Implementing Sustainability
- An Exploratory Study of the Controller’s Possibilities to Incorporate Sustainability within the Company’s Controlling Process

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Abstract

The existing research around sustainability has traditionally had a reporting focus with less attention towards the controlling of a company. As more research has directed its attention towards the controlling perspective, the human interaction has not been substantially considered. In order to increase the understanding around sustainability implementation the purpose of this study is to investigate how controllers develop management control systems in order to incorporate sustainability within the company’s controlling process. By conducting an exploratory study with interviews of seven controllers with experience from sustainability implementation, rich empirical data is collected and analysed. The study is able to show how sustainability is being implemented through a basis of three fundamental parts: the person, the package and the process. The study has several findings; controllers try to deal with sustainability proactively, controllers implement sustainability differently depending on their background and sustainability is easier implemented if being treated like regular data. The study is contributing both practically as well as academically as it is able to identify and exemplify how Swedish controllers are implementing sustainability within the controlling process.

Keywords: Controller; Controlling; Management Control Systems; Sustainability; Sustainability implementation
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1 The Need for Sustainability

Today’s global and fast changing environment has changed the ways and the rules of doing business. The media is all encompassing and cover corporate scandals and fast spreading news in the moment they occur. Hence, there is a high pressure on companies to be transparent and accountable for all their activities (DiPiazza & Eccles, 2002). The topic of sustainability is more interesting than ever and being sustainable is one of the best ways for companies to show that they care about more than only the financial aspect of business (Nilsson and Olve, 2013). Sustainability, or as it used to be called CSR (Corporate Social Responsibility), has therefore today gotten a permanent place on the agenda among big companies (Al-Tuwaijri, Christensen & Hughes, 2004; Epstein & Buhovac, 2010; Haanes et al. 2012; Mohrman & Worley, 2010). However, as we will see, to change the existing sustainability paradigm of reporting, the focus must be changed towards actions for controlling with sustainability.

From an academic point of view the actual benefits from being sustainable has long been discussed. The general idea within economics has traditionally been that a company’s core goal is to satisfy its owners by earning profit and everything else is a distraction from that goal (Nilsson and Olve, 2013). Sustainable activities were as a result originally only established to meet compliance requirements (Adams & Frost, 2008; Epstein & Buhovac, 2010). This has however come to change and most authors today see numerous benefits from sustainability activities. Ranganathan and Ditz (1998) point towards benefits such as reduced operational risk, lowered cost and an extra competitive edge. Possible financial benefits have in academia been tested multiple times and can be supported by the studies of Margolis and Walsh (2003), Orlitzky, Schmidt and Rynes (2003) and Dixon-Fowler et al. (2013). With rigorous reviews over observations and previous studies, they conclude that a positive relationship between good sustainability engagements and financial performance often exists.

The theoretical supported benefits now seem to find their way into the practical area and many companies realise they need to prove their sustainability in order to stay competitive in today’s market place. From a major study consisting of over 4000 managers, 68 % of the companies state they increased commitment during 2012 (Haanes et al. 2012). Yet an even higher number planned on being even more dedicated within the next years. In agreement with the increased interest, the amount of money on sustainability investments has also increased (Mirvis, Googins & Kinnicutt, 2010; Smith, 2014). By appearing legitimate to the surroundings a

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1 For a more detailed explanation of how the present study defines sustainability, see appendix I
company can earn ‘positive goodwill’ and at the same time avoid ‘punishments’ in forms of financial disadvantages. This proves that sustainability can function as insurance as it may reduce the risks of negative events (Nilsson & Olve, 2013). It is further a transition where the company’s goal is not only to show a respectable facade. Numerous companies are, in agreement with the academic findings, additionally starting to see more direct financial benefits as a result from integrating sustainable activities within the company (Haanes et al. 2012).

As sustainability issues gets both more attention and money the importance to use the resources reasonably is increasing. A visible example is the enlarged focus at sustainability reporting. This is noticeable both from how Swedish state owned companies from 2008 have to provide a sustainability report in accordance with guidelines of the Global reporting initiative (GRI) (Borglund, Frostenson & Windell, 2010) and in academia by numerous publications within accounting (e.g. Aerts & Cormier, 2009; Al-Tuwaijri et al., 2004). Despite the good effects that sustainability reporting can lead to; some researchers are sceptical towards companies’ actions. The fact that companies are pleased with their own reports about sustainability is, according to Gray (2010), often of less value, as many companies do not know how to handle their sustainability issues correct. Gray (2010) further questions the way sustainability often is narrated as a story, and concludes that only reporting about sustainability has not much to do with actual sustainability. Adams and Frost (2008) recognise this as an issue and conclude that data collected for sustainability reporting very seldom is used in any form of strategic alignment, management or decision making within the company.

1.1 Problem
The amount of research on how sustainability data is used for decision-making (Adams and Frost, 2008) or for implementations in practice (Schneider, Wallenburg and Fabel, 2014) is nearly non-existent. As follows, many companies still have difficulties transferring their sustainability work into quantifiable and effective measurements (Epstein and Buhovac, 2010). There have indeed been less successful attempts move towards a more sustainable way of conducting business but not having measurements that account for sustainability, and consequently are inaccurate, could be seen as defeating part of their purpose (Gray, 2010). Although publishing better sustainability reports and generating new knowledge can be seen as positive by most researchers (e.g. Aerts & Cormier 2009; Borglund et al. 2010) the actual effect of the company’s core business is many times questioned. This is further demonstrated
by Borglund et al. (2010) who confirm that the guidelines for sustainability reporting predominantly contribute to improved procedures for reporting rather than creating any actual key changes.

In order to have a larger impact on the company’s processes and actually make changes to the better, more actions than reporting about sustainability consequently must be taken (Ahlrichs, 2012; Crews, 2010; Wynder, Wellner & Reinhard, 2013). As noted by Malmi and Brown (2008), many scholars have devoted their time to study various innovations of control systems in practice. Research about Activity Based Costing (ABC), the Balanced Scorecard (BSC), Value-Based Management (VBM) and rolling forecasts etc. altogether aim to explain the development, adoption, use and impact of their idea. Taking into consideration how it today is equivalently critical for companies to comprehend how sustainability is integrated within control systems, additional research is needed also in this aspect.

Several authors (e.g. Crews, 2010; Epstein & Buhovac, 2010; Mirvis et al. 2010; Schneider et al. 2014) agree that there is a growing importance to manage sustainability implementation also in practice and within the controlling process. “Controlling is the methodology of target-oriented management” and business controlling is necessary for companies who want to reach real sustainability (Ahlrichs, 2012, p.141). Following this line of argument, reporting, which can be seen as a backward and reactive way of documenting a company’s sustainability achievements, is not enough (Ahlrichs, 2012). Successfully integrating sustainability as a central component within the company’s controlling process is instead vital (Crews, 2010; Epstein 2008; Mirvis et al. 2010). The importance can further be enhanced by Epstein and Buhovac (2010) who state that many companies today acknowledge the need to implement sustainability within the controlling process but are struggling with the implementation.

As there now exist studies trying to give advice on how to incorporate sustainability within the controlling process, the general research focus is on the organisational structures or frameworks. Less focus is instead on the people within the companies enabling the change. Crews (2010), Epstein (2008), Mirvis et al. (2010) and Schneider et al. (2014) all discuss sustainability implementation within companies but none of them choose to incorporate the role of the controller. Crews (2010) and Epstein (2008) touch upon a leader’s role without recognising the controllers’ contribution. Mirvis et al. (2010) and Schneider et al. (2014) take a more structural approach and disregard the importance of human involvement concerning sustainability implementation. Comprehending that it is the controller’s task to develop
relevant tools and methods for controlling (Anthony & Govindarajan, 2007; Bergstrand, 2010; Merchant and Van der Stede, 2007; Nilsson and Olve, 2013; Sathe 1983) it is reasonable that the controller\(^2\) also would handle the implementation of sustainability within the controlling process. This argumentation finds support in Biel (2009, p.1) as Jürgen Daum (SAP AG) states “controllers need to ask themselves more often how they can design the enterprises to be sustainable and future-proof”. Daum is of the opinion that it definitely is part of the controllers’ job to deal with sustainability aspects.

Despite real controllers’ interest, much of the research on controllers has not yet started to deal with the complexity of integrating sustainability (Biel, 2009). Among research there are only a few suggestions regarding how, or why, controllers should be taking a bigger part within the work of sustainability implementation (e.g. Ahlrichs, 2012; Nilsson & Olve, 2013). Ahlrichs (2012), Nilsson and Olve (2013) and Gates and Germain (2010) all recognise that sustainability is an important matter, which the controller needs to take into account. Nilsson and Olve (2013) note the growing importance of sustainability within controlling and state that the controller needs to be aware of the sustainability aspects. Ahlrichs (2012) is of the same opinion. He points at how the controller’s work must comprise sustainability objectives and that his/her involvement is necessary in order to reach real sustainability.

The present study’s position is that sustainability is a highly important issue and that the controller has a significant role in integrating sustainability. Integration not only in the company’s reporting but also in the development of control systems. This position is taken with respect to the few affirmative examples within literature (e.g. Ahlrichs, 2012; Nilsson & Olve, 2013), the increased focus on sustainability among practicing controllers (Biel, 2009; H&M, 2015), along with general theory stating that it is the controller’s task to direct focus and use appropriate and up-to-date controlling tools (Anthony & Govindarajan, 2007; Merchant & Van der Stede, 2007). The question is consequently not if the controller should try to incorporate sustainability within the controlling process but how.

