture is one of the most important parts in being successful with innovation. (Smith, 2012) To enhance innovative output, organisational structures need to be improved to be more effective and employees need to be constantly motivated. Deloitte (2015) highlighted that the CFO has an important role in contributing to building the culture. Corporate culture is in this context considered as a control system since the management i.e. CFOs can use it to increase and probe desired behaviour, through imposing instrumental values (Edwinah, 2013) Central parts of the internal control architecture are policies. (Zosya, 2011) They are fundamental principles and rules that steer the corporate culture since they provide members of the organisation with guidelines for the course of actions. Furthermore, policies should also help employees to make decisions in line with the corporate culture. Not by explicitly outlining the steps to follow, but instead through providing with general ideas about the company's standpoint on issues. According to Zosya (2011), most companies have some sort of policy in place. It could be an employee handbook, code of conduct or a manual. Even though writing employee policies usually are the responsibility of the HR managers, a CFO is often more qualified to write these documents since the CFO understand policies, regulations, rules and procedures. Therefore, getting involved in writing company policies (business and employee) is a method in which the CFO can use to foster innovation. Having a culture where time is

made for innovation is necessary, and the CFOs role creating an innovative culture is to be involved in discussions regarding the business model and eventual constraints this involves. Furthermore, the CFO should be open towards changing the business model so that this can be overcome. These are according to Tuff (Deloitte, 2014) new tasks that CFOs need to take on to make their organisation better in meeting customers demand. Tuff (Deloitte, 2014) also states that the CFO makes sure that the core business stays the same when innovation is happening and business models are being changed.

#### Organisational learning

Organisational learning is an important capability of an innovative organisation. It is a process that develops new ways of seeing things and understanding them within organisations. (Chiva et al., 2014) Research has shown that organisational learning can be achieved through for example managerial factors such as experimentation, risk-taking, interaction with external environments. (Chiva et al., 2014) One tool which can be used by a CFO to achieve organisational learning is to implement interactive budgets. It is a method for stimulating dialogue and altering patterns of organisational activity. Interactive budgets allow for the continual exchange of information between top management and lower levels of management, as well as interactions within various management levels but across organisational functions. Interactions comes when top management use planning and control procedures to actively monitor and intervene in ongoing decision activities of subordinates. The intervention allows an opportunity for top management to incur a debate and challenge underlying data, assumption and action plans. (Chen & Clara, 2017) Research has shown that the interactive use of budgeting provides a vehicle to overcome organisational inertia, communicate new strategic agendas, establish and implementing targets and ensures continuous attention to new ideas. (Cools et al, 2017)

#### Knowledge management

Knowledge management (KM) can be explained as the process of how knowledge in an organisation is created, used, shared and managed. The literature on innovation has recognized the importance of having *knowledge* when developing processes, products, services or business models. Innovation depends on an organisation's capability to learn, through which new knowledge is developed, distributed and used. (Chiva et al., 2014) Organisations that create new knowledge and apply it effectively and efficiently will be successful at creating competitive advantages and increase innovation capabilities. (Lopez & Angél, 2011) Through KM, firms can establish processes and infrastructures to acquire, create and share knowledge for formulating strategy. KM is related to IT efforts since it is often enabled by systems support, i.e. data management and software tools. The responsibility for ensuring such systems in an organisation typically lies on the table of the chief information officer (CIO). However, Zosya (2011) have observed a trend in that CFOs often have absorbed these responsibilities of the CIO, and been leaders of computerization movements. A reason for this that has been suggested is that a large portion of data processing is related to accounting and financial tasks. Accounting modules usually makes up a large portion of an IT system. Furthermore, the CFOs are responsible for making decisions that may cost a lot of money, as implementing ERPs or applications often does. (Zosya, 2011)

### 3.5 Summary table of "3.4 How CFOs can foster innovation"

Leadership for innovation			
Topic	Method	Objective	Discussed by
Permissive leadership-style	The CFO can notify and appraise what has been learned, even in failed projects.	“Set the tone” and encourage behaviour for innovation.	<ul style="list-style-type: none"> <li>• <i>Smith et al, (2008),</i></li> <li>• <i>Smith (2012),</i></li> <li>• <i>O’Sullivan, K. (2009),</i></li> <li>• <i>Goffin &amp; Mitchell (2017)</i></li> </ul>
Sponsorship	The CFO can excise indirect leadership by setting the context and have other executing	Encourage selected ideas and projects for innovation indirectly.	<ul style="list-style-type: none"> <li>• <i>Deloitte (2017),</i></li> <li>• <i>Goffin &amp; Mitchell (2017)</i></li> </ul>
Control Systems for innovation			
Topic	Method	Objective	Discussed by
Portfolio management and resource allocation	The CFO can use financial tools for investment appraisals that allow innovation	Adequately determine what projects to allocate resources to	<ul style="list-style-type: none"> <li>• <i>Christensen et al, (2008),</i></li> <li>• <i>Helton (2009),</i></li> <li>• <i>O’Sullivan (2009),</i></li> <li>• <i>Nagji &amp; Tuff, (2012)</i></li> </ul>
Reward and recognition system	The CFO can set up financial rewards, paid education programs, peer recognition, awards.	Programs which encourage employees to innovate and behaviour	<ul style="list-style-type: none"> <li>• <i>Goffin &amp; Mitchell (2017),</i></li> <li>• <i>Deloitte (2015)</i></li> </ul>
Project management	The CFO should consider the “right style” of project management	Ensure project outcome, budget and timeline	<ul style="list-style-type: none"> <li>• <i>Langley (2015),</i></li> <li>• <i>O’Sullivan, K. (2009)</i></li> <li>• <i>Goffin &amp; Mitchell (2015)</i></li> </ul>
Measurements and Internal surveillance systems	The CFO can use diagnostic budgets and/or financial surveillance structures	Having guard rails to protect the core business, and evaluating outcomes	<ul style="list-style-type: none"> <li>• <i>Chen &amp; Clara (2017),</i></li> <li>• <i>Cools et al (2017),</i></li> <li>• <i>Kristiansen et al (2018)</i></li> </ul>
Standardising processes	The CFO can standardise the innovation process. i.e. by using BSC for innovation	Make innovation a part of the daily agenda	<ul style="list-style-type: none"> <li>• <i>Smith et al. (2008),</i></li> <li>• <i>Tushman and O’Reilly (2004),</i></li> <li>• <i>Kaplan (2009).</i></li> </ul>
Design thinking	The CFO can impose a design thinking approach to experiment, test and evaluate the market.	Increase the chance of success with the innovation initiatives	<ul style="list-style-type: none"> <li>• <i>Liedtka, J. (2018),</i></li> <li>• <i>Brown, T. and Martin, R. (2015).</i></li> </ul>
Corporate culture	The CFO can actively involve in the formulation of (employee) policies.	Provide the company’s standpoint on innovation	<ul style="list-style-type: none"> <li>• <i>Smith (2012),</i></li> <li>• <i>Edwinah, (2013),</i></li> <li>• <i>Zosya, (2011)</i></li> </ul>
Tools for organisational learning	The CFO can foster a learning organisation through i.e. interactive budgets	Develop ways of seeing things within the organisation	<ul style="list-style-type: none"> <li>• <i>Chiva et al. (2014)</i></li> <li>• <i>Chen &amp; Clara (2017)</i></li> <li>• <i>Cools et al (2017)</i></li> </ul>
Knowledge management (KM)	Investigate how data management and systems can be used for KM.	Systematize how knowledge is developed, distributed and used.	<ul style="list-style-type: none"> <li>• <i>Chiva et al (2014),</i></li> <li>• <i>Lopez &amp; Angél, (2011),</i></li> <li>• <i>Zosya, (2011)</i></li> </ul>

## 4. Empirical Findings

*This section will present the empirical findings which was gathered during the interview process. The findings will be presented in two headings, first a general company description and thereafter a review of the methods used by the CFOs to foster innovation. The "company description"-segment includes general findings which provide a context of the organisation, the CFO and the definition of innovation. The "methods for fostering innovation"-segment presents methods which are categorized according to the elements of the Pentathlon Framework; strategy, organisation, ideation, selection and implementation.*

### 4.1 Pulsen

#### 4.1.1 Company Description

Pulsen AB is the parent company of the Pulsen Group which is a family-owned corporate group based in Sweden. The Group has 1,400 employees and a turnover of almost SEK 3.5 billion (2019). The Pulsen Group has its foundation in the IT industry but also conducts operations in several different other areas, through different subsidiaries. Pulsen AB is the mother organisation, with head office in Borås and has 1403 employees (Allabolag.se 6, 2019). The CFO, Joakim Wahlberg, has been with the company since June 2019.

#### Level of digitalisation of the finance function

Digitalisation of the finance function is an ongoing process. Pulsen AB does still have manual work mainly in Excel related to producing financial reports and business intelligence. When the CFO started in June 2019, he found that the level of digitalisation of the finance function was surprisingly substandard for a company group with a turnover of 3,5 M SEK. Therefore, the respondent initiated a large scale digitalisation process which will result in automatisisation and going from being descriptive to normative. The respondent sees that this will make him a better strategist in his role as a CFO. The objectives are to make the process of consolidation extensively faster with less (ideally no) manual work.

#### Description of the CFO-role

The CFO for Pulsen has the overall responsibility for the Group's finances and management control, and of the development of the companies finance department. The role also includes to support the strategic transformation and growth of the subsidiaries of Pulsen. Furthermore, it involves being an essential strategic sounding board to CEO, group management as well as the Board of Directors in critical business and financial decisions. The CFO also ensures that the company maintains robust financing strategy, financial risk management and capital structure in compliance with the parameters defined by the board and any covenant in effect and in alignment with the overall group strategy and objectives.

## Definition of innovation

Succeeding with innovation is a necessity for the long-term success of Pulsen Group. It is highly prioritized by the top management, and the respondent. Innovation is a capability. For example, it could be a new technological capacity, technical insight or knowledge which implies a change in the market. Working with innovation looks very different in the separate subsidiaries, following that they have vastly different operations. The base is Pulsen Data which provide consulting services, hardware, software and ERP development. Innovation is mostly incremental, and innovation projects are related to finding new applications, services or functions. It is about finding something new for the company's existing clients. In Pulsen Data, there are also examples of projects which aims at producing more radical innovations. Radical innovation is defined as something new for new segments, however, the respondent admits that Pulsen Data (or Group) has not been successful with radical innovations in several years.

## Measuring innovation

The respondent expressed that measuring innovation is difficult. Pulsen Group does not measure of innovation in the form of "we are going to create X number of innovations" or "we are going to have X SEK turnover from our innovation projects". However, the respondent has the ambition as a CFO to set up systems for measuring innovation in the future.

### 4.1.2 Methods for fostering innovation

#### Innovation strategy

The respondent suggests that as a CFO, he must look at innovation on two different levels; one lower process-level where it is required to have detailed project management to promote innovation. The other level should be a higher management level where other types of control means can promote innovation. The respondent thinks incremental and radical innovation must be differentiated. There should be an explicit separation of incremental and radical innovation in the organisation, otherwise, innovation can never become part of a strategy. Regarding incremental innovation, the respondent admits that his role in influencing the outcome is limited. He expressed that he could potentially establish goals or some sort of reward system to promote the work of incremental innovation, but that's about it. Regarding radical innovations, the respondent thinks his role is different. The respondent sees a responsibility as a CFO to pinpoint the difference between incremental and radical innovation and then decide how they should be promoted through financial instruments of control.

#### People, culture and organisation

Leadership is the most important aspect for having an organisation and culture which foster innovation. The respondent expressed that it is crucial to have a top management team that understands this, and the role of the CFO is, of course, important in creating awareness. The CEO and CFO of Pulsen works in close collaboration. The respondent describes the CEO as a true entrepreneur and his willingness to change drives change and creates innovation. Recently, the CEO employed a new team to the top management. Including the CFO, as well as the new HR manager. Together we formulated the "UPAL"-corporate culture. For this to happen, financial management and the CFO have very important parts. Furthermore, the CFO explained

that the budget process itself can be used for fostering innovation, since it can be used to increase the exchange of information between levels and departments in the organisation. Interactions through budgets occur when financial managers use control procedures to intervene in ongoing decision activities of business functions or projects. The intervention allows an opportunity for financial managers to debate and revise action plans.

### Ideation

The responsibility as a CFO for stimulating ideas for innovation is indirect. The respondent is not directly involved in the ideation process, other than encouraging it through control systems. The respondent suggests that he as a CFO could build instruments for how the organisation manage new ideas which sets structures. Instruments could, for example, be “innovation competitions”, or “reward systems”. The responsibility of the CFO is to continuously allocate resources to these initiatives. For example, by setting resources separately for daily operations and innovation.