\(^2\) For a more detailed explanation of how the present study defines controller, see appendix I
1.2 Research Question

As companies today want to be proactive with their sustainability work, and reap benefits from it, sustainability needs to be integrated within existing control systems and have an impact on day-to-day decisions. Noticeable from existing research, this is highly important but at the same time definitely a challenge. Companies have troubles transferring their sustainability work from only reports into effective measures for the controlling process. Both academically as well as practically there are needs to understand how controllers, and the companies they represent, are developing control systems in order to incorporate sustainability within the controlling process. This leads up to following research question:

*How does the controller develop management control systems in order to incorporate sustainability within the company’s controlling process?*

1.3 Aim and Contribution

Exiting studies, advising on ways to implement and control sustainability (e.g. Crews, 2010; Epstein, 2008; Schneider et al, 2014), do not incorporate the role of the controller. This study aims at understanding the controller’s role when encountering sustainability demands and his or her work to implement sustainability within the company’s controlling process. As Ahlrichs (2012), Crews (2010), Epstein (2008) and Schneider et al. (2014) direct their focus primarily towards the United States and Germany, the present study will further be able to contribute to existing research as it gives insight into sustainability implementation in Swedish companies.

With the starting-point in the concept presented by Malmi and Brown (2008), this study investigates how a controller, within a Swedish company, develops control systems that integrate sustainability. Based on the notion of management control systems as a package, this study investigates how the growing popularity of sustainability has affected the controller in terms of his or her controlling process. Since practice in many cases is lacking evidence on how sustainability successfully can be implemented (Epstein, 2008), the present study strives, from a theoretical perspective, to identify and exemplify how sustainability is being implemented within the company’s controlling process. By doing so, it will contribute to the literature in regards to the fields of control systems (the package), the controller (the person) and the controlling (the process) as well as to the combination of these three fields. The purpose is for these three fields to make up a more comprehensive foundation and give a broader perspective for sustainability implementation. Lastly, the study can function as a
practical tool for companies that realise the need for improved controlling and want examples of how controllers work with implementing sustainability.

1.4 Thesis Disposition

Chapter 2 describes the foundation of controlling and is divided into three parts. The Package, the tools available for controlling. The Person, the actor or actors within the company responsible for controlling. The Process, controlling as a flow of events over time where different tools and methods are used in practice. In Chapter 3 the theoretical developments of the need for controlling in regards to sustainability are presented. The chapter is summarised by an analysis model where the theoretical key points based on the foundation are being narrowed down and encapsulated. Chapter 4 provides a comprehensive overview of the methodology in this study. It describes the process of how data was collected together with the selection of interviewees followed by a discussion about ethical perspectives. Chapter 5 presents the findings from the empirical data. It illustrates the controllers’ possibilities as well as challenges with integrating sustainability aspects within the companies’ controlling process. In Chapter 6 the empirical findings gets examined with consideration of the theoretical foundation. The chapter analyses sustainability implementation from the role of the person, the use of the package and the process of controlling. Chapter 7 is the final chapter and answers the research question and summarises the main findings. It highlights the most important takeaways regarding sustainability implementation and gives suggestions for future research.

2 The foundation

The study is built on the use of three parts: the Package, the Person and the Process (P-P-P). The idea is to let these three parts function as guidance throughout the study. The parts are constructed for this study specifically and aim to provide a foundation for the study in order to answer the research question. These parts have, to this study’s knowledge, never been investigated together before but were chosen to together grasp the comprehensive situation and broad perspective of implementing sustainability within the controlling process. Within this chapter the parts are described strictly from a controlling perspective, i.e. without any connection to sustainability.

2.1 The Package

Malmi and Brown (2008) have in order to roughly map how control is exercised presented the typology seen in figure 1. The basic idea is to see how management control systems can be
used to direct employees to act, decide and behave in line with the companies’ objectives and strategies. The typology consists of five systems of control, with some sub-categories. Malmi and Brown (2008) recognise that it is problematic to study control systems individually since no system works in isolation and many companies in reality use a combination of numerous different systems. The authors recognise that there are plenty of reasons to look at the control systems not in isolation but as an interconnected phenomenon, a package. They recognise the need for their study, since existing research tends to have a too narrow focus that overlooks in what contexts the systems operate in connection to each other. According to the authors is it beneficial for companies to learn how different types of control are interrelated, e.g. can complement or substitute each other. Learning this will ease the understanding of each system and help companies reach the desired outcomes.

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Figure 1. Management control systems as a package illustrated by Malmi and Brown (2008). Used within the present study to clarify the package, the tools available for controlling.

To present control systems operating as a package is however not a new occurrence. The idea has been studied over 35 years by e.g. Otley (1980) and Flamholtz, Das and Tsui (1985). Yet Malmi and Brown (2008), with their qualitative approach, have gained a certain reputation among researchers (e.g. Ferreira & Otley, 2009). The five systems of control presented by Malmi and Brown (2008) are:

- **Cultural controls** - Controlling the employees by influencing them with what is in line with the organization
- **Planning** - Using goals and formulated directives to control execution and make clear what is expected of the employees
- **Cybernetic Controls** - Setting clear objectives and measure performance in order to follow up and give feedback
• Reward and Compensation - Motivating employees to achieve organizational goals by individual or group based goals.

• Administrative Controls - Governing the behavior of individuals by establishing who is responsible for specific actions.

Something Malmi and Brown (2008) recognise as a challenge with creating a ready package is the difficulty to draw general conclusions. Since companies are large and complex is it difficult to both capture this complexity and at the same time illustrate the situation in a comprehensive paper. Perhaps is it this challenge of complexity that has urged Malmi and Brown (2008) to disregard one of the perhaps most important factors, the human interaction, when discussing the use of control systems. Bergstrand (2010) notes that the control systems form the backbone within the company’s controlling. However, for the company to operate, people who take responsibility and who can see the whole picture are needed. With respect of it being the controller’s task, by relevant tools, to manage and control the employees and the company (Anthony & Govindarajan, 2007; Bergstrand, 2010; Merchant & Van der Stede; 2007; Nilsson & Olve, 2013), the present study considers it being necessary to also involve the controller’s interaction when studying the control systems.

Yet another issue with the package is how it can be seen as fixed. A company is constantly changing while the package, as described by Malmi and Brown (2008), is ever the same. Realising this need for a process in combination with the package furthermore illuminates the needs for a controller to handle and balance the many and changing control systems (Merchant & Van der Stede, 2007). It will in all research, whenever considering the typology presented by Malmi and Brown (2008), consequently be appropriate to add the aspect of the controller and the process in combination with the theory about the package.

2.2 The Person

In Sweden, Controllerhandboken by Nilsson and Olve (collectively with other leading scholars), with its ten editions during the last three decades, plays an important role in controller literature. Internationally the role is less clearly defined and the terms controller and management accountant can both be used for a person in charge of management decisions and responsible for monitoring and controlling (e.g. Granlund & Lukka, 1997; Merchant & Van der Stede 2007). Among practitioners, the controller profession has grown from being something only for big, manufacturing companies. It is today a profession appearing in all kinds of industries, both public and private companies and also smaller companies (Bergstrand, 2010).
The increase indicates that the ideas by Sathe (1983), regarding the need for controllers in times of uncertainty, are still highly relevant today. A company today normally has numerous controllers at different organisational levels. The corporate controller is working at the headquarters and several other controllers are operating at different business units within the company (Anthony & Govindarajan, 2007; Merchant & Van der Stede, 2007). Regardless of organisational level the controller is usually part of the management team and he or she consequently has responsibility for the relevant organisational unit (Sathe, 1983).

The controller needs to have good and up-to-date knowledge about the specific company. According to Nilsson and Olve (2013), it is essential to have an overall insight into different tools and different controlling measurements as well as an experienced understanding in how to promote them to others. Merchant and Van der Stede (2007) conclude that the controllers play key roles in the design and development of control systems. The controllers are experts within the financial measurement and important members of the management teams. The difference between positive financial results and major corporate scandals is very likely dependent on the actions by the controller (Merchant & Van der Stede, 2007). All in all is there a range of activities and decisions the controller can be involved in dependent on the structure and situation of the company. Activities such as planning, budgeting or evaluations together with decisions about pricing, distribution or new products are only some of the possible undertakings for the controller (Sathe, 1983).

2.3 The Process
One of the major responsibilities for a controller is to facilitate in management’s decision-making process (Sathe, 1983). Keeping a good eye at costs, their origin and their development is one way of doing so. Thanks to today’s vast access of information and numbers from various systems, it has become more important to handle controlling issues by breaking down what is most important and focus on that in particular (Ahlrichs, 2010; Lindvall, 2009). One goal for the controller is to enable the company’s controlling processes by finding and establishing different measures for different units to follow (Nilsson & Olve, 2013; Sathe, 1983). It is today more common among Swedish controllers to be part of this proactive goal-setting role and therefore step away from a reactive role more connected to only monitoring and reporting (Bergstrand, 2010). The controller gets easily stuck in a too reactive role but it is, according to literature (e.g. Bergstrand, 2010; Nilsson & Olve, 2013; Sathe, 1983), important that the controller also is able to work proactively.
The process of finding and integrating measures into the goals of the company is nonetheless complicated. Both Nilsson and Olve (2013) and Borglund et al. (2010) recognise the challenge to initially find relevant measurements. It is vital that every important piece of information is considered in each process and that future consequences are taken into account (Anthony and Govindarajan, 2007). It is additionally difficult to integrate these measures in controlling models and make sure they are used and followed in the right sense. According to Ahlrichs (2012), the basic process of controlling can be illustrated by a continuing cycle. One of the simplest forms of such controlling cycles, meant to enable continuous improvement, was introduced by Deming (1982). His *Deming cycle* holds four constantly on-going steps including plan (setting targets) do (implementing in daily business), check (collection of data) and act (analysis of plan). While planning and doing are proactive tasks, checking and acting are more reactive tasks of the same cycle.

The model basically tells us that all four steps are important and that partial improvements, or selective focus often hampers the overall accomplishments of the company (Ahlrichs, 2012). Even though it is vital that the controller is part of the entire process many controllers today feel that they are not able to spend as much time as they want on the planning stage (Nilsson & Olve, 2013). Very strong focus on check (reporting) can lead to suboptimal company performance if the other steps in the process get neglected (Ahlrichs, 2012). It is instead recommended for the controller to use the different steps in combinations. When establishing or updating the measurement systems could it for example be smart to seek inspiration in many times already existing measurements for external reporting (Nilsson & Olve, 2013).

3 Controlling with Sustainability

This theory section starts off with section 3.1 introducing the importance of studying sustainability. The rest of the chapter then follows the P-P-P standard introduced in chapter 2. The chapter concludes with an analysis model where the theoretical key points are being narrowed down and encapsulated in a figure.

3.1 The Importance of Studying Sustainability

Numerous authors today realise that caring about sustainability is more than only a trend and they can point out several reason for why sustainability is important for companies. Epstein (2008) goes as far as stating that *every* company today realise that sustainability is important. If every company has realised this or not is in the present study left unspoken but it is at least
uncomplicated to see that sustainability more or less has become a permanent and critical part of business among bigger companies today (Crews, 2010; Epstein and Buhovac, 2010). That being said, companies are undoubtedly finding sustainability important for different reasons and there are both cynics and optimists regarding companies genuine concern (Nilsson and Olve, 2013). Considering the numerous reasons to care; true concern, stakeholder interests, regulations, economic profit etc., the question is, as Epstein (2008) puts it, no longer if sustainability issues should be handled but why. The present study finds it necessary to take it one step further and not settle for why but to get an understanding of how sustainability matters are dealt with.

3.2 Person - The Controller’s Connection to Sustainability

The amount of research on the controller’s work with sustainability is limited and there are probably several reasons why that is. One is that controlling towards sustainability is a relatively new area (Ahlrichs, 2012). Another reason can be understood from Lindvall’s (2009) reasoning; there is no research on the connection since in practice another unit rather than the controller should handle sustainability issues. Gates and Germain (2010) are however questioning if sustainability work should be “owned” by a separate unit instead of being delegated to the controllers. Considering the reasoning by Nilsson and Olve (2013) and Gates and Germain (2010) together with business examples and real-world justifications (Biel, 2009) suggest that sustainability represents an increasing part of the controller’s tasks. The need for and yet limited existing research on the topic can exemplify the necessity of studying the controller’s involvement in the controlling process.

Ahlrichs (2012) concludes that the increased demands on sustainability definitely has affected the controller and in turn has created new demands on the controller. He determines that much of the management practice needs to be updated and significant changes need to be made in how the controller works. Nilsson and Olve (2013) are of similar opinion and also notice these increased demands. Independent of the company’s view on sustainability, a controller should keep up to date with the sustainability-debate affecting his or her company. They further state there is a growing practical interest among controllers to find methods that can help management and employees go from word to action and fulfil their strategies and plans in regards to sustainability.

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H&M is one of several companies who today make clear that sustainability work is part of the controller’s tasks. [http://career.hm.com/content/hmcareer/en_id/what-can-you-do-here/production/business-controller.html](http://career.hm.com/content/hmcareer/en_id/what-can-you-do-here/production/business-controller.html)
Epstein (2008) similarly recognises the need for companies to create processes to improve both financial and sustainable performance but mentions managers or financial executives in place of controllers. As the controller, in accordance with Sathe (1983), is a part of the management team these terms can be considered relatively equivalent. Also the actions, reactions, impacts and tools Epstein (2008) discusses as necessary for managers in many regards touches or resembles what Nilsson and Olve (2013) are discussing being within the role of the controller.

3.3 Process - The Procedure of Implementing Sustainability

3.3.1 Traditional Sustainability Work
In order to comprehend how the controller develops control systems that are including sustainability it is first necessary to grasp how most companies actually has worked with sustainability issues until today. Sustainability work has traditionally only meant reporting sustainability (Crews 2010, Wynder et al. 2013). In agreement with the steps presented by Deming (1982), this means that a great focus has been put on the step check (the collection of data).

The benefits of sustainability reporting are legitimacy and possible awareness, discussion and alignment among employees (Borglund et al., 2010; Epstein & Buhovac, 2010). Mirvis et al. (2010) conclude that what gets reported should reflect the company’s core ideas. Preferably it should transform the company towards becoming more sustainable (Mirvis et al. 2010). Several authors are doubtful towards reporting being the only or most important tool for sustainability work in practice. Mirvis et al. (2010) and Wynder et al. (2013) conclude that external reporting can portray a dishonest facade of sustainability to stakeholders, which is dangerous and creates large risks (e.g. bad reputation) for the company. Gray (2010) is of the opinion that many companies are handling sustainability wrong and concludes just as Ahlrichs (2012) that reporting about sustainability has little to do with actual dedication to sustainability. According to Ahlrichs (2012), a bigger focus on all the steps within the controlling process, the Deming cycle, is needed.

3.3.2 Controlling in a Broader Sense
Nilsson and Olve (2013) note that sustainability data often is separated and used either for reporting or controlling and that the general issue seldom is discussed with a more unified agenda. Conscious controllers understand, according to the authors, the importance of both proactive and reactive controlling and have an understanding of the difficulties and possibilities with both aspects. Exclusively doing one of the two aspects of sustainability work
is consequently not enough. In order to truly commit, and reap the most benefits, companies therefore need to stop only reporting sustainability and learn how to use collected data for things such as strategy alignment and improved decision-making (Adams & Frost, 2008).

The divergence and excessive focus on reporting that can be seen today in practice can correspondingly be seen within academics. While the literature, according to Crews (2010) and Schneider et al. (2014), on sustainability in general is expansive, most of the studies have an accounting or reporting focus and less research has been done on sustainability as part of managing or controlling (Crews, 2010). Another example of a study, which has recognised the gap between reporting and optimal controlling towards sustainability, is Adams and Frost (2008). They look at how sustainability reporting can be integrated within management practices and are able to show how competent reporting leads to improvements in sustainability performance. This finding is supported by Nilsson and Olve (2013), as they conclude that reports are tangible instruments that can be used to improve controlling. These positive results, regarding the possibility to improve controlling, indicate the need to investigate how companies implement sustainability within their controlling process.

3.3.3 The Challenges with implementing Sustainability within Controlling
The true test for a controller regarding his or her commitment to sustainability lies, according to Wynder et al. (2013, p.377), not in the external reporting but “in the internal measures of performance that drive managerial decision-making”. Many companies spend time and resources on their sustainability reports but have plenty to learn when it comes to using the data in the company’s controlling process (Adams & Frost, 2008; Biel, 2009). Mirvis et al. (2010) determine there is a significant gap between executives who admit that sustainability is important in order to reach financial success and executives who actually take serious actions on integrating sustainability into the business practices. Also numerous other authors (e.g. Adams & Frost, 2008; Borglund et al. 2010; Crews, 2010; Epstein, 2008; Epstein and Buhovac, 2010 Schneider et al. 2014) have identified the challenges of implementing sustainability within controlling and have come up with numerous reasons for why.

Schneider et al. (2014) note how there is little existing research on what is actually enabling sustainability implementation, which could be one of the reasons for why many companies struggle with it. Mirvis et al. (2010) conclude that a more agreed view with better alignment for responsibility and handling of issues is needed. Both Adams and Frost (2008) and Borglund et al. (2010) determine that companies have difficulties transferring their sustainability work
into quantifiable and effective measurements. Epstein (2008) and Epstein and Buhovac (2010) agree with the above and additionally determine; a) it is difficult to set up clear goals with direct links to profits, b) financial short-term pressures are affecting the decision-making and c) stakeholder reactions are uncertain and constantly altering. Epstein (2008) is able to summarise it by remarking that it is fundamentally different to implement sustainability compared to any other strategy.

Despite the numerous issues mentioned above are all authors certain that it is of growing importance to manage the implementation of sustainability within controlling. Ahrichs (2012, p.142) for example states, “Controlling requires new or enhanced tools and metrics due to this expansion of the scope”. Epstein and Buhovac (2010) further conclude that many companies today indeed want to implement sustainability but do not know the proceeding. The numerous exemplified challenges presented within academia imply that there is a need for a practical study where companies with experience from sustainability work are investigated.

3.4 Package – The Implementation of Sustainability within Control Systems

3.4.1 Existing models

While most authors can agree on why it is problematic to implement sustainability within practice, they are more inconsistent on how to actually solve the problem and are consequently presenting different ideas or models. The willingness to explain the world by newly constructed or updated models (e.g. BSC, Six Sigma etc.) lies in the nature of academia. In this case, it can however also be supported by Crews (2010). Organisational leaders today face a more complex reality than existed when the most common used management models were developed. This notion is further in agreement with Nilsson and Olve (2013) who reason that existing economical models have little or no experience adding sustainability aspects. The authors state that many models or systems are not designed, or perhaps even compatible, for adding these new perspectives.