### Selection

The respondent expressed that he has an important role in the selection process, which is more straightforward than in ideation. As a CFO, he influences the selection process primarily through resource allocation. Selecting ideas for innovation relates to the overall innovation strategy. As a CFO, the respondent must consider the range of projects and then implement control systems with the portfolio in mind. It is the respondents’ opinion that if he implements control systems which target incremental innovation, then that is what the organisation will produce. If radical innovations are promoted through control systems, the chances will increase that the organisation may manage to produce it. Radical innovation projects are by nature riskier and there is a high failure rate, which implies there must be an expectation that they could fail. They require a different risk profile. Furthermore, the respondent pointed out that since he is the CFO of a corporate group, it is not his role to make all decisions in the selection process. Those decisions are made in the different subsidiaries by the respective business controller. Instead, he can act as a supporter, or sponsor, through his board work within the different subsidiaries.

### Implementation

The respondent thinks there is a lack of numbers for evaluating progress when implementing innovation. Especially with radical innovations, where it is difficult to know what the market wants. For success with radical projects, the respondent think business model components should be used rather than for example discounted cash flow analysis. With radical innovation, it is not plausible to estimate the market. In fact, the market might not even exist. Incremental innovation is easier to integrate with financial figures and evaluate progress, but it is still difficult. The respondent thinks it is his role as a CFO to set the structure for evaluation and project reporting and ensure a system for adequate resource allocation for innovation projects.

## 4.2 Platzer Fastigheter

### 4.2.1 Company Description

Platzer Fastigheter is a Swedish property developer with seat and operation concentrated to the metropolitan area of Gothenburg. Platzer owns or manage commercial properties of approximately 800 000 square meters. The parent company Platzer Fastigheter Holding AB is listed on NASDAQ OMX Stockholm “Mid Cap” list since 2013 and has 67 employees (Allabolag.se 5, 2018). The turnover last year was 98,1 M SEK. The CFO, Fredrik Sjudin, has been with the company since 2018.

#### Level of digitalisation of the finance function

The respondent admits that producing financial reports is a time-consuming task, which still includes a lot of manual work. Historically, projects of digitalisation have been given to those in the organisation which showed interest, since there has not been an IT manager. When the respondent was on-boarded in 2018, responsibilities of development in IT and digitalisation landed on his table since he has a background within that field. After restructurings, a business development department is now responsible for digitalisation of processes and business development together with the IT-council.

#### Description of the CFO-role

The respondent is in his role as CFO responsible for finance, accounting, controlling and compliance in corporate law. In parts, he also acts as a supporter for IT-development through his participation in the IT-council. The council consists of three members: The CFO, head of HR, and head of business development (currently the CEO). Through the council, they decide on a strategic level how processes and procedures should be designed.

#### Definition of innovation

The respondent see innovation as something necessary for the development of the organization. However, he admits that the level of innovation novelty in the property industry is lower than in other sectors. The aim for Platzer is not to be a “radical innovation producer” but rather to be a leaning and learning organisation which manage constant incremental improvements. Real-estate and properties is an investment-heavy industry. With large investments follows a certain inertia. Platzer has examples of innovation in the organisation. For example, they have been investing in the development of “connected properties”, and are at the forefront in comparison to industry competitors. Having connected buildings and digitalised processes facilitates a lot of operations. Most importantly, it generates data which can be used for creating innovation in the future.

#### Measuring innovation

There is no measurement of innovation in the organization at Platzer. All innovation initiatives are incremental. Furthermore, most of the innovation projects are related to IT development. There is a set agenda for the IT development where top management have defined a development plan, which is being followed up and measured.

## 4.2.2 Methods for fostering innovation

### Innovation strategy

The respondent admits that there is no explicit innovation strategy formulated in the organisation. Instead, the closest enunciation to an innovation strategy is the set agenda for IT development. The top management has defined an IT development plan for the organisation.

### People, culture and organisation

The respondent thinks that the corporate culture of Platzer is innovative. The culture is described as "freedom with responsibility for all employees". The biggest contribution of Platzer's culture is that it fosters short path decision-making. According to the respondent, this means that decisions can be made faster and more flexible, which gives Platzer a competitive advantage. The respondent thinks they can become even better at short path decision making if they manage to become more of a learning organisation. The respondent relates organisational learning to IT and digital developments, where he has a personal interest. That interest is according to him partly a reason as to why he is an advocate of promoting the best tools and support systems. According to the respondent, adequate system support will promote knowledge management and indirectly benefit innovation. If the right data can be easily accessed, it will generate knowledge which absorbs in the organisation. A foundation for innovation is therefore that the organisation have technology and data that support the business. The respondent thinks that data should only have to be created once, and then available for different business functions. Today, it is more like each function creates their own data, which often already have been generated elsewhere in the organisation.

### Ideation

Ideas for innovation requires creativity, and creativity is related to the corporate culture. The respondent advocates, through his leadership as a CFO, that the work procedures should be allowable and permitting. The respondent thinks this stimulates the creation of new ideas. Ideation requires that the employees feel that they are trusted and have authority to make decisions, and that they are backed up by the organisation if they should make a wrong decision.

### Selection

The respondent is involved in deciding which projects are funded and which are not. This is primarily done by making calculation of future investments. Investment decisions are evaluated on the rate of return. Platzer has set out a general rule for investments which implies that the future project should yield a 20% ROI as standard demand. The respondent notes that he has the mandate to allow for a lower rate of return if he sees that the investment, in the long run, can generate additional values.

### Implementation

New development at Platzer is always structured in projects. The respondent is highly involved in implementation of innovation through project management and setting structures. In the establishment of project teams, the respondent thinks it is essential to have the right expertise at the right place. Furthermore, to standardise the projects there are examples of established

structures for meetings, where even the attending parties are pre-determined. The respondent also determines the process and structure for how reporting should be conducted within the projects. The respondent admits he has a vested interest in setting structures, since he must report to the board himself. Therefore, creating a structure for reporting will reduce the amount of work related to reporting.

## 4.3 Findwise

### 4.3.1 Company Description

Findwise is an IT-consultancy firm which helps customers to find, analyse and act on data in the organisation. Findwise have won awards for their work with turning information into valuable knowledge for their customers as well as rapid growth. The company is a mid-sized enterprise with 87 employees and a turnover of 156 M SEK (Allabolag.se 2, 2018). The CFO, Carl Björnfors, has been working as a CFO at the company since 2017.

#### Level of digitalisation of the finance function

The CFO describes that he is highly involved in the digitalisation processes of Findwise. He has been working with digitising processes since the start. However, the CFO admits that creating financial reports still involves manual work. In the operations however, much of the processes are fully automated. Findwise was in 2018 acquired by a larger corporate group and therefore much of the holding company's processes (including systems support and reporting structure) was implemented in 2019.

#### Description of the CFO-role

The respondent consider himself as a modern CFO, mainly because his background is not within the operational economy. The respondent's responsibilities are financial monitoring, controlling and reporting to the board. The CFO works closely with the CEO and is a member of the corporate board. Findwise was acquired in 2018 which implied that the structure of the role changed, and became more centred around reporting. Innovation at Findwise is created in relation with their clients. Therefore, the respondent notes that he is fostering innovation by being involved in strategically choosing customer projects. When choosing projects, it is important that the decisions are in line with the business strategy and niche. The respondent notes that it is important that Findwise turn down projects which are not in line with the business niche, even though they would generate revenue. Maintain the business focus is a priority for the respondent.

#### Definition of innovation

Innovation at Findwise is according to the respondent what they offer to their customers, and achieve together with clients. Findwise is an IT-consultancy firm that operates in a niche segment, why the CFO describes that they constantly must outperform. To deliver more than expected is often accomplished through innovation. Thus, innovation is about pushing the limits in terms of solutions created together with their customers. Furthermore, it is important that knowledge from each generated innovation is shared across projects. Innovation does not only occur within projects. Findwise have developed standardised solutions which is used as a

base in most of the projects. Making those standardised solutions better, through innovation, will allow Findwise to spend their time on being innovative with clients. In turn, discoveries achieved with clients will then improve the standardised solution so they can excel in the future.

#### Measuring innovation

The respondent is as CFO responsible for financially monitoring the different projects of Findwise. This involves making analyses of the projects results. Progress is measured, but not the output of innovation. The respondent thinks that having digitised processes make it possible to earlier detect when projects are heading in the wrong direction.

### 4.2.2 Methods for fostering innovation

#### Innovation strategy

The CFO describes that Findwise does not have an innovation strategy. However, the business strategy is to excel competitors in relationship with clients. The CFO expressed that he is highly involved in creating the business strategy together with the CEO. To continuously deliver the best solutions for the customers, innovation is a necessity. Therefore, innovation is indirectly a part of the strategy. It is important that it is formulated in the strategy what type of innovation, or goal with innovation endeavours that the organisation have, for the CFO to be guided and steer against those goals.

#### People, culture and organisation

By the start in 2005, Findwise was a flat organisation where activities, tasks and responsibilities performed were decoupled an explicit role or position. This structure inherently fostered creativity and innovation since the employee's engagement was very high. All employees made much decisions themselves. The respondent expressed that it is hard to keep the culture intact after an acquisition. Some of the old culture and new are inevitably mixed together. To maintain a creative culture where the employees feel high engagement, the CFO described that small thing's matter. For example, offering breakfast every day or spend extra resources on the personnel in terms of tools for the employees so they can cooperate in the best way. Therefore, the CFO tries not to cut back on those aspects as a consequence of a restrictive budget. In relation to the organisational structure, the respondent thinks it is necessary that the firm can capture the knowledge that is created in projects, and use this to recreate the solution or innovation in consequential projects. Being a learning organisation will help Findwise realise their business strategy and excel in performance with clients.

#### Ideation

Engagement creates creativity, the respondent describes. Therefore, Findwise tries to get their employees as engaged as possible in their work. To do this, the employees must be allowed to make heavy decisions by themselves. Furthermore, the CFO feels a responsibility in that the employees have interesting projects to work with. Since the organisational structure changed after the acquisition this has become harder. The CFO says that the way of leading is now different from before the acquisition. The company has grown and management must use

structure to manage a more complex group of employees. It is essential that management conduct a permissive and allowing leadership towards the consultants.

### Selection

Since innovation occurs in relation with the customers, the CFO is involved through his role in deciding which projects Findwise should take. Ideation occurs within the projects and the respondent admits that selecting the best ideas is not a structured process today. It rather lies with the employees e.g. the consultants involved in the project. The consultants have the mandate to present ideas within the projects to work with, and sometimes separate projects are created around it.

### Implementation

The respondent expressed that he, as a CFO, is not that involved in the actual implementation of innovation since it occurs within the projects. Rather, he is conducting following-up of the projects. The respondent thinks that when evaluating progress, it is important to have a long-term perspective. Some projects will not show good results in the short-term. Therefore, he wants to have constant updates, to know what is happening within the projects. As a CFO, he wants consultants to motivate the reason for short term loss and longer-term potential, to be able to evaluate them and further pass on the information. This is an important job, he says, to avoid that promising projects are cut-back on, or killed in early stage. As a CFO, I am a building bridge for innovation to the rest of the top management team and the board.

## 4.4 Liseberg

### 4.4.1 Company description

Liseberg is Scandinavia's biggest amusement park founded in 1923. Liseberg has a turnover of SEK 1,37 billion and has expanded a lot over the years and has 1112 employees (Allabolag.se 4, 2019). Mats Wittholt is the CFO of Liseberg and has been at Liseberg for since 2018.

#### Level of digitalisation of the finance function

Developing new digitised processes have been a focus of Liseberg for a long time. A new IT manager was hired with the aim of reshaping and modernising the IT function. Previously, when a problem occurred related to IT, the solution often was to develop a separate system or solution to solve the problem. Therefore, Liseberg was trapped in a structure of several different systems. The last ten years however, Liseberg have started to implement more standardized systems and the finance function are partially digitized. Digitalising financial processes are prioritised by the respondent. There are two different types of digitalisation at Liseberg, the first is digitalisation towards the customer (innovative customer solutions), and the second is the digitalisation of internal processes to make them more effective.

#### Description of the CFO-role

As a CFO at Liseberg, the responsibilities revolve around IT, financial management and inventory (cash management). 20-30% of the respondent's time constitute of strategic work, 20-30% involves leadership work and 20-40% is operational work. The respondent wants to

move away from spending time on gathering data for reports. Instead, he wishes to allocate time on analysis of the presented data and present insights. This will allow him to be more of a strategist in the management team. The CFO describes that it is difficult to generally describe what the CFO-role entails. It is very different depending on how it is interpreted. The traditional CFO was supposed to be cost-conscious and the budget was always priority. The respondent describes that he does not interpret the role in a traditional way. He has a background in both IT and economics, which according to him is a favorable combination which bring a lot of benefits.