Looking at it from a more theoretical perspective, the package presented by Malmi and Brown (2008) does also not take sustainability into account when discussing their control systems. Still, they interestingly enough touch upon the topic. They are in the light of a constantly shifting environment discussing what possible sets of control systems that play the biggest role when managing overall lasting performance. Since they do not have any answer, they leave this issue open for future research. Even if this study has its own agenda it will probably contribute to coming some steps closer answering their issue thanks to the examination of how
controllers can develop control systems in order to incorporate sustainability within the controlling process.

3.4.2 Interrelated Control Systems
For sustainability work to be influential, sustainability needs to be built into the instruments and processes of the company (Epstein, 2008). Nilsson and Olve (2013) conclude that measurements other than financial ones should be in focus and they further state that there is a need to give attention to values and qualities which cannot be quantified, and therefore risk to be overlooked. Ahlrichs (2012) describes hybrid systems and show how a sustainable company needs to have strategic objectives that include various targets. Based on the balanced scorecard, a ‘sustained scorecard’ with additional sustainability goals is presented. Ahlrichs (2012) advocates how the controller can use key indicators and gives examples of new measurements such as ‘Sustainable value Added’. Also Keeble et al. (2003) recommend the use a non-financial system with KPI’s and has for example developed a model with 69 indicators answering four key sustainable development questions. The authors aim to help companies by involving key staff and facilitating to better decision-making around performance measures. Adams and Frost (2008) also describe the process of developing KPI’s for measuring sustainability performance. They argue the use of non-financial “sustainability”-KPI’s can be used to effectively influence decision-making. In their study of British and Australian companies, they are able to show how sustainability is getting integrated and used as a base for decision-making. They show that both the issues and operations vary a lot from company to company which has implications for practice, guidelines and legislation.

Also Schneider et al. (2014) give advice on approaches when implementing sustainability. Their angle is more from an organisational and planning perspective. They argue internal coordination proves to be the most obvious facilitator of successful implementation. A proactive sustainability strategy requires increased coordination and it is a necessity to have a broad set of measures and clear goals and instruments to meet both short and long-term goals. Crews (2010) discusses how sustainability from a both organisational and cultural perspective should be communicated. The recommendations involve the importance of credibility and sustainability fully integrated within the entire company. Also Mirvis et al. (2010) take up the importance of full integration of sustainability and discuss how the cultural controls and the companies’ vision, mission and values are essential in sustainability implementation.

The studies that perhaps have come the furthest within the field of how to implement
sustainability in the company’s controlling process are the works by Marc J. Epstein (e.g. Epstein 2008; Epstein & Buhovac, 2010). Epstein and Buhovac (2010) show, in a more straightforward way with a financial measurement system, how to use available techniques to tie measurement and reporting of sustainable impacts into operational day-to-day management decisions. The authors stress the importance of making sustainability a central component in planning, systems and the culture throughout the company. They also notice that few companies have bothered to quantify the link between sustainability actions and financial effects. Companies in many cases work with sustainability because they think they are “suppose to”, rather than making it a business case. Not quantifying the financial effects makes the companies, according to Epstein (2008), less adaptable to integrating sustainability within the strategy and also more vulnerable to shifting priorities. By measuring all effects in financial terms and integrating in existing systems and traditional investment models, Epstein and Buhovac (2010) reason that companies are able to make more affective management decisions.

3.5 Conclusion of Theory – Analysis Model
As can be seen within the theory section, there are various reasons for why companies today want to be more sustainable. All authors referred to in section 3.4 recognise at least some challenges occurring when sustainability is being implemented in practise among companies. These challenges vary but a central reason is, according to Epstein (2008), that implementing sustainability is completely different from implementing other strategies. Different authors are recommending different kinds of control systems in order to successfully implement sustainability. Using the typology by Malmi and Brown (2008) it can be seen how for example Epstein (2008) is arguing for a type of cybernetic control with a financial measurement systems while Mirvis et al. (2010) instead argue how cultural control is the most important. The diversity of solutions can be seen as evidence that it might be wise to look at the situation from a larger perspective.

The present study’s contribution to the literature will consequently be to look at the situation from a broader perspective with a more practical view in order to investigate sustainability implementation. As several studies (e.g. Adams and Frost, 2008, Ahlrichs, 2012) have concluded, reporting is not enough and companies need to look at how sustainability also is incorporated within the controlling process. All factors within the foundation: the package, the person and the process (P-P-P), will therefore be examined. More specifically the present study will examine the controller’s possibilities to develop control systems in order to incorporate
sustainability within the controlling process. In line with the fact that a company consists of individuals making controlling possible (Bergstrand, 2010) and that it is the controller task to develop relevant tools in order to control the company, this study argues that all parts are equally important. The *person* is necessary in order to facilitate and encourage better outcomes for sustainability. The *package* is the required control systems available for the controller to use. The *process* shows how the controller actually operates and with what approach he or she uses the available control systems.

With this in mind figure 2, based on P-P-P, is created. Within figure 2, a person can be seen in the centre of the company’s controlling process with the possibility to use the package explained by Malmi and Brown (2008). This package is in figure 2 represented by the various control systems available around the person. Companies use a combination of controlling methods to manage the company in the optimal direction, not only towards sustainability. The idea is thereby that the person, depending on the situation and his or her experience, chooses appropriate control systems to use. The arrows are further two-sided in order to capture the process. When it comes to sustainability implementation the controller can work with a proactive or reactive agenda, or both. By starting from the steps presented by Deming (1982), the traditional ways of only reporting sustainability, if the person checks or acts, are signs of a reactive role. This is symbolised by an arrow towards the person. If the person is being part of developing control systems and plans or does, he or she has a more proactive role. This is symbolised by an arrow towards the package. In accordance with literature (e.g. Ahlrichs, 2012; Nilsson and Olve, 2013), conscious controllers are able to capture both sorts of tasks and act both reactively and proactively. This is symbolised, just as shown in figure 2, by a two-sided arrow.

![Figure 2](image_url)

*Figure 2. The analysis model displaying the controller (person) responsible for managing the various control systems (package) available when implementing sustainability within the controlling process (process).*
The advantage with the model is that despite different companies are using different control systems and have different processes the model can function as an expression of individuality. While it in some companies are more or less difficult to align the controlling with sustainability is this model attempting to show how controlling proceeds from the person involved and the need to adapt the controlling process to the specific company. Figure 2 intends to embrace the logic by Malmi and Brown (2008), about complexity in a company. Focusing only on aspects that are recognised as important by the controllers is a way to narrow down and focus on the research question.

4 Methodology

The method chapter presents the study's scientific perspective and the methodological choices made in the study. It is also explained how the interviewees were selected, how the interview guide has been created, and how the empirical data was collected and analysed. Finally follows a discussion about this study’s ethical perspectives.

4.1 Research Approach

This study aims to contribute to an increased understanding of how controllers within Swedish companies, develop control systems that includes sustainability. The approach is based on empirical experience together with the basis of literature to derive conclusions. It can therefore, in accordance with the reasoning of Bryman (2008) and Saunders et al. (2009), neither be seen as an overall purely inductive nor deductive approach. The approach is dependent on which part (P-P-P) is being analysed. As the literature review has revealed, there is a need for a greater understanding about the controller in general but foremost his or her connection to sustainability implementation and development of control systems. The almost non-existent research within this area has led the analysis of this part, the person, to take a more inductive approach. The present study has, at the same time, explored practice and analysed the package and the process, with a more theoretical basis. This makes it possible to watch these parts as slightly more deductive. The overall mixture has enabled me to draw conclusions in order to answer the research question, without getting too restricted by limitations in existing research regarding sustainability within controlling.

4.2 A Qualitative Approach

The purpose of this study was to look at how controllers develop control systems in order to incorporate sustainability within the controlling process. Since the research question aims to
answer how, a qualitative study was seen as appropriate. A qualitative approach is, according to Holme & Solvang (1997) and Saunders et al. (2009), best suited when the study seeks to improve the understanding of an issue or when the reasoning behind a decision is in focus. Since the study was trying to increase the knowledge about an unstructured process in the real world, was it, in accordance with Bryman (2008), a natural starting point to perform a qualitative study.

Qualitative interviews aim to understand the interviewees’ opinions. The interviews tend to be flexible as the questions can follow the respondents’ answers, and give the opportunity for appropriate follow-up questions (Bryman, 2008; Saunders et al., 2009), which in turn will enable a broader understanding of the situation (Bryman & Bell, 2013). One advantage with performing interviews, relevant for the present study, was that interviews make it possible to deeply investigate the reasoning around certain processes (Holme & Solvang, 1997). Since little existing research has investigated sustainability implementation from a controlling or controller perspective, an exploratory study was performed. An exploratory study is, in accordance with Saunders et al. (2009), explicitly suitable for research in new areas. Yet another argument for interviews can be acknowledged from Malmi and Brown (2008) as they conclude that future research in connection to their typology should be in forms of interviews rather than surveys, in order to ensure the quality of the data.