#### Definition of innovation

The respondent notes that there is a difference between incremental and radical innovation. He thinks that radical innovation is often what is implicitly referred to when innovation is discussed. However, to his opinion, incremental innovation can be equally important and generate a lot of value. At Liseberg, radical innovations entails coming up with new amusement attractions or create new experiences in the. Today there is no clear process to do this. Furthermore, the CFO describes that there are several barriers for radical innovations in the park. For example, there is limited space to work with. In terms of product innovation, the usual way is to find existing attractions and adapt them to the concept of Liseberg. One innovation that the CFO has been involved in lately is removing the physical queue and replace it with a virtual queue instead, which is an example of a more radical project.

#### Measuring innovation

The respondent explains that they often work with a vision when implementing something new and try to follow this as much as possible. However, innovation is not explicitly measured.

### 4.4.2 Methods for fostering innovation

#### Innovation strategy

The respondent thinks Liseberg does not have an explicit innovation strategy. However, innovation is indirectly incorporated in the overall business strategy and it connects much to digitalisation. Liseberg has a formulated plan which comprise the next four to five years forward. The plan concerns how Liseberg is going to improve its organisation and streamline it with digitised systems and processes. The CFO is a part of this and transfers the strategy into the budget. Forecasts follow up that the budget is followed and that the resources are sufficient to follow the setup plan.

#### People, culture and organisation

The CFO describes that Liseberg has a culture that stimulates innovation. The culture is open and the employees are encouraged to try new things. However, he also admits that the organisation is more open towards innovations close to the current business. More radical innovations require cross-functional work which may encounter some resistance. Traditionally, innovation has been happening in within the business functions, but today more projects are cross-functional. For example, the work of building a new hotel and waterpark. The CFO

describes that he is used to working in a culture where forecasts and follow-ups are constantly used.

### Ideation

Within the different business areas, there is a lot of work for stimulating creativity. There is a constant search for new ideas, though more incremental than radical ones. The respondent is as a CFO not particularly involved in the ideation process.

### Selection

The respondent notes that he has a big role in determining what projects to invest money in. Commonly this is decided by using capital budgets. The respondent explains that Liseberg not usually would initiate projects that will not generate increased revenues, or cost savings. Resource allocation is therefore determined in the budget process, why provision of resources for innovation is a clear responsibility for the CFO. Looking at investments, the payback time is around two to three years. The respondent describes that they must invest 80-90 per cent of the cash flow to maintain the park and to offer new experiences for the customers, otherwise, the organisation will not survive.

### Implementation

The CFO is involved in the steering group of the large projects being performed, his role is to follow up how the progress within the projects. Every project has its own budget and forecast and the outcomes are constantly compared against the forecast. It is important to keep projects on track and the controlling department need to be out in the organisation to know what is going to happen, before it does, to motivate the future directions.

## 4.5 Estrella

### 4.5.1 Company description

Estrella is a Swedish manufacturer of snacks. The company Estrella AB is part of the corporate group Maarud Holding AS, owned by the larger German corporate group Intersnack. The number of employees working at Estrella is 186 and the turnover is 988 M SEK (Allabolag.se 1, 2018). The CFO, Susanne Hartog has been with the company since 2011 and in the role as a CFO since 2018.

#### Level of digitalisation of the finance function

The digitalisation of the finance function is currently an ongoing process at Estrella. Estrella is implementing a new ERPs which will be common for the entire corporate group to increase automatisations. Today, there is manual work needed for putting together financial reports. The respondent doesn't see that this occupy much of her time since they have streamlined processes and can bring out financial reports rapidly.

### Description of the CFO-role

The respondent has been with Estrella for nine years. However, only in the role as a CFO during the last two years. The respondent reports to owners in Germany every month. Being the CFO, she is responsible for ensuring financing strategy, compliance and risk management. Furthermore, she works closely with the CEO. Estrella is primarily led by three persons e.g. the CEO, the respondent (finance) as well as head of the supply chain.

### Definition of innovation

Estrella have both product innovation and process innovation. Product innovation is for example line-extensions which compose inventing new flavors, compositions or concepts. Launching new products is regulated and allowed for twice a year. Prior to the launch period, products must be presented, approved and listed before it is okay commercialise. Estrella also constantly work with process innovation, especially within the manufacturing processes. Innovation occurs within the fields of material, chemicals of raw material and production. Estrella have worked many years with creating new ways of controlling the production process.

### Measuring innovation

At Estrella, there is no measurement of innovation project per se. But progress is tightly followed our operations through KPI'S and financial surveillance.

## 4.5.2 Methods for fostering innovation

### Innovation strategy

The respondent admits she is highly involved in the organisation's strategy work. The strategy is influenced by demands from the corporate group. For example, investment rules such as pay-back time and profit ratio is determined by directives set by the owners. The respondent does partially lean on the framework when making investment decisions. She notes that it can be helpful to have a guide when determining how to fund innovation. Especially, when deciding on projects for process innovation. In terms of product innovation, there is more freedom. For those projects, decisions are primarily made in the Swedish C-suite. KPIs are used for evaluating potential profit within new product development innovation. Products are constantly renewed and the new product must be better than the last one, which gives us a natural benchmark. The respondent notes that employees at Estrella knows that the calculations must look good if the product is to be launched. Therefore, the employees have profitability-targets. The respondent express that this is an example of how innovation strategy is transmitted in the organisation through control systems.

### People, culture and organisation

According to the respondent, Estrella have a culture for innovation. Particularly, the culture stimulates a good climate for ideation. Estrella wants employees to share their opinions about the products. Many important discussion takes place in the red break-room sofa. Employees are encouraged to be creative and express their opinions, especially when it comes to products and flavors. An example of how the culture is manifested is the tradition when employees travel

and bring back samples of snacks to share with their colleagues. It might sound simple, but our couch is valuable for the corporate culture.

### Ideation

The respondent notes that culture is a big part of innovation. Apart from creating an innovative culture there are other initiatives for generating ideas. Examples are our quarterly "innovation-days" where employees are invited to eat lots of snacks. Furthermore, ideas come from cross-organisational meetings in the corporate group. Ideas also come from market research, especially for products and processes. However, the respondent is not directly involved in the ideation process.

### Selection

The respondent is in her role as a CFO participating in allocating resources for projects, and ensure that the best tools are being used and practiced for evaluating this. For new products, there are numerous tests which must be fulfilled for the new product to launch. The respondent is involved in setting the requisites for the goals to be met within innovation projects. Furthermore, she is in her role questioning each goal and target. The final selection is the pay-back time and framework from the corporate group.

### Implementation

In relation to implementing innovations, the respondent sees it as her as a CFO job to foster implementation of innovation through help backing up the projects and make innovation come alive through financial support in the entire process. It is important that projects for innovation are constantly revised. Furthermore, the respondent brought up the topic of estimating future markets. She stressed that it is crucial to get the estimations right. For a product launch it is equally bad to underestimate as it is to overestimate future sales. Underestimating future sales will imply failure in implementation. There will not be sufficient raw material, packaging etc to meet the demand. For example, the most recent radical innovation for Estrella was the launch of "lentil snacks", where sales were underestimated with 10 times. If sales can be accurately estimated, Estrella can adjust production, lower costs, be more efficient and ensure an efficient supply chain. Therefore, the respondent has in her role as a CFO implemented a control system, in the form of a price-reward program which will ensure that estimations are as accurate as possible.

## 4.6 Bubbleroom

### 4.6.1 Company Description

The brand Bubbleroom was created in 2005 and is an online retailer offering women clothes. Bubbleroom was part of a larger corporate group which divided in 2019. This made it necessary to appoint a CFO. Esko Österbacka started as CFO in 2019 and since then Bubbleroom has been a company in growth. Bubbleroom is a mid-sized enterprise with 51 employees and the turnover for Bubbleroom is 288 M SEK (Allabolag.se 3, 2018).

### Level of digitalisation of the finance function

The daily operational work of the finance function at Bubbleroom is entirely managed through digitized systems. Financial statements and reports are created and managed through a software program where budgets also are created, as well as following up the company's results. These processes were not as digitised before, but needed to be speeded up because of the rapid growth. The financial control systems and IT-solutions stems from the larger corporate group but has by time been more adapted to the structure of Bubbleroom.

### Description of the CFO-role

The respondent describes that having a holistic approach is what he thinks is most vital in his work for fostering innovation. He tries to look at the organisations and to have different inherent perspectives in mind when making decisions. Another vital part of the CFO role in fostering innovation is to have a long-term mindset and know where the company is heading. Together with the CEO, the CFO sees a big responsibility in steering the organisation in the right way. Being long-term minded is important, but the CFO sees that he must also be able to balance it with the short-term goals.

### Definition of innovation

The respondent explains that innovation for Bubbleroom is related to business development. Innovation can be improvements of processes in the supply chain, or new customer solution which capture new value. At Bubbleroom, innovation is not primarily large radical changes, it is rather incremental improvements. These are essential to stay relevant in the competitive e-commerce industry.

### Measuring innovation

Bubbleroom does not measure innovation in a sophisticated way today, according to the respondent. The follow-up on projects has before been insufficient and more systems for it are needed. Today, the running projects are only evaluated based on costs and if the project are following the setup time schedule.

## 4.6.2 Methods for fostering innovation

### Innovation strategy

Bubbleroom does not have an explicit innovation strategy. To develop the business, an emerging strategy approach is used where all business functions are included in the work. The respondent admits that it is the employees i.e. buyers, marketing etc, who meet customer demand and know what thoughts and new ideas that need to be worked on. Therefore, including all employees in the strategy work is a priority for the respondent.

### People, culture and organisation

Since Bubbleroom has been a relatively small company, it has been possible to have a culture where it is allowed to try new things and where making the wrong decisions is not so bad. The CFO explains that it is encouraged to be creative and exploratory.

## Ideation

At Bubbleroom, the employees have a lot of responsibility for developing the business. Higher-level management give the complete mandate for ideation and try to capture their ideas in an early phase. Ideation is an interactive process of strategy shaping decisions of business development, but also necessary development shaping strategy. Innovation is a part of that. Since the employees are taking a large role in developing the business, there must be a culture of showing failure is ok. It is important that the employees are not afraid of trying new things. This means that the management needs to be forgiving when things didn't go as planned. As a CFO and member of the top management team the respondent sees a big responsibility in demonstrating that it is ok to make mistakes and communicate this with all levels of the organisation.

## Selection

The CFO explained selecting which projects to fund is a shared procedure with the corporate owners. The selection of projects to prioritize must consider the owners' opinions and have the general goals e.g. business strategy in mind. Furthermore, the respondent explains that the nature of the retail industry must focus on customer demand. Bubbleroom must constantly change focus with the collections, collaborations and profile. Recently, the outbreak of COVID-19 have changed the demand and forced Bubbleroom to change focus. The respondent is highly involved in making those decisions through the process of resource allocation.

## Implementation

The respondent believes it his role to ensure that only the best ideas are turned into projects, and to succeed with the projects it is important that there are not too many projects run at the same time. Otherwise, the implementation of innovation is carried out by the employees and backed up by the respondent through financial surveillance.

## 4.7 Expert interview

The expert in this research is Staffan Davidsson and he has been working with innovation in different contexts for over 20 years. He has been occupied as *Innovation Manager* at Volvo Cars and today he is operative in the consultancy firm 66NM, where the core business is to help clients to improve their innovation capabilities. The company 66NM was founded by Staffan in 2002.

### The CFOs role in fostering innovation

The respondent is not sure whether the CFO generally should be seen as a participant or opponent in an organisation's work for innovation. His experience tells him that CFOs generally wants to minimise risk, have control over budgets and deliver good financial figures in quarterly reports. That horizon of the CFO is often short term, and doesn't add up with being successful in innovation. Furthermore, he thinks there is a huge difference between CFOs. Their inherent willingness to take risks and look beyond short term financial targets is decisive

for whether he or she will foster innovation. The risk-profile must be transmitted into leadership and that is where the big difference is.

### Definition of innovation

The respondent think that to become successful in innovation, the ability to have long horizons, patience and a different risk profile is required. These aspects must be different than those for daily operations. Failure should be expected in innovation endeavors, as only about one out of ten ideas will survive. Success will be attained if the work takes the users-perspective (use design thinking as an approach). An organisation must be supportive towards individual projects. If an employee wants to work with an idea for innovation, the rest of the organisation must support by backing the employee. For instance, time must be released in his or her schedule and the organisation must create space in the daily operations to allow for this.

### Measuring innovation

According to the respondent, measuring innovation is difficult. Instead, he suggests, organisations should measure behaviour that is good for innovation. One such behaviour could, for example, be to show respect for an idea. It is not that the idea should generate a certain amount of revenue, but rather that the idea is treated with respect. Being respectful for an idea implies that digging deeper is encouraged, instead of forcing the idea-giver to ask for time to work with it. The respondent advocates that measuring the behavior is important, although he also admits that measuring the results of behaviour is likely difficult, and often sub-optimized. Generally, when measuring innovation, common methods is to use ROI. The respondent thinks that is not effective. In fact, it can be counteracting. Other examples that might work better which the respondent has experienced is to measure innovation through KPI's like: "deliver a certain number of projects or ideas", "testing a certain number of ideas" or "increasing the height of innovation".

### Innovation strategy

The respondent pointed out that he has not had many experiences from organisations with explicit innovation strategies. More often, they are incorporated into the overall business strategy. However, there is a problem with having them in the business strategy. Namely, that the strategies are too short-termed to fit with innovation. Often, they extrapolate the history to the future in a linear manner with a horizon of two years. Organisations want to be five years ahead but then they are often clueless. The respondent thinks that one important fundament for being successful with innovation is to have a separate budget for innovation, which is not affected by the state of the market or current economic situation. Furthermore, it should not be dependent on the return of projects etc.

### People, culture and organisation

The expert emphasized that to accomplish a culture for innovation, employees must be supported by an organizational structure which quickly can create space for working with individual projects. Creating space means that every hour of the day cannot be scheduled, streamlined or tightly maneuvered. There must be flexibility for employees to pursue ideas, and have a culture where the employees are encouraged to work across departments. Employees should be encouraged to change departments. If the organizational structure

supports this, the respondent also emphasizes innovation endeavors be supported by a central budget for innovation.

### Ideation

Idea generation requires a set of basics to be in place. If there is not a central budget in place for innovation, the CFO must at least create room in the budget for innovation. As an employee, there is nothing in the role description telling you that you should work with innovation or own projects that you yourself figured out. The stimulus to do so must come from the organisation. There must be an allowance from the organisation for unexpected projects and to leave room for those ideas to grow. Furthermore, ideation is supported by creativity. This implies there must be a culture for innovation which do not punish failure, it is highly important that the focus is on what has been learned within different (failed) projects.

### Selection

One of the strengths with the CFO is that they are familiar with the core business from a financial point of view. They have a unique understanding of the business and should, therefore, be a great support in business development as well as choosing what new business models that should be viable with the existing operations. They can also participate by making calculations for this.

### Implementation

Regarding the implementation of innovation, the respondent thinks it is important to do calculations early in a project to prove its viability, both to the CFO but also to the rest of the organisation. This will gain legitimacy for the innovation project. Early in a project calculations of "dreams or visions" should be reported. This could be done through conducting several activities proving that "we have tested this on suitable customers x times, etc." The benefit of this is that statements can be made regarding the viability of the project. For example, if there are external people who wants to invest. In radical projects, the respondent explains that it is even more important to collect signals indicating that the project can be good business. To do this, the user must be in focus. From the CFOs point of view, it is important to make sure that the revenue streams are real. Testing the product on real users by printing or prototyping the product or service is one way to quantify or prove that it will work and will generate revenue, which is important for the CFO.

## 5. Analysis and Discussion

*In this chapter, the empirical findings will be analysed and compared to contemporary academic research following a thematic order. Firstly, an introductory analysis and discussion will be outlined which attend to the findings of innovation and the role of the CFOs. Secondly, the chapter will continue with an analysis of the empirically identified methods which CFOs use to foster innovation. These methods will be compared with the findings provided in the literature review. The structure of the segment is divided according to the five elements of the Pentathlon Framework; strategy, organisation, ideation, selection and implementation. The identified methods for fostering innovation will be discussed in relation to the five elements of the Pentathlon Framework, which also was used as structure in the data analysis. The identified methods in the empirical findings are thus allocated to each element according to how they were discussed by the respondents. Conclusively, a summary table of the analysis and discussion will be provided, which makes comparisons between the methods found in the theoretic background and the empirical findings.*

### 5.1 Innovation and the role of the CFOs

#### 5.1.1 Digitalisation of financial processes

It has been stipulated in the background as well as in the literature review of this report that the level of digitalisation of the finance function has changed the role of the CFO. Automatisation of processes in the finance department have implied that the role of the CFO and the requirements of the position have changed. (Chandra et al., 2018; Deloitte, 2016; Proctor, 2014) However, the aforementioned publications did not specifically apply to Swedish companies. Therefore, the Swedish CFOs were asked about the level of digitalisation in their organisations. Surprisingly, the interviewed CFOs were not satisfied with the current level of digitalisation, and they all admitted that manual work is still required for operational tasks e.g. producing financial reports. Digitisation projects were ongoing in all case-companies which indicate that this topic is prioritised for the top management team. However, since the CFOs reported that much manual work still is related to operational tasks, this indicates that the level of digitalisation in the case-companies have not come as far as anticipated. The level of digitalisation, especially of the finance function, have been identified by Proctor (2014) and Deloitte (2016) as a determinant for how much a CFO have time for engaging in the future of the organisation. The empirical findings suggest that the CFOs still must allocate much time to standardised operational tasks. According to Chandra et al., (2018), it is an important aspect of the CFOs ability to foster innovation that there is time to allocate to these issues and move away from being operational. The empirical findings therefore suggest that the CFOs might have less time for working with the future of the organisation. However, the CFOs show an awareness of that the digitalisation will determine the configuration and prerequisites of their roles, which is in line with Chandra et al., (2018); Deloitte (2016) and Proctor (2014). For example, the CFO of Pulsen already have a list of work procedures and control systems in mind

for fostering innovation, which he will implement as soon as the digitalisation efforts and new processes will allow.

### 5.1.2 Definition of innovation

The case-companies of the research operates in six different industries, which is a likely consequence as to why innovation have appeared in a variety of forms in the empirical findings. As identified by Goffin & Mitchell (2017), innovation is a wide concept which have different bearings for different organisations. The occurrence of innovation in the case-companies ranged in the degree of novelty as well as in dimension. There were examples of innovation being incremental improvements incorporated into daily operations, as well as separated radical innovation projects. Furthermore, innovation also manifested in several different types of dimensions, such as processes, products and services. Regardless the form of existence, all CFOs insisted that innovation is vital for the long-term sustainability of their businesses. Since innovation was described in so many ways during the interviews, it is easy to see why CFOs might have difficulties in comprehending just what innovation means and best can be utilized for their organisation. (Gabriel, 2019) It was therefore surprising that the interviewed CFOs, on the contrary, showed a high level of insight about the concept of innovation. All respondents could make a clear definition of what it means for their organisations, and how it can be utilised. As the CFO of Pulsen noted: *“there is nothing in my role description telling me to work with innovation which indicates that if the CFO takes responsibility for innovation endeavours, it stems from personal interest rather than a requirement from the organisation.*

### 5.1.3 Difficulties of measuring innovation

Another aspect related to innovation is the difficulties of measuring progress of innovation endeavors. The empirical findings show that innovation is not measured in the case-companies. All CFOs explained that progress and output is measured in the overall business, however not exclusively innovation. This is in line with the expert who thought it was expected that there would not be examples of measuring innovation. To his experience, the most common methods for measuring innovation is to use ROI and payback-time, however, these measurements can be ineffective and counteracting for innovation. More adequate ways to measure innovation could be delivering a certain number of projects or ideas, testing a certain number of ideas or increasing the height of innovation.

The interviewed expert suggested that measuring “behavior that is good for innovation” is an alternative, rather than to measure innovation output. One example of such behavior could be “to show respect for an idea” where digging deeper is encouraged. The idea-giver should not have to ask for time to work with the idea, instead, the organisation should allow this. However, measuring the results of behavior is also difficult in practice and the interviewed expert thinks it can be sub-optimising if not done right. This is in line with Pisano (2015) and O’Sullivan (2009) which also stressed that measuring innovation is difficult. It is unpredictable and cannot easily be quantified. The interviewed expert stressed that the lack of quantifiable numbers is naturally distressful for an executive who is financially responsible. The CFOs expressed that the lack of possibilities for measuring innovation is a problem, especially for implementing

innovation which will be discussed in relation to project management in section 5.2.5 of this report.

#### 5.1.4 Applications of methods for innovation

The empirical findings suggest that the CFOs understanding of innovation, the organisational context (industry, size) and the level of digitalisation of financial processes are determinants for what methods are being used by CFOs for fostering innovation. Adding to this, the personal characteristics of the CFO is also a determinant for whether he or she will foster innovation. For instance, the CFO of Liseberg described that the personal interpretation of the CFO role affects how it is performed and to what extent innovation is prioritised. The fact that there is room for interpretation of the role indicates that personal characteristics will influence how it is performed. Furthermore, the interviewed expert identified that personal characteristics is an essential determinant for a CFO to properly promote innovation. Traditionally it has been incorporated in the role of the CFO to minimise risk, have control over budgets and deliver good financial figures in quarterly reports (Blanchard, 2014; Hazel 2014). According to the interviewed expert, that horizon is often too short term for innovation endeavours. The CFOs individual willingness to take risks, and look beyond short term financial targets will determine how good or bad he or she is for fostering innovation. The CFO of Bubbleroom expressed that the most important ability he, as a CFO, has for fostering innovation is to be ambiguous. This means, to consider short term goals and long term plans at the same time. This supports the view of Proctor (2014) in that being a CFO today is a tough balancing act. Personal characteristics seem to be a determinant for how good the CFO will be at fostering innovation.

## 5.2 Methods which CFO use for fostering innovation

### 5.2.1 Methods for Innovation Strategy

Creating an innovation strategy is a profound element of the Pentathlon Framework, as the strategy is shaping and influencing the elements and stages of the innovation funnel. It should guide the idea generation, project selection and implementation. (Goffin & Mitchell, 2017) The methods which the respondents identified to be particularly adequate for encouraging an innovation strategy were *establishing a language for innovation* and *adopting a central budget for innovation*.

When innovation strategy was discussed in the interviews, neither of the CFOs confirmed the existence of an overall innovation strategy in their organisations. Although all of them claimed that innovation was directly, or indirectly, part of their organisations overall business strategy (The CFO of Estrella, Pulsen, Findwise). The CFO of Platzer Fastigheter noted that the closest to an innovation strategy that occurs in the organisation is the agenda set for IT development. The CFO of Liseberg also identified digitalisation and IT-development being a large part of the plans ahead. He related these plans to the innovation strategy since they determine what the organisation wants to be able to do in the future, how they will deliver customer experiences and internal processes. The CFOs of Pulsen, Platzer, Findwise and Liseberg identified that digitalisation endeavours create the basis for innovation since it determines how data can be

accessed, processes are changed and customer value can be delivered. Therefore, it is not surprising that they connect digitalisation to business strategy, which partly includes plans for innovation.

According to the interviewed expert, explicit innovation strategies are rare. More often, they are incorporated in the overall business strategy. Business strategies however seldom have a time horizon of more than two years, but according to the expert, innovation requires longer perspectives. Therefore, it is a conflict of horizons with the strategy for innovation and overall business strategies which support that they should ideally not be combined. Contemporary research identifies that having a separate innovation strategy is crucial for being successful with innovation (Muskett, 2019; Pisano, 2015; Deloitte, 2014; Goffin & Mitchell, 2014). Therefore, this research has identified a discrepancy regarding how innovation strategy is described in contemporary research and how it is implemented in practice. The academic research identifies that CFOs should be key stakeholders in the development of companies' innovation strategies. However, the empirical findings indicate that CFOs are rather involved in formulating business strategies, often through close collaboration with CEOs (Pulsen, Platzer, Findwise, Estrella, Liseberg, Bubbleroom).

#### Establish a language for innovation to institutionalise a definition

In relation to innovation strategy, the importance of establishing a language for innovation was discussed. Primarily it was the CFO at Pulsen who identified that it is his role as a CFO to establish a language for innovation, which involves separating “incremental” and “radical” innovation. The two types of innovation are different, therefore without a language for innovation which separates the concepts, it is difficult to establish an innovation strategy. The CFO further explained that the different types of innovation require different instruments of control. Thus, implementing an innovation strategy varies depending on the type of innovation. Therefore, a definition of the concept of innovation must be institutionalised in order for the organisation to know what is aimed for. Establishing a language for innovation helps by generating a discourse within the organisation that is required for formulating an innovation strategy, according to the CFO of Pulsen. According to Pisano (2015), an innovation strategy should explain the coherent set of interdependent processes and structures of how the company search for novel problems and solutions, synthesized ideas and selects which projects get funded. To do this, a language for innovation must be established to describe what is referred to with the strategy. The CFO of Pulsen and Findwise emphasized that different control systems should be used for fostering different types of innovation, therefore it is important as a CFO to know what the organisation wants in terms of innovation plans. The CFO can then steer the organisation through control systems to promote different types of innovation according to the strategic plans.