The study strived to establish rather open discussions around the topic where the respondents on several occasions were encouraged to develop their reasoning. Unstructured interviews are well suited for exploratory studies as they are less strict and they enable an open discussion, enable the understanding of opinions and provide the opportunity to have unstructured supplementary questions (Saunders et al., 2009). The study was, in accordance with the recommendations by Bryman and Bell (2013), executed to have open and thought-provoking questions (i.e. no yes or no questions) and a less strict order of questions. By holding unstructured interviews the present study was able to benefit from the interviewees insight and it was easier to grasp the respondents’ dealings with sustainability. Because basically no existing research deals with how controllers are handling sustainability implementation it was essential not to get too narrow-minded but be open for the controllers’ every view and opinion related to the topic. Having a less strict set of questions enabled this.
4.3 Considerations with Selected Approach

Bryman and Bell (2013) suggest that qualitative studies should be assessed on their authenticity and credibility, which for example depends on the study's reliability. The reliability of the study depends on whether the typical rules of unstructured interviews have been followed. Authenticity and credibility refers to how detailed the research, work processes and limitations are described. These factors are strengthened by a clear and structured methodology in the study. The method described in this chapter is presented in detail to give the reader a clear picture of how the study has come up with the results. To strengthen the study's reliability and authenticity all processes and limitations have been described as careful as possible. A general weakness with qualitative studies is how the generated results should not be generalised to the population, but rather should be seen as generalising the theory (Saunders et al., 2009; Yin, 1994). When performing this qualitative study it was consequently not the intention to extrapolate the results. The results will instead function as a first insight into how controllers are working with implementing sustainability in the companies controlling processes. A general weakness with exploratory studies is the difficulty to recognise theoretical terms in practice. A way to deal with this has, in accordance with Saunders et al. (2009), been to be open and flexible and allowing previously unplanned analyses respond to new findings. In agreement with interpretative research, the analysis can be seen as a process where the understanding has been developed over time.

According to Saunders et al. (2009), a disadvantage with interviews is that respondents may be affected by the interviewers' body language and that interviewees may want to answer in a way that gives a good impression. Procedures that were done to reduce this impact on the respondents were, in accordance with the advice by Saunders et al. (2009), to begin each interview with neutral and general questions and to avoid leading questions. Another general disadvantage of interviews is the risk of misunderstanding the respondent’s reply (Saunders et al., 2009). To minimise this risk, all respondents were asked if it was acceptable to get back to them if, after going through the material, it was something I did not understand or something that needed further elaboration. Before the study's publication, extracts from the empirical text were sent to each respondent where they had the opportunity to clarify anything that might have been misunderstood. Considering I was aware of the possible drawbacks with interviews together with the actions done to reduce their impact, it can be argued that performing interviews was indeed the best choice for answering the research question of the study.
4.4 Interviewees

In order to contact companies I chose to send an interview enquiry (see appendix I) by email to various companies. Aligned with the aim of the study it was most important that the company had a well-established connection to sustainability work with a clear sustainability strategy. For that reason neither the industry nor the type of company had, during the selection phase, any vaster importance. Size on the other hand was of certain significance since smaller companies in general have less experience from dealing with sustainability than what bigger companies do. This is noted by Waddock and Graves (1997) who conclude that larger companies attract more attention and in order to meet stakeholder demands, need to take more actions concerning sustainability. As a result companies on the Nasdaq OMX Stockholm Large Cap, all with operation in Sweden, were contacted. Every enquiry was sent out to one or two email addresses that were found on each company website.

To let individuals choose to take part in research is known as self-selection sampling and is appropriate for exploratory research (Saunders et al., 2009). It can further in agreement with Saunders et al. (2009) be seen as an appropriate method for this study since it allowed individuals who were experienced and interested in sustainability to devote their time to be interviewed. The negative side with this approach of selection is however that the respondents are not representative for the population. In this case, busy controllers could easily neglect an email about an interview.

The selection of people in qualitative studies is crucial since the results to a large extent depend on the respondents. Respondents that are not suitable for the questions at hand can technically even lead the study to lose more or less of its value. The choice of interviewees has therefore, in accordance with Holme and Solvang (1997) been a central part in the study. As it was the aim of the present study to explore how the controller is actually working in practice, it was of importance to hold interviews with people with experience from both controlling and sustainability issues. The goal was to hold interviews with controllers that had spent time and/or resources on sustainability implementation. The controllers would contribute to the study, as they would be able to give relevant examples of how they personally are controlling with sustainability.

Noticeable from the first round of enquiries sent out was the rather positive response received from companies eager to schedule an interview and be part of the study. However, more concerning were the various titles of the people responding. Even though the email was
directed towards controllers, or persons in a similar position, I received agreeable responses from people in different units. The reaction to this fragmentation was to make sure every potential interviewee had a clear connection to controlling with tasks similar to a controller. In some cases I had to decline their participation and kindly ask to be directed to the correct person within their company. In other cases such connection existed and their job description would fall under the present study’s definition of a controller. Their tasks could be considered equivalent to a controller’s despite not being titled controller. The present study uses a slightly broadened definition of controller in order to capture the entire width of the phenomenon. This choice is more thoroughly clarified in appendix I. A list of all interviews is provided in table 2.

<table>
<thead>
<tr>
<th>Respondent’s title</th>
<th>Company (section)</th>
<th>Interview type (length)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Area Controller</td>
<td>Trelleborg (5.1)</td>
<td>Telephone (40 min)</td>
<td>2015-03-24</td>
</tr>
<tr>
<td>Non-Financial Controller</td>
<td>Atlas Copco AB (5.2)</td>
<td>Personal (50 min)</td>
<td>2015-03-26</td>
</tr>
<tr>
<td>Head of Finance</td>
<td>Fabege AB (5.3)</td>
<td>Personal (45 min)</td>
<td>2015-03-26</td>
</tr>
<tr>
<td>Financial Controller</td>
<td>Manufacturing Company (5.4)</td>
<td>Telephone (30 min)</td>
<td>2015-04-08</td>
</tr>
<tr>
<td>Sustainability Manager</td>
<td>Atrium Ljungberg (5.5)</td>
<td>Personal (45 min)</td>
<td>2015-04-08</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>Swedish Match (5.6)</td>
<td>Personal (35 min)</td>
<td>2015-04-10</td>
</tr>
<tr>
<td>Management Controller</td>
<td>Retail Company (5.7)</td>
<td>Personal (40 min)</td>
<td>2015-04-27</td>
</tr>
</tbody>
</table>

Table 1. List of interviews

Yet another relevant factor for this study is how many interviews that should be included. Eisenhardt (1989) argues that researchers should stop adding interviews when the additional learning has been saturated. In the end of my seven interviews I started to recognise many of the answers, which indicate that saturation has been achieved. According to Eisenhardt (1989), there is no ideal number of interviewees. Fewer than four interviewees can nevertheless make the study weak, as there are few sources to generalise a complex situation from. At the same time, interviewing more than ten respondents is also not recommended, as it becomes difficult to interpret everything because of the complexity and volume of information involved. Seven interviews, qualifies in the middle of the interval and the documented interviews have all enabled me to gain information in order to answer the research question. Within the present study two interviews where held over telephone. This was done in order to reach controllers who for various reasons did not have the possibility to meet in person. The benefits of an increased number of participating respondents can be supported by Sturges and Hanrahan (2004) who note that the differences between telephone interviews and personal interviews are small within qualitative studies.
4.5 Preparation
Since the respondents had significant working experience from both controlling and sustainability work it was essential to prepare well for the interviews. This was, except performing the literature review, done also by performing a minor pilot study. The pilot study was executed with an experienced sustainability consultant who played the role as a controller and answered the interview questions. Performing the pilot study made me able to change the wordings in some unclear questions and delete a few irrelevant questions.

The preparations for the interviews also consisted in the development of an interview guide (see appendix III). This interview guide was based on the literature review that was conducted. The main purpose of the interview guide was, in accordance with Bryman and Bell (2013), to create a comprehensive framework for the interviews in order to strive for all relevant theoretical areas being addressed during each interview. This is explained further within the operationalization in section 4.6. The questions were not always asked exactly as stated in the interview guide. Instead of asking the exact same questions every time, it was considered a higher priority to adapt the interviews to the answers given by the interviewee. To my knowledge this adaptation led to less controversial questions and a smaller risk that the interviewee would only give answers that were politically correct but far from the actual situation.

4.6 Operationalization
The interview guide starts with general questions (question 1-4). These “warm-up questions” served, in accordance with Saunders et al (2009), to make sure the discussions set off in a comfortable way. They also provided me, as a researcher, with general knowledge about the interviewees’ background and their current positions. The rest of the interview questions were categorised into three parts; the person, the package and the process. Some of the questions concerned more than one part but were nevertheless categorised in one category only. This difficulty to distinctively separate the questions was due to the interrelatedness of the three parts.

As the involvement of the controller looks differently depending on the structure and the situation of the company (Sathe 1983), the questions in this section were establishing the role and the responsibilities of the person (question 5-10). Increased demands on sustainability have forced companies to spend more time and resources on sustainability work (e.g. Epstein & Buhovac 2010; Mirvis et al. 2010) and it was hence of relevance to see how this has affected
the controller. Since Ahlrichs (2012) and Nilsson and Olve (2013) are of different opinion than Lindvall (2009), the expectations on the controllers were examined. Regarding the issue whether sustainability work should be owned by a separate unit or not, exemplified by Gates and Germain (2010), the involvement of other units were also investigated.