In the empirical findings, the method of establishing a language for innovation to institutionalise a definition was mentioned by 2 of 6 interviewed CFOs. (Pulsen and Findwise)

## 5.2.2 Methods for people, culture and organisation

It is the people, teams and organisational structure that allow for innovation to happen in an organisation. During the interviews, several different aspects of *people, culture and organisational structure* were discussed by the respondents. The methods identified in the empirical findings were to use *corporate culture (as a control system)*, *standardizing processes for innovation*, *prompt a learning organisation* and *knowledge management through digitalisation efforts*.

### Use corporate culture as a control system

The first method identified by the CFOs for creating a culture for innovation was to use corporate culture as a control system. This might seem unexpected, since establishing the corporate culture typically is on the agenda of the HR-department of an organisation (Zosya, 2011). The CFO of Platzer pointed out that it is important to have an adequate corporate culture since ideas for innovation require creativity, which relates to the corporate culture. Corporate culture is considered as a control system since the management i.e. CFOs according to Edwinah (2013) can use it to increase and probe desired behaviour, through imposing instrumental values by levers of control. All the interviewed CFOs expressed that they are actively involved in building or influencing the corporate culture for innovation. The CFO of Pulsen described that he has participated in formulating the policy of the corporate culture i.e. the "UPAL-culture". According to Zosya (2011) policies are central parts of the corporate culture architecture. It is suitable that a CFO participate in writing these documents since he or she has the position of understanding policies, regulations, rules and procedures in the organisation. (Zosya, 2011). The CFO of Findwise expressed that he also has been involved in formulating the corporate culture. He has been with Findwise since the start, and back then, the structure of Findwise was characterised by a flat organisation. In a flat organisation, employees have higher engagement which promotes an innovative culture. However, since Findwise has experienced rapid growth, there was a need for the culture to be explicitly formulated.

In the empirical findings, the method of using corporate culture as a control system was mentioned by 2 of 6 interviewed CFOs. (Pulsen and Findwise)

### Standardising internal processes

The second method relating to people, culture and organisation is to standardise processes for innovation. The CFO of Pulsen identified that he, as a CFO, must look at innovation on two different levels; one higher management level as well as a lower process-level, which required to have detailed project management and standardise processes for incremental innovation. Processes for incremental innovation should be incorporated into daily activities, while processes for radical projects should be put aside from daily operations. To develop radical innovations while at the same time be successful in the core business, it is important to have

an organisation with distinct units that are tightly integrated at the senior executive level. This is in line with Tushman & O'Reilly (2004) description of an ambidextrous organisation. However, for incremental innovation, processes incorporated into daily activities should be standardised. The CFO of Pulsen saw that his role for standardising incremental processes was limited since they occur in the daily operations which are too operational for him to decide on. The CFO of Liseberg describes that standardising processes for innovation in his organisation means that forms of cross-functional work must be implemented. Historically, in Liseberg cross-functionality encountered resistance. Standardising processes within the business functions to ensure cross-functional operations is, therefore, a method used by the CFO to foster innovation, primarily of radical character. According to the interviewed expert, standardising internal processes contributes by allowing for innovation to happen spontaneously in the organisation. The organisational structure must allow for unexpected projects to grow. The CFO of Findwise expressed that he had been involved in standardising processes in the organisation as part of the corporate up-scaling where standardising processes is a necessary part. The importance of standardising processes is also discussed by Tushman and O'Reilly (2004) which declare that it is important to remember that to develop radical innovation, the current operations must be efficient. Efficiency in operations are increased by standardisation. (Tushman and O'Reilly, 2004). This partially explains why the CFOs saw it as their priority to ensure an efficient organisation with standardised processes that can be financially monitored.

In the empirical findings, the method of standardising internal processes was mentioned by 4 of 6 interviewed CFOs (Pulsen, Liseberg, Estrella and Findwise).

#### Foster a learning organization

When discussing the topic of organizational structures for innovation, the concept of “learning organisation” was brought up particularly by the CFO of Findwise, Pulsen and Platzer. The CFO of Findwise expressed that to deliver good customer value and be effective with innovation, it is necessary that the firm captures the knowledge that is created in each project. The knowledge can be used for recreating the solution or innovation in the next customer project. Therefore, the CFO of Findwise wants to make Findwise more of a learning organization.

The CFO of Platzer noted that if they manage to become more of a learning organisation will generate competitive advantages. Becoming more of a learning organisation will advance the innovation capabilities of the organisation. It is especially important in the real estate industry which is investment heavy and where innovation is hampered. The importance of this capability has also been identified in academic research, where for example Chiva et al (2014) identified that organisational learning is an important capability of an innovative organisation. To increase the exchange of information, the CFO of Pulsen explained that budgets can be used.

A method for fostering a learning organisation that a CFO can use is to apply a budget-process which create an exchange of information. Interactions occur between top management and lower levels of management, as well as within various management levels but across organisational functions. This is in line with what Chen and Clara (2017) describes when discussing interactive budgets. They identify that budgets used in an interactive way allows for the continual exchange of information, which will improve organisational learning. Interactions through budgets occur when financial managers use control procedures to intervene in ongoing decision activities of business functions or projects. The intervention allows an opportunity for financial managers to incur a debate and challenge underlying data, assumption and action plans.

The CFO at Pulsen made an explanation of a budget-process during the interview, which he would implement as soon as there were systems support in place after their ongoing digitisation project is finished. The described budget process was a method like *interactive budgets*, however, he did not explicitly make that denomination. According to Chen and Clara (2017) using budgets in an interactive way allows for the continual exchange of information, which will improve organisational learning.

In the empirical findings, the method of fostering a learning organisation CFOs. (Pulsen, Platzer and Findwise)

### Knowledge management through digitalisation efforts

Knowledge management and organisational learning go hand in hand, and having proper knowledge management is considered to achieve organisational learning. As described above, the subject of “learning organisation” was brought up by 3 of 6 CFOs, and the discussion naturally progressed into the topic of knowledge management since the concepts are related. The three respondents stressed that knowledge management would help their organisations to become more innovative. This is supported by Chiva et al (2014) which states that innovation depends on an organisation's capability to learn, through which new knowledge is developed, distributed and used. To create, capture and share knowledge, adequate software system support is appropriate in the organisation.

The CFO of Platzer, Findwise and Pulsen emphasized that data management and IT is important. They are in their roles advocates of digitalising processes with one of the aims being improving knowledge management. This is not explicit in their role description as CFOs, rather it seems to stem from a personal interest and background in IT and data management. In fact, as Zosya (2011) have discussed, pandering digitalisation processes typically lies on the table of a Chief Information Officer (CIO) or Data Manager in an organisation, and not the CFO. Lately, CFOs have often absorbed these responsibilities of the CIO and been leaders of computerization movements. A reason for this is according to Zosya (2011) that a large portion of data processing is related to accounting and financial tasks. Furthermore, the CFOs are

responsible for making decisions that may cost a lot of money, as implementing ERPs or applications often do. Furthermore, as the CFO of Platzer and Findwise pointed out, CFOs have a vested interest in proper data management and systems support since it enables better reporting structures. This increase efficiencies and indirectly add-on profits. The CFO of Findwise expressed that he wants to advocate an organisation which not “reinvents the wheel” with every new client. Instead, he sees a responsibility in that the organisation can utilize previous knowledge and capture know-how across projects. Findwise will then according to the CFO be able to excel in delivery, customer satisfaction and focus more attention on innovation endeavours.

In the empirical findings, the method of involving in the process of knowledge management through digitalisation efforts was mentioned by 3 of 6 interviewed CFOs (Pulsen, Platzer and Findwise).

### 5.2.3 Methods for ideation

Ideation is the first phase of the innovation funnel, and in this phase, it is important that the organisation manage to produce ideas for innovative projects. Goffin & Mitchell (2017) identified that having a business environment which motivates employees to come up with innovative ideas, without feeling fear of failure is crucial in this process. When discussing how ideas for innovation projects were created in the organisation, the CFOs highlighted that they were not actively involved in the actual production of ideas. Instead, the creation of ideas for innovation in an organisation commonly occurs in the more operational levels of the different business functions i.e. R&D, market, production or consultancy. A CFO is not, and should not be, actively involved in the production of ideas for innovation. Rather, as all the respondents pointed out, the CFO can influence the ideation through indirect higher-level tasks. For example, by influencing the corporate culture. The primary method which the CFOs identified to affect the ideation is through *exercising leadership which demonstrates it is okay to fail*.

#### Exercise leadership that demonstrates it is okay to fail

One aspect of ideation that was brought up by three of the CFO was the importance that employees feel that it is okay to fail or make wrong decisions. The CFO of Platzer emphasised that it is one of his primary tasks to convey to employees that they are trusted and have authority to make decisions. This is crucial for successful innovation since about 95% of innovation attempts fail to return their capital (Deloitte, 2016). Most ideas for innovation will not be viable, according to the expert. Therefore, employees must feel backed up if they have done something wrong. Having an environment where employees get blamed is unlikely to lead to an innovative culture, according to the expert. The CFO of Bubbleroom also expressed that it is his role as CFO and member of top management to demonstrate that it is ok to make mistakes. The CFO of Findwise noted that having a permissive environment is essential for ideation, especially at Findwise where their operations require employees must be able to make most of the decisions themselves. The opinion of the CFOs around allowance for being wrong and make mistakes is

in line with O'Sullivan (2009) which discuss that CFOs should practice leadership for innovation to show that failure is okay. This should be conveyed by the CFO through daily actions. Doing so will set the tone, encourage experimenting and ideation (O'Sullivan, 2009).

In relation to the subject of allowing mistakes within the organisation, Goffin & Mitchell (2017) have suggested that to keep the staff innovative recognition and reward programs can be useful. This involves not only rewarding success, but also failure (Goffin & Mitchell, 2017). In a report from Deloitte (2015) it was emphasised that employees must be protected in failed projects, and organisational learning experiences should be rewarded. The CFO of Pulsen mentioned that reward and recognition programs are examples of control systems which he is considering for the future. He thinks that implementing such a program will benefit the creation of new ideas for radical innovations. Such initiatives are not in place today, however, the CFO of Pulsen see it as his role to promote ideation through executing adequate and permissive leadership.

In the empirical findings, the method of exercising leadership which demonstrate failure is ok was mentioned by 3 of 6 interviewed CFOs (Pulsen, Platzer and Findwise).

#### 5.2.4 Methods for selection

The sequential phase following the ideation phase is the selection phase. This phase involves selecting the most promising ideas for innovation and evaluating possible risks and returns related to the different projects. The expert noted that CFOs possess knowledge which is advantageous in the selection process. They are familiar with the core business from a financial perspective and have a unique understanding of the business. Therefore, they can be of great support in business development as well as choosing new business models. The CFO of Pulsen mentioned that he can work as a sponsor to engage in the best ideas, which is in line with what Deloitte (2017) describes about sponsorship. By using sponsorship, the CFO manifests what ideas he or she wants the organization to engage in, but let others take the leading role in this. Furthermore, CFOs can determine how potential new business fit with the existing operations. The CFOs concurred with the expert in that they have an important role in selecting projects for innovation, primarily through the method of *resource allocation which considers additional values*.

##### Resource allocation which considers additional values

Allocating resources for innovation projects is not an easy task. The CFO of Bubbleroom described that it is difficult to determine what projects to fund since there are so many stakeholders to consider. In his role, he must consider the owners, customers and short terms vs. long term goals. The CFO of Platzer mentioned that when determining where to put the resources, calculations of future projects and investments are made. The CFO of Platzer, Pulsen and Estrella mentioned that when making investment calculations they often use *ROI* and *payback-time* for evaluating the projects. According to Christensen et al (2008), those common

financial tools can be inappropriate for making judgements of investments with longer time-horizons. It is therefore highly important that finance leaders consider that new ideas sometimes take a while before they generate earnings. Especially for radical investments, the CFO must sometimes afford a short-term loss in earnings to develop the idea. Often the potential loss of short term earnings ends up having a chilling effect on the willingness to innovate (Helton, 2019). O'Sullivan (2009) identified that a CFO have a favourable position for making these decisions since he or she is unlikely to be personally involved with the development of projects and can, therefore, look at the economics and investment decisions in a struggling project with reasoned distance. The CFO of Bubbleroom expressed that this balancing act is difficult.