Companies are exercising control and are using various tools, systems and practices to direct employees to act, decide and behave in line with the company’s objectives and strategies (Malmi & Brown, 2008). In order to find out what these tools are and how they are interrelated in each specific company, the next set of questions was designed to be regarding how the package (question 11-16) within the company was perceived. One of the central factors when performing the interviews was to identify when and how controllers talked about different types of control. A way to avoid possible misunderstanding was to make sure there was a shared perception of controlling. At the same time, the respondents would not be steered in answering in a particular manner. By first letting the respondent explain freely and then displaying the typology by Malmi and Brown (2008), I wanted to receive a broader understanding of what the interviewee meant when discussing various control systems. This allowed the respondent to reason how well their control methods could be described by the package. By asking about different control systems in relation to sustainability this set of questions intended to establish the possibilities/challenges for the controllers to include sustainability. In what types of control systems, described by Malmi and Brown (2008), it was considered easier/more difficult to include sustainability, was also touched upon.

Nilsson and Olve (2013) and Adams and Frost (2008) stress the importance of including sustainability within the entire controlling process. They are of the opinion that effective reporting about sustainability can lead to improvements in management practices. It was of importance to investigate to what degree the companies were reporting sustainability and how they had been able to incorporate sustainability in their controlling processes. In order to capture the controller’s role within the controlling procedure, the questions about the process (question 17-23) were created. The questions were establishing how the controllers were dealing with sustainability implementation as well as the general benefits of including sustainability in the controlling process. As communicating current control systems is a common responsibility for controllers (Nilsson and Olve, 2013) and could be seen as do within the Deming cycle (Deming 1982), one communication question was included.
4.7 Purpose of Analysis
In order to better understand the purpose of the analysis, this section is intended to operationalize some of the choices that were made in connection to the analysis. Regarding *person* (section 6.1), the purpose was to investigate whether it was possible to identify different "types" of respondents. This was done in order to explain if or to what extent different views, ideas or possibilities to include sustainability, are linked to the background or experience of the controller. Regarding *package* (section 6.2), the purpose was to explore how the respondents used the control systems as a package or not. It was also of interest to see within what control systems it was possible to include sustainability and within what control systems it was more difficult. Regarding *process* (section 6.3), the purpose was to examine how controllers were working proactively and reactively with sustainability and how different types of controlling tasks could explain the possibilities to include sustainability.

In order to simplify the interview summary (see table 2) the respondents were sorted after different criteria. In accordance with interpretative research the respondents were not selected after these criteria and the criteria only worked to easier explain the differences and similarities among the respondents. Relatedly no boundaries were drawn up before hand and the separations that have been made emerged in connection to the writing of the analysis. Consequently the separations are no exact science and only used in order to better illustrate the respondents. Respondents’ experiences were separated into either long or short. The respondents with a short experience had within the present study worked between 2 and 3 years as controllers within their company while the respondents with a long experience had worked between 10 and 17 years. By starting each interview with general questions the controllers could be divided into having either financial or sustainability background. This separation was based on earlier work and job assignments. Lastly, all the respondent’s tasks were also divided into subgroups. The respondents explained their tasks more in detail but in order to make it comprehensible for the reader, all tasks were divided into any of four groups. These were strategic planning, communicating, consolidating data and analysing.

4.8 Ethical Research Perspectives
In consonance with the reasoning by Bryman (2008) it is important when performing research to inform the individuals that are being studied or interviewed about the intentions of the study and that the use of the material is thought to be for a specific purpose only. Providing the interviewees with some information about the study (see appendix II) and making a short
presentation about my thesis and myself before each interview has been a successful way to deal with this potential issue. Giving the respondents the opportunity for their name and/or the company name to be anonymous has been another step to act in an ethical manner. Giving all interviewees the opportunity to be anonymous whenever they want, with no questions asked, has hopefully made the respondent more comfortable when answering the questions. It has in accordance with Saunders et al. (2009) also enabled them to express themselves more freely without feeling too obligated to in a proper way represent their company. In this study, two companies wanted to stay anonymous. The interviewees did further as promised receive extracts from the empirical text before the study’s publication in order to get the chance to clarify possible misunderstandings.

5 Empirical Results

This chapter takes a step away from the PPP structure in order to present each interview by itself and not combine theoretical terms with the empirical results. The P-P-P structure will instead be used in chapter 6. A summary of all interviews can be found in table 2 in the end of the chapter.

5.1 Business Area Controller

The respondent has the overall responsibility for reports and processes in order to follow up and control the areas overall business. One of the main tools at Trelleborg for controlling is the strategic plan. This plan together with a financial plan, runs over 3 years but gets updated every year. The respondent also bases his controlling on his units profits and loss statements, balance sheets and cash flow statements that he looks at every month. The results are being compared to the expected results and the comparisons are at this level relatively financially driven. Trelleborg has a history as a conglomerate where financial results were very much in focus. The respondent sees how this is still noticeable, even though “today is more about operative control”. Today some non-financial data is taken into the consolidation system that the respondent uses. The reason why the company gathers this additional information is partly because they need to but also in order to gain a better overall understanding.

The respondent concludes that Trelleborg has a modern “western-civilisation view” on sustainability but has yet more integration to do in the controlling process. He points out that sustainability in many aspects is not a formal demand from the top management. When doing the 3-year plan, growth and profitability is more important. “In order to get there we are
discussing sustainability issues but mostly at a qualitative stage and not defined in scorecards or KPI’s to a larger extent. The respondent does not have any direct involvement in the reporting process and is not getting evaluated from any goal fulfilment that has to do with sustainability measures. He considers it easier to integrate sustainability within policies and reward systems rather than in the financial statements. He argues that, “the policies are only to write down” and reward systems can have a rather direct effect of the behaviour. The problems with these two control systems are not the implementation part but rather the follow-up process. Direct financial effects of sustainability are, according to the respondent, more difficult to measure and therefore more difficult to incorporate within the controlling process.

5.2 Non-Financial Controller
The respondent works with consolidation of data from different units within Atlas Copco. She works within Group Controlling and makes sure the information from the units looks correct and provides the top management with data when they need information either for controlling internally or reporting externally.

Atlas Copco is rather decentralised and every business area is responsible for their controlling. In order to control towards sustainability however Atlas Copco has a SHE (Safety, health & Environment)-council. Together with the business area controller of corporate responsibility and a representative from each business area is the respondent part of this group. The SHE-council is formulating overall sustainability strategies and its goal is to “together be controlling the sustainability issues more specifically”. A more practical way the SHE-council is working with encouraging units to become more sustainable is through the sharing of best practice cases. “If a good investment is being made somewhere and it gives result (e.g. less energy use), we are trying to show what has been won from that investment. By connecting it to money and making an investment calculation is it easier to spread.” A normal way of doing so is to show the payback of an investment.

Most goals in connection to sustainability are enforced top-down. The goal to reduce CO2-emissions by 20% is presented in the annual report. In these cases “has the group decided on a number and then all divisions need to adapt and reach these goals by setting their own goals and making their own strategies.” These KPI’s are obtained from GRI and adapted to what is important for Atlas Copco. No monetary compensation systems in connection to non-financial data exist, as far as the respondent knows. She is not in charge of deciding over reward systems but does not see it as an important question. She believes, that the units are trying to reach their
sustainability goals anyways and states that plenty of scorecards with KPI’s are being used to internally regulate in what direction the various units are moving. By forcing units to discuss their sustainability goals and results on their management meetings Atlas Copco tries to minimise the divergence from financial data. By making sustainability KPI’s more standard, Atlas Copco attempts to work the sustainability aspects into the culture of Atlas Copco.

The respondent believes the best way to incorporate sustainability within the controlling process is to avoid making a big difference between non-financial and financial data. A major step was taken five years ago when the consolidating system started to include non-financial data. The non-financial data is since was the received from the units in the same way as the financial data and it was gathered once every three months instead of once every year. Creating similar processes has made it more serious and makes it easier to create routines. This since the respondent does not need to search or ask for data as before. Also in the planning stage, Atlas Copco has tried not to differentiate too much and “we try to have the same processes for financial and non-financial data in order to enable the controlling.”

5.3 Head of Finance

In one sense did Fabege as a real estate company start their sustainability work already a long time ago by realising they could save a lot of money by saving energy. Today they have an entire business area with environmental focus responsible for energy saving and proper material use. Also environment certifications (e.g. Green building, BREEAM) for all property, as well as monitoring the suppliers to ensure the supply chain, is part of the sustainability work.

Even though reward systems exist within Fabege is the respondent hesitant to them as “they can certainly be counterproductive for the company as a whole”. For the respondent is instead creating engagement among all employees something highly important and something she thinks well characterises Fabege’s controlling. According to the respondent, goal setting is an important part and KPI’s and “soft values are as far as possible broken down to various units.” By using watchwords that get reviewed on conferences and yearly evaluations of the employees, is Fabege trying not only to follow laws and restrictions but also to create an inner Fabege-feeling about what is socially and ethically correct to do in certain situations. The respondent points out how the top management has an important role, “I think you can design how many systems you want but unless management thinks it is important, you won’t get
In the same sense is she arguing that what gets displayed externally needs to be true internally as well.

The respondent considers that Fabège is using various control systems in connection to sustainability and that all control systems go together in one way. She argues the indirect effects often are very strong. Some companies are “not willing to rent if we cannot provide a green lease, and if we can not offer that we miss a large part of potential tenants and then it will affect the financial.”

5.4 Financial Controller

The respondent concludes that Manufacturing Company can, and probably will, be better at connecting non-financial measurements to reward systems in the future. He does not see any problems with having reward systems that are including sustainability measurements but reflects that the company culture and shareholder expectations has lead the company to use reward systems in the ‘normal’ way with financial goals.

An important part for the respondent has been to calculate the financial gains from sustainability actions. This is for example when it comes to energy use rather easily done. Manufacturing Company is using best practise examples. “Today is more about creating comparability and being more specific”. The respondent states that it is an important but difficult matter to create meaningful fragmentations. By breaking down every factory in about 100 processes they are enabling comparisons for the processes that are alike between factories.

“It is important to be tangible and clear with what you are measuring”. The respondent concludes that the economical values are so normal in the society since they are regulated by law, audited etc. It will, according to the respondent, take some time until sustainability aspects get the same status. By quantifying and by having clear and tangible goals for sustainability, the status will be improved. “It is easy it gets a bit too wishy-washy, clarity is important and here the controller has a big part. The controller must be part of and describe how to measure and define things”.

The company has during the last years started to measure non-financial factors more often. This has, according to the respondent, improved the controlling and made it more flexible. The respondent is certain that the importance of controlling sustainability will increase and points at many companies who are aiming to create environmental profit and loss accounts and environmental KPI’s. The respondent is convinced that the idea of making the results more
tangible and finding a calculation model that can be revised is the right way to go. “It all comes down to the monetary value, even if it does not show on our company’s account it can show on the society’s account”.

The respondent advises other controllers and companies to be clear what they actually mean with sustainability and to find out the actual effect on the own company. Independent on control systems the respondent argues it is important to incorporate the sustainability effects as far as possible. By finding the right way of controlling and be brave enough to broaden the perspective to include non-financial aspects, sustainability effects are possible. The respondent further concludes that the first initiatives to change towards sustainability need to come from the top of the company since it will not work otherwise.

5.5 Sustainability Manager
The respondent is responsible for Atrium Ljungberg’s sustainability strategy and her role includes controlling the company by creating overall measurements and goals. She works to support the implementation of sustainability questions within the company and she makes sure there is a common agenda throughout the organisation. An important part right now for the respondent is to, in line with GRI and materiality, have a discussion with various stakeholders in order to decide the sustainability focus. These discussions have so far led to more certifications and a bigger focus on sustainability.

According to the respondent, the business concept and the values at Atrium Ljungberg are of great importance when it comes to controlling. It is important to have a reliable long-term focus and the company culture is something the respondent is trying to spread to all employees. By forming a contract and using a performance management system “Every employee have individual value-based goals stating how you should work”. Except the strong cultural control and some long-term goals in sustainability, few control systems are used centrally at Atrium Ljungberg. Reward systems and BSC’s are for example not used at all and the policies have, according to the respondent, no controlling function. The company is further not using ISO-certifications but instead certifies buildings with help of and industry specific BREEAM.

Most controllers at Atrium Ljungberg today are financial controllers and do only financial follow-up. The respondent believes their role can be developed in the future as sustainability is getting more incorporated within the controlling processes. One example is ‘energy use’ which has high financial impact and could be treated like a financial measurement. It, is already
measured and followed up and can therefore easily be included in the controller function. She is of the opinion that “it is important that sustainability is an integrated part in all the company’s processes and work. It should not be something only for a specific function”. The respondent believes it is important to make an analysis of what the company’s significant issues are and make sure these are part of the company’s business strategy. Doing so will be “a more natural way of including sustainability in the company’s processes and in the controlling”. The next step is, according to the respondent, to break down to employee level and make sustainability tangible.

5.6 Business Analyst

Swedish Match has no reward system for top management on sustainability goals yet but the respondent argues that it is possible. Factories are tracking some sustainability measures on monthly basis and it is centrally simple to measure electricity use, water use, emissions etc. “Regarding energy use is it natural to have goals since it can lower the cost which is good also from an economical standpoint”. The respondent is certain it will be more common to include sustainability aspects within the controlling process in the future and that sustainability will not be something only for a specific unit. He thinks future laws and regulations will make a shift necessary. If a company is getting punished for their amount of emissions, will it be a natural step for that company to carefully measure and control how they can reduce their number. To control sustainability and be ahead of competitors can for a company be seen as “a form of risk minimising”.

There are, according to the respondent, plenty of advantages with including sustainability in the controlling process. If sustainability gets more integrated and part of the controlling, for example through more sustainability-KPI’s, then it would get more attention within the company in general. The respondent does not see any problems with this development since many sustainability aspects can get measured, and “as long as you can measure it you can integrate in in the control systems”. With a strictly financial background, the respondent does not find sustainability data very different from financial data. “Sure many people think sustainability is fluffy, but it is not fluffy in the reality” and he points out that much of the data on sustainability can be measured and monitored like any financial numbers.

Despite the possibilities to fully incorporate sustainability, Swedish Match is not there yet. Sustainability is less centrally controlled and financial controllers work with more computer systems and controlling models than what the respondent does. A problem he sees is that the
computer systems in many cases are not yet adapted for integrating sustainability aspects. Better systems can include sustainability within the same process instead of having a distinguished process. Another problem is that both centrally and at the factories there are different people who handle financial and non-financial data. It is, according to the respondent, therefore often a clash of cultures, which is making the cooperation less smooth. While many people within controlling have a financial background and little experience from sustainability, people working with non-financial data are not very familiar with controlling or working with quantitative data on a daily basis. “We need to speak the same language in order to cooperate”

5.7 Management Controller

Since Retail Company has had a strong cost-focus for a long time was it in most cases easy to adapt to the new sustainability demands. The respondent was the one who initiated the development of sustainability KPI’s. She wanted relevant KPI’s that included sustainability in order to keep up with competitors sustainability work. Developing new KPI’s with sustainability was easily done as the company already had established measurements and was using KPI’s frequently. By proceeding from sustainability reports and GRI the company was together with consulting help able to choose targets, goals and KPI’s in connection to sustainability. The purpose was for the employees to consider sustainability aspects when taking all kinds of decisions.

The main objective for the respondent has then been to spread the information and make sure all employees understand how the new measurements affect them. This is mostly done by educating, explaining and illustrating. “Many employees found it more convenient to not care about sustainability”. When sustainability actions were closer connected to financial gains, the changes were easier adopted. Technically the respondent does not see any problems with including sustainability within the control systems. Retail Company has kept their financial KPI’s and added new ones with sustainability and all managers are today getting evaluated on numerous different aspects. Sustainability has also been included within their company concept with the idea to consider sustainability aspects more often.

CSR is included in all controllers’ daily work and they have all “received a CSR package”. The respondent finds it good that the process of handling sustainability data is similar to other data. Sustainability measures are examined every three months and if a KPI is not functioning there are possibilities to change or remove it. The respondent has further tried to evolve a new measurement system where sustainable choices would get prioritised and “included” in the
KPI’s. This would mean that “an investment in a sustainable measure would be allowed to cost a little more money”, as it would benefit the company in the long run. This is at this stage just a vision for the respondent but she is confident that it in the future will be easier to measure the exact financial costs or benefits on sustainable investments.

Since the controller seldom is alone in charge of the process, consensus within the company is needed. The best thing for a controller to do is, according to the respondent, to show in words and actions about what can be done and show the benefits of being sustainable. “The controller is in charge of facilitating and making it possible for the employees to make sustainable decisions”.

5.8 Interview summary

Table 2 summarises the interviews by illustrating the experience of the controller, his or her general background and the major tasks he or she has. The table further provides examples of how the respondents work with sustainability implementation within their company.

<table>
<thead>
<tr>
<th>Title</th>
<th>Experience</th>
<th>Background</th>
<th>Major tasks for the controller</th>
<th>How the controller works with sustainability implementing within his/her company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Area Controller</td>
<td>Long</td>
<td>Financial</td>
<td>Analysing Strategic Planning</td>
<td>Measures and monitors sustainability if money can be saved</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Treats some sustainability data as other data</td>
</tr>
<tr>
<td>Non-Financial Controller</td>
<td>Short</td>
<td>Financial</td>
<td>Consolidating data Strategic Planning</td>
<td>Treats sustainability as other sorts of data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Formulates detailed goals for sustainability</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Creates goals and scorecards including sustainability</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shares best practice examples with connection to money</td>
</tr>
<tr>
<td>Head of Finance</td>
<td>Long</td>
<td>Financial &amp; Sust.</td>
<td>Analysing Strategic Planning</td>
<td>Formulates sustainability goals on group and individual level</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Creates engagement among employees</td>
</tr>
<tr>
<td>Financial Controller</td>
<td>Long</td>
<td>Financial</td>
<td>Analysing Strategic Planning</td>
<td>Calculates financial gains from sust actions</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Facilitates comparisons by breaking down sustainability</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Formulates clear and tangible goals for sustainability</td>
</tr>
<tr>
<td>Sust. Manager</td>
<td>Short</td>
<td>Sust.</td>
<td>Communicating Consolidating data</td>
<td>Creates measurements and goals for sustainability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Creates engagement among employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tries to connect sustainability to business strategy</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>Short</td>
<td>Financial</td>
<td>Strategic Planning Consolidating data</td>
<td>Creates KPI’s and goals including sustainability measures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Handles sustainability measures like financial measures</td>
</tr>
<tr>
<td>Management Controller</td>
<td>Short</td>
<td>Financial</td>
<td>Strategic Planning Communicating</td>
<td>Initiated development of sustainability KPI’s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tries to connect sustainability benefits with financial costs</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Demonstrates sustainability to involve employees</td>
</tr>
</tbody>
</table>

Table 2. Interview Summary

6 Analysis

In order to answer the research question this chapter is connecting the theoretical field and the analysis model with the empirical findings. Since controllers, within both academia and practice, are different, this study does not aim to present one unified example of how sustainability is being implemented. Instead both differences and similarities will be identified
and presented. The analysis will further not evaluate which methods of sustainability implementation that are the most successful. It will instead exemplify the various ways sustainability is being implemented within the controlling process.