Allowing short-term loss for long term profit might sound easy. However, as the CFO of Liseberg pointed out it is one of the most profound responsibilities of a CFO to keep track of cash flow. Otherwise, the organisation cannot survive, and too much short-term losses can therefore not be allowed. This is in line with O'Sullivan (2009) who identified that it is a responsibility of the CFO to help companies protect their innovation goals without exceeding the resources. Furthermore, according to Tushman & O'reilly (2004), the core business must not be overlooked when choosing innovative projects. The core business needs to run smoothly and be efficient for the organisation to allow innovation initiatives. It is easy to see why selecting projects for resource allocation is difficult. Therefore, it might be suitable for the CFO to have a guide in those decisions. Preferably, the business strategy, or particularly, an innovation strategy should be useful for that purpose. (O'Sullivan, 2009) The CFO of Pulsen supports the view of O'Sullivan in that it should be helpful if the decision of selecting projects can be guided by an innovation strategy. The CFO of Estrella admits that she sometimes let the business strategy guide portfolio decisions, but argues that the position and formulations in the strategy are not always clear. The CFO of Pulsen noted that he must also consider the range of projects. There are constraints on both time and money which means that some projects must stand back. This indicates that CFOs are struggling with finding the right innovation portfolio and wish for guide with these decisions.

One rule that can be used as support when determining viable innovation projects is the 70/20/10-rule; 70% of all money being distributed on initiatives related to innovation should be concentrated on a firm's core business. The 20% should be spent on adjoining possibilities, and 10% should be distributed to projects that could be revolutionary for the organisation and also that could be of large impact for the market in a broader perspective. (Deloitte, 2014)

In the empirical findings, the method of resource allocation which considers additional values was mentioned by 6 of 6 interviewed CFOs.

### 5.2.5 Methods for implementation

The implementation phase is the last section of the innovation funnel of the Pentathlon Framework. Implementing innovation involves a change of gear in the organisation, and entails turning an innovative idea into reality. Innovations are often implemented in the form projects, as identified by Goffin & Mitchell (2017) and therefore a lot of the discussions around implementation concerned the subject of projects. The CFOs raised the topics of structure, reporting, measuring progress and their involvement in projects for innovation. Therefore, the first identified method which CFOs use for implementing innovation is to *involve in project management through financial control*. Furthermore, the CFOs raised the subject of *measurements and surveillance systems* in relation to implementation, which compromises the second method used by CFOs for making innovation come alive.

#### Project management through financial control

The CFOs, as well as Goffin & Mitchell (2017), identifies that projects are the most commonly used form of implementing innovation. The CFOs expressed that they actively contribute in project management by setting the structure for how reporting should be conducted within the projects. The CFO of Liseberg and Estrella described the importance of being able to follow up progress within the projects, and conduct financial support in the entire process. The empirical findings thus support the view of Langley (2015) in that project management is an organisational competency where active participation by the CFO is suitable.

One difficulty with project management that was brought up by the CFO of Pulsen and Estrella was the lack of numbers for evaluating progress. The CFO of Pulsen pointed out that for radical innovation, it is extremely difficult to know what the market wants. It is not always possible to estimate the market. For radical innovations, a future market is possibly not even definable because it might not yet exist. The CFO of Pulsen further explained that it is generally easier to integrate financial figures of incremental innovation to evaluate progress, but it is still challenging. The CFO of Estrella pointed out that making the correct estimations of the future market is essential for successful implementation. It is equally bad for implementation to underestimate the potential of a project as it is to overestimate it.

Measuring progress of innovation was also discussed by the expert. He expressed that it is important to make calculations early in a project to prove its viability and collect signals indicating the innovation project is “good” business. Doing calculations early will increase the legitimacy of the innovation project. The best way to do so, according to the expert, is to report calculations made of early dreams and visions. Several activities should be performed early in a project to prove that customers and investors exist. This is especially important in radical innovation projects, which often gets killed by the organisation. According to the expert, it is often controllers or even CFOs that kill innovation projects in an early stage, because they need to see that revenue streams are real. Testing the product on real users by printing or prototyping the product or service is one way to quantify or “prove” that the innovation will work and generate revenue.

This procedure of testing innovation iteratively with end-users or customers is the basis of design thinking. Goffin & Mitchell (2017), as well as Liedtka (2018), have identified that

applying design thinking is especially useful in the implementation of innovation. Design thinking considers the experience users will have in interacting with the innovation, which will increase the likelihood that implementation will not fail (Liedtka, 2018).

According to the expert, implementation efforts often fail when the idea lies far from the core business. Design thinking is helpful, according to him, and its applications can help by proving that there are real potential customers for the innovation project. Testing solutions on end-users will lower cost and risk and increase employee buy-in (Liedtka, 2018). To see financial viability is important for a CFO and therefore using design thinking in project management seems adequate for mitigating the challenges identified by the CFO of Pulsen and Estrella.

In the empirical findings, the method of involving in project management through financial control was mentioned by 6 of 6 interviewed CFOs.

#### Measurements and surveillance systems in the overall business

It is not only within the innovation projects that measuring and follow up is important. While discussing implementation of innovation, the CFOs of Liseberg, Estrella and Platzer brought up the topic of having healthy finances in the overall business. It is their responsibility to ensure healthy finances in the current operations, to allow for innovation to come alive. The CFO of Liseberg explained that it is his job to transfer the strategy into budgets, measure that the budget is followed and ensure that the resources are sufficient to follow the plans. The CFO of Liseberg pointed out that if this is not done right, there will be no room in the organization for innovation projects. Healthy finances coincide well with the traditional role of the CFO, i.e. conducting analysing of the financial status of the company and keep track of costs and budgets (Hazel, 2014; Deloitte, 2016). Furthermore, identifying the importance of “healthy finances” for fostering innovation has been done in contemporary academic research. For example, Tushman & O’Reilly (2004) expressed that having internal surveillance systems, measurement and balanced finances in the existing business is necessary for the organization to find a new business (Tushman & O’reilly, 2004). Additionally, Deloitte (2016) have identified it is the job of the CFO to ensure there are guard rails to protect the core business.

Establishing internal surveillance systems is steps taken by a company to make sure it does not fail. A central part of the internal surveillance systems is constructing and following up on budgets, i.e. using them in a diagnostic way. (Zosya, 2011) Diagnostic budgets represent a method with a strong focus on financial targets which involves making corrections as a result of feedback about performance. (Cools et al, 2017) The use of diagnostic budgets might sound constraining for innovation. Research has shown that monitoring processes helps to identify problems and achieve goals, sometimes through novel means (Chen & Clara, 2017) Even though the use of too-tight budgets can have a hindering influence on creativity, people are often inquired and actionable when they know the prerequisites of a project. The budget gives the framework, timeframe and prerequisites within which the team members can act. (Cools et

al, 2017) This coincides with the view of the CFO of Estrella, which expressed that targets are not hindering innovation. In fact, she sees increased productivity from setting targets. However, as she also notes, they must be constantly re-evaluated not to be contradictory for progress. The CFO of Liseberg expressed that it is the biggest responsibility of the CFO to ensure that the company make it to the future. This is in line with O’Sullivan (2009) and Tushman & O’Reilly (2004) who identified the big challenge of maintaining sustainability in the current business, and at the same time fund the innovation that will drive future growth.

In the empirical findings, the method of establishing internal surveillance systems was mentioned by 6 of 6 interviewed CFOs

## 5.3 Summary Table of Analysis and Discussion

### Innovation and the role of the CFOs

Digitalisation of financial processes	The role of the CFOs has already changed as a consequence of digitalisation and automatisisation. However, the CFOs expect this development to continue and that they in the future can become even more of strategists.
Definition of innovation	Innovation have appeared in a variety of forms, types and dimensions in the case-companies. The CFOs show a high level of knowledge and insight around the concept.
Difficulties of measuring innovation	Innovation is not measured in isolation. The CFOs stressed that the lack of tools for evaluating innovation endeavors is problematic.
Application of methods for innovation	Determinants for what methods that are applied for innovation are: level of digitalisation, organisational context and personal characteristics.

### Methods which CFO can use for fostering innovation

Methods for innovation strategy	There were no explicit innovation strategies in the case-companies. A method which the CFOs apply for innovation strategy is to establish a language for innovation, to institutionalise a definition which can be used for innovation strategy.
Methods for people, culture and organization	The CFOs recognised corporate culture to be important and use different types of control systems and participate in policy-making. Having the right systems support, access to data and the possibility to utilise it is identified as essential. Therefore, CFOs foster organisational learning and support IT-initiatives for knowledge management. They take large responsibility for data improvement, software solutions and IT in general.
Methods for ideation	CFOs does not intervene directly in producing new ideas for innovation. They rather influence through high-level tasks. For example, by exercising leadership which show it is okay to fail. Accepting failure is identified as essential for successful innovation.
Methods for selection	Resource allocation is a common task of the CFOs. For innovation, however, additional values must be considered other than short term revenue. The use of ROI and pay-back time for evaluating projects is insufficient. Sometimes it's easier to see the additional values in a project, if it is also in line with the business strategy.
Methods for implementation	CFOs participate in implementation of innovation through setting the structure for project management. Primarily through financial control, structures for reporting and following up. Furthermore, CFOs are concerned with having healthy finances in the overall business to have the strength to support innovation initiatives. This is done by setting up surveillance systems in the overall business.

## 6. Conclusions

### 6.1 Answering the research questions

#### 6.1.1 What methods do CFOs use to foster innovation in Swedish mid-sized and large companies today?

Defining innovation has been described as a difficult task in the literature review. Despite this, the CFOs of the research demonstrated a profound understanding of the concept and how it best can be utilized for their organisations. The CFOs could differentiate and elaborate on radical and incremental innovation, as well as how these types of innovation manifested in the case-companies. Furthermore, they described innovation in a range of dimensions e.g. not only products but also processes and business models, which also is signalling a high level of knowledge and insight around the concept. The findings show that CFOs not only have a rich understanding of innovation, they also experience having a large responsibility for innovation in their organisations. Which they fulfil through applying different types of methods. It has been distinguished that personal characteristics of the CFO e.g. willingness to take risk, is a determinant for what methods are executed. Moreover, data management, digitalisation and IT development are according to the CFOs essential enablers for innovation. Pursuant to these findings, several methods have been identified in the research to be currently used by CFOs in Swedish mid-sized and large companies for fostering innovation.

These are presented in the table below:

#### Methods used by CFOs for fostering innovation

- Establishing a language for innovation, to institutionalise a definition of the concept in the organisation.
- Use corporate culture as a control system, to foster an innovative culture.
- Standardising internal processes, especially for incremental innovation.
- Foster a learning organization, which can utilise created knowledge around innovation.
- Promote knowledge management, by taking large responsibilities in digitalisation efforts.
- Exercise leadership that demonstrates it is okay to fail.
- Participate in resource allocation, which considers additional values other than potential revenue.
- Engage in project management, primarily through financial control
- Impose measurements and surveillance systems in the overall business.

### 6.1.2 How do the methods of CFOs relate to the five different elements of the Pentathlon Framework?

Innovation is a wide concept which has many different bearings depending on the context. The five elements of innovation identified in the Pentathlon Framework have served as a useful division of the concept. The CFOs related different ways of working i.e. methods for innovation to the five different elements. The results show that CFOs are more directly involved in the *selection* and *implementation* phase of innovation rather than the *ideation*-phase. For ideation, influence by the CFO is more indirect through higher-level tasks. Regarding innovation strategy, the findings show that separate strategies for innovation did not exist within the case-companies. Rather, innovation was incorporated in the overall business strategy. Regarding *people, culture and organisation* the findings show that CFOs are very concerned about promoting the right corporate culture and have direct influence over organisational structures through setting structure for reporting. Conclusively, the table below shows how the methods identified in RQ1 relates to the five elements of innovation in the Pentathlon Framework.

Elements of Pentathlon Framework	Method used by CFO for fostering innovation
Innovation Strategy	<ul style="list-style-type: none"> <li>● Establishing a language for innovation, to institutionalise a definition.</li> </ul>
People, Culture and Organisation	<ul style="list-style-type: none"> <li>● Use corporate culture as a control system.</li> <li>● Standardising internal processes for incremental innovation.</li> <li>● Foster a learning organisation.</li> <li>● Knowledge management through digitalisation efforts.</li> </ul>
Ideation	<ul style="list-style-type: none"> <li>● Exercise leadership that demonstrates it is okay to fail.</li> </ul>
Selection	<ul style="list-style-type: none"> <li>● Participate in resource allocation which consider additional values.</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>● Engage in project management primarily through financial control.</li> <li>● Impose measurements and surveillance systems in the overall business.</li> </ul>

## 6.2 Contributions

### 6.2.1 Theoretical contributions

Some research has been published which scrutinise how to drive innovation from the finance function. However, adopting the perspective of the finance department is usually not the primary focus in the large number of articles which have been published within the field of innovation management (Goffin & Mitchell, 2017). According to Chenhall & Moers (2015), more research is expected in the future which focus on understanding how financial management control systems relate to more complex notions of innovation, where the CFO is the person responsible for implementing the most adequate control systems (Accenture, 2018). Therefore, the first theoretical contribution is to shed light on the issue of innovation and the role of the CFO in fostering it. By giving suggestions of what methods that can be used by a CFO in an organisation to stimulate innovation, the previously mentioned research-gap is directed. Furthermore, Chenhall & Moers (2015) argue that there has been some work on differences in financial management control design for the stages in the innovative process (ideation, selection, implementation). However, they add that it would be informative to examine how these stages are interrelated and the implications for management control systems and the finance function. This indicates that not many publications have investigated what is required by the finance function of an organisation (led by the CFO)+ in the different elements of innovation. Thus, the second theoretical contribution is to link the methods used by a CFO for fostering innovation to the different elements of innovation. The research investigates the role of CFOs in the five different elements of innovation management, which are identified in the Pentathlon Framework.

### 6.2.2 Practical implications

According to a survey by Accenture (2018), many CFOs think innovation is important for their organisations, but few understand how their actions can promote it. By looking at the multi-case examples showing what CFOs are doing today for fostering innovation, an increased understanding of what can practically be done to stimulate innovation can be obtained. By suggesting concrete methods for fostering innovation in Swedish mid-sized and large organisations, an executive financial manager, business controller or CFO are provided with insights about what can practically be done for driving innovation in their organisations.

## 6.3 Limitations

The research aim is to investigate what methods CFOs are using to foster innovation in Swedish organisations. The research aim is fulfilled through collecting primary data from six interviews with CFOs and one innovation-expert. A limitation of the research that must be addressed is the risk that the answers by the CFOs are biased. The CFOs were interviewed about their role in fostering innovation. It is reasonable to think that the CFOs would like to say they are working to stimulate innovation, even if they are not. Or, that they do not comprehend what fostering innovation means, even if they might think so. To reduce the risk

of building conclusions on biased data, we have included the perspective of an innovation-expert. He is not occupied as a CFO and can therefore look at the role of the CFO with an objective view. However, it would be ideal to involve more respondents in the research which are not occupied as CFOs to be able to draw conclusions which are more nuanced.

### 6.3 Future Research

The role of the CFO is in an evolving stage, and one of the underlying substantial processes which are affecting the role i.e. the digitalisation and automatisisation of financial processes is still ongoing. The empirical findings suggest that the digitalisation efforts were underway in all case-companies. However, many of the interviewed case-companies were not satisfied with the current level of digitalisation, which suggests that digitalisation efforts will continue. Furthermore, the empirical findings indicate that companies yet struggle with fully comprehending what is required for successful innovation management. Innovation was clearly high on the agenda of all case-companies, and the authors found a readiness from the contacted CFOs to participate in the research because of the topical research subject. However, companies struggled to bring off innovation endeavours as desired. With the literature review and empirical findings in mind, some suggestions for potential future researches are reported:

1. CFO techniques and methods for fostering innovation depends on what type, or category, of innovation that is wanted. This research has treated innovation as a broad concept including all degrees of novelty e.g. both incremental and radical innovation. However, as was suggested by the empirical research. Different methods used by the CFOs are suitable for different types of innovation. For example, as the CFO of Pulsen noted:” If I apply control systems for promoting incremental innovation, that is what I will get. I will not get radical innovation”. Hence, it could be useful to investigate what types of methods a CFO can use for fostering particularly incremental innovation vs. radical innovation endeavours.
2. One of the research aims was to map out how the methods that are used by CFOs for fostering innovation can relate to the Pentathlon framework and the five different elements of innovation. Observations of the literature review in combination with the empirical findings point to a general lack of understanding of what resources, support and insights that are required from an organisation to successfully bring forward the different elements of innovation. For instance, there was a large discrepancy between the case-companies and contemporary research regarding innovation strategy. No empirical finding was reported of innovation strategy; however, the academic research stresses its importance for successful innovation management. This discrepancy is interesting for future research.

## 7. References

### 7.1 Books

Bryman, A. and Bell, E. (2011). *Business research methods*. 3rd ed. Oxford: Oxford Univ. Press.

Eriksson, P. & Kovalainen, A. (2015). *Qualitative methods in business research: A practical guide to social research*. SAGE Publications Ltd; 2 edition (November 2, 2015)

Fylan, F., (2005). Semi-structured interviewing, in Miles J., Gilbert P. (Eds.), *A Handbook of research methods for clinical and health psychology*. New York, USA, Oxford University Press.

Goffin and Mitchell. (2017). *Innovation Management, Effective Strategy and Implementation*. 3rd edition. London: Macmillan Publishers Limited.

Kvale, S. & Brinkmann, S. (2014). *Den kvalitativa forskningsintervjun*. 3. Uppl. Lund: Studentlitteratur.

Patel, R. & Davidson, B. (2003). *Forskningsmetodikens grunder: Att planera, genomföra och rapportera en undersökning*. 3. Uppl. Lund: Studentlitteratur.

Silverman, D. (2004). *Qualitative Research: Theory, Method and Practice*. London: Sage Publications.

Zosya, M. (2011). *CFO Techniques*. 2011 ed. Springer Verlag, 2011. Web.

### 7.2 Articles

Accenture (2018). *The CFO Reimagined*. Web. Retrieved 2020-03-09 from: [https://www.accenture.com/\\_acnmedia/pdf-85/accenture-cfo-research-global-short-report.pdf](https://www.accenture.com/_acnmedia/pdf-85/accenture-cfo-research-global-short-report.pdf)

Blanchard, D. (2014). The Changing Role of the CFO: As the pace of Business Gets Faster and More Complex, CFOs Are Evolving to Satisfy the Needs of Their Companies. *Industry Week* 263.9 (2014): 26. Web.

Chandra, K., Plaschke, F. & Seth, I. (2018). Memo to the CFO: Get in front of digital finance - or get left-back. *McKinsey & Co*, July 2018.

Chen & Clara. (2017) Management Control for Stimulating Different Types of Creativity: The Role of Budgets. *Journal of Management Accounting Research* 29.3 (2017): 1-21. Web.

Chenhall, R. H. & Moers, F. (2015). The Role of Innovation in the Evolution of Management Accounting and Its Integration into Management Control. *Accounting, Organizations and*

*Society 47 (2015): 1-13. Web.*

Chiva, R., Ghauri, P. N., & Alegre V. J. (2014). Organizational learning, innovation and internationalization a complex system model. *British Journal of Management: British Journal of Management. Web.*

Christensen, C. M., Kaufman, S. P. & Shih, W. C., (2008). Innovation Killers: How Financial Tools Destroy Your Capacity to Do New Things. *Harvard Business Review 86.1 (2008): 98-105, 137. Web.*

Collis, J., & Hussey, R. (2013). Business research: A practical guide for undergraduate and postgraduate students. *Macmillan International Higher Education.*

Cools, M., Stouthuysen, K. & Van Den Abbeele, A. (2017). Management Control for Stimulating Different Types of Creativity: The Role of Budgets. *Journal of Management Accounting. Research 29.3 (2017): 1-21. Web.*

Davis, J., Docherty, C. A. & Dowling, K. (2016). Design Thinking and Innovation: Synthesising Concepts of Knowledge Co-creation in Spaces of Professional Development. *The Design Journal, Volume 19, 2016 - Issue 1.*

Deloitte. (2014). Adding innovation to the CFO's agenda. *The Wall Street Journal. Published 2014-03-25.* Retrieved 2020-04-03 from: <https://deloitte.wsj.com/cfo/2014/03/25/adding-innovation-to-the-cfos-agenda/>

Deloitte. (2015). The CFO's role in fostering innovation. *The Wall Street Journal. Published, 2015-08-12.* Retrieved 2020-04-14 from: <https://deloitte.wsj.com/cfo/2015/08/12/the-cfos-role-in-fostering-innovation/>

Deloitte. (2016). The four faces of the CFO. *Deloitte Development LLC. 36 USC 220506.* Retrieved 2020-04-02 from: <https://www2.deloitte.com/us/en/pages/finance/articles/gx-cfo-role-responsibilities-organization-steward-operator-catalyst-strategist.html>

Deloitte. (2017). What projects will you - or should - you sponsor? Retrieved 2020-03-27 from: [https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-cfo-insights-four\\_faces.pdf](https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-cfo-insights-four_faces.pdf)

Dhaundiyal, M. (2019). Imperatives of industry 4.0. *Deccan Herald, 16-12-2019.*

Edwinah, A. (2013). Corporate Culture: A Tool for Control and Effectiveness in Organizations. *Research on Humanities and Social Sciences.*

Gabriel, K. (2019). How CFOs can unlock innovation. *CFO 14-08-2020.* Retrieved 2020- 04-18 from: <https://www.cfo.com/strategy/2019/08/how-cfos-can-unlock-innovation/>

Garvin, David A., & Levesque, Lynne C. (2006). Meeting the Challenge of the Corporate Entrepreneurship. *Harvard Business Review, 84.10 (2006): 102-112. Web.*

Gioia, D. A., Corley, K., G. & Hamilton, A., L. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods, 16 (1) 15-31*

- Goffin, K & Mitchell, R. (2005). The Risks of Innovation The Innovation Process Differs from Other Forms of Project in That It Typically Entails Higher Levels of Uncertainty. As a result, Managers Need to Pay Particular Attention to Risk. *Financial Times [London (UK)]* 2005: 5. Web.
- Hazel, Debra. (2014). Expanding Role of the CFO. *Chain Store Age* 90.6: 10-12.
- Helton, J. (2019). Confessions of an innovation killer. *Healthcare Financial Management*, April 2019.
- Ilker E., Musa S.A. & Alkassim R.S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5 (1), pp. 1-4.
- Kaplan, R. S. (2010). Conceptual Foundations of the Balanced Scorecard. *Harvard Business School*. 10-074 (2010). Web.
- Kaplan, R.S., Norton, D.P. (1996). Using the balanced scorecard as a Strategic Management System, *Harvard Business Review*, pp. 75-85.
- Klapalová, Alena & Radoslav Škapa. (2018). Perceived Importance of Innovation, Knowledge Management Maturity, Returns Management Knowledge and Internal Integration. *Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE 2018 (2018): 347-54*. Web.
- Kristiansen, Normann, J. & Ritala, P. (2018). Measuring Radical Innovation Project Success: Typical Metrics Don't Work. *Journal of Business Strategy* 39.4 (2018): 34-41. Web.
- Langley, M. (2015). 3 Things CFOs Should Know About Project Management. *CFO, Business Planning*. Published 2015-08-06. Retrieved 2020-04-11 from: <https://www.cfo.com/business-planning/2015/08/3-things-cfos-know-project-management/>
- Liedtka, J. (2018), Why Design Thinking Works. *Harvard Business Review*, September-October 2018.
- López-Nicolás, C. & Meroño-Cerdán, A. L. (2011) Strategic Knowledge Management, Innovation and Performance. *International Journal of Information Management* 31.6: 502-09. Web.
- Muskett, L. (2019). Evolving Finance to Support Innovation. *CFO Issue* 2019-10. Retrieved 2020-04-13 from: <https://www.cfo.com/strategy/2019/10/evolving-to-support-innovation/>
- Nagji, B. & Tuff, G. (2012). Managing Your Innovation Portfolio. *Harvard Business Review*, May 2012.
- OECD/Eurostat/European Union. (1997). Proposed Guidelines for Collecting and Interpreting Technological Innovation Data: *Oslo Manual, The Measurement of Scientific and Technological Activities*, OECD Publishing, Paris.

O'Sullivan, K. (2009). Disciplinarians' Dilemma: Derided as Enemies of Innovation, CFOs Can, in Fact, Be Its Valuable Friends. (leadership). *CFO, The Magazine for Senior Financial Executives* 25.6 (2009): 25.

Pisano, Gary P. (2015). You need an innovation strategy. *Harvard Business Review*, June 2015.

Proctor, B. (2014). The Changing Role of the CFO: New Demands Require New Fundamentals. *Financial Executive* 30.2 (2014): 18-19. Web.

Shelton, R. & Percival, D. (2013). Rethinking Innovation in industrial manufacturing. PwC's *Global Innovation Survey 2013: Industrial Manufacturing Perspectives*.

Shipman, R. (2017). The innovative new role of the CFO. *PwC Digital Pulse*. Retrieved 2020-04-17 from: <https://www.digitalpulse.pwc.com.au/report-innovation-cfo-new-role/>

Smith, A. (2012) Innovation-driven Leadership. *Strategic Direction* 28.8 (2012): 169-174. Web.

Smith, M., Busi, M., Ball, P. & Van Der Meer, R. (2008). Factors influencing an organisation's ability to manage innovation: A structured literature review and conceptual model. *International Journal of Innovation Management* 12.4 (2008): 655-76. Web.

Thomson, J. (2013). Signs a Small Business Needs a CFO. *Forbes*, February 14, 2013

Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31, 439e465.

Tushman, T.L. & O'Reilly III, C.A. (2004). The ambidextrous organization, *Harvard Business Review*, 82(4): 74-81.

## 7.3 Websites

Allabolag.se 1. (2018). *Estrella AB*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5567634885/estrella-ab>

Allabolag.se 2. (2018). *Findwise AB*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5566607601/findwise-ab>

Allabolag.se 3. (2019). *Liseberg*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5560236811/liseberg-aktiebolag>

Allabolag.se 4. (2018). *New Bubbleroom Sweden AB*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5566999214/new-bubbleroom-sweden-ab-publ>

Allabolag.se 5. (2018). *Platzer Fastigheter Holding AB*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5567466437/platzer-fastigheter-holding-ab-publ>

Allabolag.se 6. (2019). *Pulsen AB*. Retrieved 2020-04-25 from:

<https://www.allabolag.se/5562596428/pulsen-ab>

Cambridge Dictionary. (2020). Retrieved 2020-04-22 from:

<https://dictionary.cambridge.org/dictionary/english/innovation>

Eurostat (2016). *Glossary: Enterprise Size, European Union*. Retrieved: 2020-04-11 from:

[https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Enterprise\\_size](https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Enterprise_size)

# 8. Appendix

## Appendix 1 - Interview Guide (CFO interview)

<p><b>Interview Guide – CFO interview</b></p> <p><b>Part I - Introduction</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> What is your role and responsibilities as a CFO in the organisation?</li><li><input type="checkbox"/> Have your responsibilities as a CFO changed during your time in the position?</li><li><input type="checkbox"/> What does innovation mean for you?</li><li><input type="checkbox"/> How do you work with innovation in your organisation?</li><li><input type="checkbox"/> Do you consider innovation to be important for your organisation?</li><li><input type="checkbox"/> How would you estimate the importance of you as a CFO for the organisations innovations projects?</li></ul> <p><b>Part II - Innovation strategy</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Does your organisation have an overall innovation strategy?</li><li><input type="checkbox"/> If yes, are you involved in the creation of the strategy?</li><li><input type="checkbox"/> Is the innovation strategy conveyed in forecasts, budgets or other management control systems?</li><li><input type="checkbox"/> How responsible do you feel for the overall innovation strategy? How is the responsibility expressed in activities?</li></ul> <p><b>Part III - People, Culture, organisation</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Would you say your organisation have a culture which stimulate innovation? If yes, in what ways are this expressed?</li><li><input type="checkbox"/> Are you, or have you performed any activities in your role that encourage this innovative character of culture?</li><li><input type="checkbox"/> Are there any concrete incentives, or example of projects you have had in your organisation to stimulate creativity?</li></ul> <p><b>The Funnel</b></p> <p><b>Part IV - Ideation</b></p> <p><i>Ideation is a phase where its necessary to come up with many ideas. Therefore creativity is important and must be promoted.</i></p> <ul style="list-style-type: none"><li><input type="checkbox"/> How do you work to stimulate creativity in your organisation?</li><li><input type="checkbox"/> Is there a control system, framework, internal process in place (that you are a stakeholder in) that you think stimulate creativity in your organisation?</li></ul> <p><b>Part V - Selection</b></p> <p><i>Selection is a phase where it is necessary to choose the best ideas / project.</i></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Are you involved directly, or indirectly in the selection process of innovation projects?</li><li><input type="checkbox"/> Do you use specific evaluation tools when choosing innovation projects?</li></ul> <p><b>Part VI - Implementation</b></p> <p><i>Implementation is the process of bringing ideas to life, and getting the innovation to a commercial product or service.</i></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Does your organisation work with innovation as a project? If yes, are you involved in setting up the project management framework?</li><li><input type="checkbox"/> How do you measure success of innovation projects, or innovation?</li></ul>
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## Appendix 2 - Interview Guide (Expert interview)

### **Interview Guide – Expert Interview**

#### **Introduction**

- What is your background and your occupation?
- What do you think about the role CFO and how it has changed with considerations to the recent technological development?
- Are there new requirements of the CFO?
- What do you think about innovation, how should an organisation work in order to be innovative?
- How important is it for a CFO to be actively involved in fostering innovation in an organisation?

#### **Part I - Innovation strategy**

- Should a CFO be actively involved in creating the organisation's innovation strategy?*
- If yes, how should the CFO involve in this strategy work?*

#### **Part II - People, Culture, organisation**

- How is a culture of innovation created in an organisation? What characterises a culture of innovation?*
- How can a CFO create a culture of innovation? What methods?*

#### **Part III - Ideation**

*Ideation is a phase where its necessary to come up with many ideas. Therefore creativity is important and must be promoted.*

- What methods could a CFO use for stimulating the creation of new ideas for innovation in an organisation?*
- How can a CFO stimulate creativity in an organisation?*

#### **Part IV - Selection**

Selection is a phase where it is necessary to choose the best ideas / project.

- Do you think that the CFO is involved in the selection phase?*
- What are their role in the selection of innovation?*

#### **Part V - Implementation**

Implementation is the process of bringing ideas to life, and getting the innovation to a commercial product or service.

- How do you think innovation are often managed in the organisation? Is the CFO involved?
- What methods can / are CFO's using should be involved in the implementation of innovation?

#### **Conclusively**

- Is there ways of working as a CFO that potentially could constitute as counteracting or limiting for innovation?

## Appendix 3 - Introduction and termination of interviews

### *Introduction to interviews*

Our names are Linnea and Ellinor and we are students enrolled in a Business Master at the University of Gothenburg. We are conducting a research where we are exploring what role the CFO's of an organisation have for stimulating innovation (today). The focus is around the concrete methods a CFO are using to foster innovation in an organisation.

Since innovation is a broad topic, we have taken inspiration from the Pentathlon Framework and categorised innovation into five different elements; strategy, organisation, ideation, selection and implementation. We will ask questions specifically related to these elements of innovation and your role as a CFO.

The interview will be structured in six segments. The first section is composed of introductory questions to set the context and background, where you can explain about your role and how you work with innovation in your organisation. The second part is related to your role as a CFO and the overall innovation strategy of your organisation. The third part is about the people, culture and organisation in relation to innovation and your role as a CFO. The fourth segment is about how your organisation provides an environment for creating innovative ideas, and if you are involved in that process. The fifth segment concerns the selection process, which involves how and when innovative ideas are selected and if you are involved in that work. Conclusively, the sixth segment will be concerned with questions around your role as a CFO and how innovation are implemented in your organisation. Are work treated as projects, and are you involved in project management?

Before starting the interview, we need to ask if it is okay that we record the interview content, in case you feel comfortable with that. We also want you to know that if there are any question you can't answer me for any kind of reason, please tell me. If everything is clear for you, we can now start with the interview.

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### *End of interviews*

I am very grateful for having your time and this opportunity. In case you are interested, we can share the thesis's findings once I have finished my study. Moreover, in case we have additional questions, or something is not clear, can we contact you for further follow up?

# Appendix 4 - Data Analysis Coding

## 1st Order Concepts

## 2nd Order

### Aggregate Dimension: Digitalisation of the finance function

- Digitalisation is an ongoing process.
- Producing financial reports include manual work.
- Standardised systems are used.
- ERP system implementation.

Traditional work in the finance function

- The CFO initiated automatization of financial processes.
- The CFOs personal interest and background in IT.

The CFOs role in digitalisation efforts

### Aggregate Dimension: The role of the CFO

- Financial accountant.
- Leader of financial department
- Reporting to the board.
- Supporter for the IT-department.
- Close relationship with CEO.
- Hard to generalise the CFO role, how it is interpreted is determinant.

What the CFO role involves

- Create awareness of innovation.
- Drive digitalisation processes.
- Have a holistic approach.

How the CFO foster innovation

### Aggregate Dimension: Perception about innovation

- Innovation is necessary for long term success of the org.
- Innovation is a capability.
- New technology, technical insights.
- Working with innovation can look very different.
- Innovation is about what the company offer to the clients.

Definition of innovation as a concept

- Innovation is about creating something new for the company's existing clients.
- Innovation is about creating something new for new customers.
- Improvements of existing ways of working/products

Radical and incremental innovation

### Aggregate Dimension: Measuring innovation

- Difficult to measure innovation
- Ambition to set up measurement system for innovation
- Using ROI, pay-back time, input vs. output

Deficiency in measurement

- Work with visions when implementing something new.
- Follow progress through KPIs
- Evaluation is based on cost and schedule.

How innovation can be measured

## 1st Order Concepts

## 2nd Order

### Aggregate Dimension: Innovation Strategy

- Innovation at different levels; lower process-level and higher management level
- Requires differentiation of radical and incremental innovation
- Transfer innovation strategy into the budget

- No explicit innovation strategy is formulated
- Innovation is part of the overall business strategy
- IT and data development plans
- Involve all employees in strategy work

Establishing a language for innovation

Innovation strategy as concept

### Aggregate Dimension: People, culture and organisation

- Leadership is important for having a culture for innovation.
- Knowledge and organisational learning is important for innovation.
- The CEO willingness to drive change and innovation.
- Digitalisation and data shapes internal processes.

- Freedom with responsibility
- Learning organisation
- High engagement
- Reporting culture might be counteracting

The CFOs role in creating innovative culture

How the organisational structure affects culture

### Aggregate Dimension: Ideation

- The CFO can stimulate innovative ideas through higher-level tasks and encourage through control systems.
- The CFO can build instruments for managing new ideas.
- Creativity requires innovative culture.

- Work with innovation competitions or reward systems.
- Engagement creates creativity.
- Innovation days for sharing ideas.
- Market research for innovative ideas.

How the CFO can stimulate new ideas

Stimulating ideation

### Aggregate dimension: Selection

- Resource allocation
- The CFO has an important role for the selection process.
- The CFO can act as a sponsor.

- Selecting ideas for innovation requires sufficient evaluation tools.
- Investment calculations to evaluate on.
- Resource allocation determined by the budget process.
- The owners and customers opinion matter.

The CFOs role in the selection phase

What determines selection

### Aggregate dimension: Implementation

- Lack of possibilities to evaluate progress.
- Difficult to estimate the market.

- Implementation should take the form of projects.
- Evaluate projects from long term and short term perspective.
- Make calculations early to prove the projects viability.

- Use business model components rather than discounted cash flow.
- The CFO sets structure for project reporting.
- Backing up projects through financial surveillance.
- The CFO should actively involve in project management.

Difficulties with implementation

Successful implementation

The CFOs role in implementation

## Appendix 5 - Email with interview-inquiry

E-mail to CFOs with interview inquiry. The respondents were contacted in native language (Swedish)

*Hej,*

*Vi är två studenter på Handelshögskolans masterprogram "Innovation and Industrial Management". Vi har under vår utbildning studerat innovationsledning, och förstår hur svårt det måste vara att lyckas med innovation.*

*Samtidigt förändras affärsklimatet allt snabbare och teknologisk utveckling ställer ökande krav på organisationers förmåga att förändras och vara innovativa. Med detta i åtanke har vi inlett en forskning som handlar om vilken roll företagets ekonomichef (CFO) har för att främja innovation.*

*Vi tror att en CFO har gått från att tidigare vara operativ/övervakande, till att allt tydligare bli en affärsstrategisk roll. Digitaliseringen och automatiseringen av finansiella processer har gjort att en CFO idag är en person som har stort ägande i att utstaka bolagets väg framåt. Vi blev därför nyfikna över vad utvecklingen av CFO-rollen har för företags arbete med innovation.*

*Eftersom du är en CFO på ett bolag med spännande verksamhet har vi valt att kontakta dig. Vi hoppas att du är lika intresserad av detta aktuella ämne som vi är, och därav vill hjälpa oss att bidra med dina kunskaper och insikter.*

*Vi vill boka ett möte för en intervju som kommer att ta max. 1 timme. Vi hoppas också att du ser ett mervärde i att:*

- *Samarbeta med två masterstudenter från Handelshögskolan.*
- *Bidra till ökad kunskap i ett aktuellt, men outforskat ämnesområde.*
- *Ta en paus från arbetsdagen och reflektera över din arbetsroll.*

*Vi är tacksamma för återkoppling och visat intresse!*

*Med vänliga hälsningar,*

*Ellinor Joelsson och Linnéa Ragnell*