6.1 The Person
The analysis suggests that all respondents acknowledged the increasing sustainability demands. All respondents saw an increasing focus on sustainability throughout the last five years and many pointed out that their position had transformed due to this. The controllers also concluded, just as Nilsson and Olve (2013) had, that it was their job to keep up to date with how the sustainability demands affected their work. With that reasoning it could be argued that the controllers saw themselves in the central role figure 2 portrays.

The analysis suggests that the individual controller’s background affected his or her dealings with sustainability implementation. This is noticeable by looking at table 2. The controllers with only financial backgrounds all tried to establish the relationship between sustainability effects and financial effects. These controllers were, in this respect, acting in accordance with Epstein and Buhovac (2010). In contrast, the controllers with a sustainability background did not mention the same amount of financial focus. They on the other hand, in more depth, stressed the importance of creating engagement among employees in order to include sustainability within business decisions. Also, this reasoning has theoretical support as Mirvis et al. (2010) conclude that including sustainability within the company culture will solve many of the sustainability issues.

As can be seen from table 2, the controllers had different main tasks. This fragmented image of what a controller does, is in agreement with the fragmented picture given by the literature. Big companies employ different kinds of controllers (Anthony & Govindarajan, 2007, Merchant & Van der Stede, 2007) and the differences can therefore to a high extent also depend on the title or type of controller being interviewed. The respondents within the present study come from different companies in different industries, also leading their tasks to be different. The fact that sustainability issues and operations vary a lot from company to company is something also Adams and Frost (2008) notice. The authors conclude that these differences have implications for practice and guidelines regarding sustainability.

Some of the interviewed companies have a separate unit that handles much of the sustainability issues, making the controller function divided. The organisational issue which is to be
preferred has been discussed by Gates and Germain (2010). A separate unit or sustainability integrated within the controller function. The general opinion among the controllers was that sustainability issues were to be integrated within the controller function in order to be integrated within the entire company. The Sustainability Manager and the Business Analyst for example both argued that a separate unit should not run sustainability issues. Instead, the controllers who handle financial data should, in distinction from Lindvall (2009), also be able to incorporate sustainability data. Most respondents made it obvious that they, as controllers, have a highly significant role in regards to sustainability. In agreement with Ahlrichs (2012), Biel (2009) and Nilsson and Olve (2013) they found it natural to include sustainability within their controlling process.

6.2 The Package

Although the analysis has shown how the respondents prioritised different control systems, many respondents commented that they, in some sense, used all of the control systems. In agreement with Malmi and Brown (2008), these respondents could see the control systems as a package. One example is the Head of Finance. She commented, much like illustrated in figure 2, that she has a central position being able to choose appropriate tools from a package around her. She argues that all control systems are interrelated and that the indirect effect between the various control systems are very strong. Her opinion is that the control systems can both complement and substitute each other and that bad performance within one control system will affect the rest of the control systems negatively as well. This sort of reasoning that all control systems are important and that sustainability must be integrated in the entire company is also confirmed by the Business Analyst and the Management Controller and is in agreement with Mirvis et al. (2010), Crews (2010) and Epstein (2008). On the other hand some respondents commented that the package presented by Malmi and Brown (2008) was too theoretical to accurately illustrate their specific situation. An example of this reasoning is shown by the Non-Financial Controller. She claims that it from a company perspective perhaps could be seen as a package. From her position however, the control systems were more as separate pieces. One reason for her opinion was that she, in her role, is not in charge of the reward systems. This leads her to have fewer options for controlling and her situation cannot be exactly explained by figure 2. The analysis is consequently divided between controllers who, in accordance with Malmi and Brown (2008), regard the control systems as a package and controllers who do not regard the control systems as a package.
In general, the interviews revealed a strong financial focus connected to dealing with sustainability. Although the interviews, in agreement with figure 2, attempted to regard all parts of the package, the controller’s attention were widely directed towards cybernetic control. The Business Area Controller and the Financial Controller both commented on their company’s strong focus on efficiency and profitability, which has had an affect on the controlling when dealing with sustainability as well. The Business Analyst and the Management Controller are both using sustainability KPI’s, which is in agreement with the advice from both Keeble et al (2003) and Ahlrichs (2012). The Management Controller points out that quantifying the sustainability effects will lead to better decision-making, something that is correspondingly argued by Epstein (2008). Although Epstein and Buhovac (2010) comment that few companies have been able to quantify the financial link to sustainability, many respondents comment that this is relatively common. According to the respondents is it moreover in many cases relatively straightforward. This is an indication that a lot has happened since 2010, when the article came out. As recommended by Epstein and Buhovac (2010), many respondents also witness how they have been able to establish best practise-examples. Through these examples they have been able to show the exact financial gains from investments in sustainability. The analysis consequently suggests that there is a strong focus on financial pieces within the package.

6.3 The Process

According to Bergstrand (2010) it is becoming more common for a controller to work proactively in his or her role. Nilsson and Olve (2013) comment that many controllers today want to act more proactively but often “get stuck” with more reactive tasks, such as reporting or analysing. The issue was recognised by the Financial Controller. He stated that the ambition for him in many cases was to work proactively. In order to do so he however also needs to realise and have knowledge about the past. For him was it important to work both reactively and proactively, illustrated by the two-sided arrows in figure 2. He can only improve the controlling with all-encompassing knowledge about all steps. This reasoning is in accordance with Ahlrichs (2012) who clarifies that all four steps within the cycle of Deming (1982) are important for the controller to handle and that selective focus may hamper the results.

The amount of time a controller spends on acting proactively versus reactively is dependent on the controller’s role. In line with the Deming cycle, some of the respondents had more reactive tasks (e.g. analysing reports = act) while some of the respondents had more proactive tasks
(e.g. goal-setting = plan). Even though all controllers had both types of tasks, having most of the latter types of tasks would enable the controller to be more proactive. The Non-Financial Controller can illustrate how different tasks can lead the same controller to work both reactively as proactively. Consolidation of data is one of her major tasks, which leads her to work reactively. Within her role in the SHE-council on the other hand, she acts as part of a group that forms sustainability strategies, which is an example of more proactive task. In accordance with figure 2, her controlling process can therefore be described with two-sided arrows. According to Nilsson and Olve (2013), controllers should understand how to use reporting together with the proactive tasks within controlling. The Management Controller pointed out how she was able to use data from sustainability reports in order to decide her methods of controlling. This procedure is, according to Adams and Frost (2008) and Biel (2009), highly preferred since competent use of the reports can lead to improved decision making within the company. Both Ahlrichs (2012) and Nilsson and Olve (2013) comment that it could be suboptimal for the company if the controller is too selective in his or her focus and is not being able to handle the entire process.

Despite the fact that Epstein (2008) comments that it is fundamentally different to implement sustainability than implementing other initiatives, the Non-Financial Controller and the Business Analyst are arguing for not treating it any differently. The entire process of dealing with sustainability should, according to the controllers, to a larger extent resemble the process for financial data. Creating similar processes has made sustainability more prioritised and made it easier to create routines. The collection of sustainability data should additionally be done as often, and with the same deadlines and the same priority as financial data. Also the Financial Controller is of similar opinion and points out how measuring sustainability factors more often is beneficial for him as it creates more flexibility and control. The controllers state that creating the same processes for non-financial and financial data has reduced complications and improved their controlling process.

7 Conclusion

The purpose of this study was to examine how controllers develop management control systems in order to incorporate sustainability within the company’s controlling process. The study shows how sustainability is being implemented within the controlling process with a starting point of three fundamental parts: the person, the package and the process.
The study suggests that controllers have an important responsibility and often are involved in implementing sustainability within the controlling process. A potential problem for controllers is however the risk of “getting stuck” doing only reactive tasks and not being able to focus on the more proactive parts of developing control systems. When dealing with sustainability, the study suggests that, both a reactive and a proactive approach is desired in order to improve the controlling. The study finds that many companies already are measuring sustainability issues and to a high extent already have data for sustainability. These companies often only need to figure out how they can use the data along with the goal of acting proactively. Considering that controllers have tasks that include formulating goals and KPI’s with sustainability, the study concludes that it is indeed possible to be proactive when it comes to implementing sustainability.

The analysis suggests that the individual controller’s background affected his or her dealings with sustainability implementation. The two controllers who had a sustainability background were for example more explicitly stressing the importance of creating a strong company culture. By engaging employees they tried to include sustainability within business decisions. The controllers with a strict financial background did, on the contrary, put less emphasise on employee involvement. They instead found it more important to come up with ways to calculate the financial effects from sustainability actions. In line with the large number of respondents with a financial background, the study shows that many controllers have made it a priority to calculate the financial aspects from sustainability. As a result many respondents have found it beneficial to turn sustainability into a business case and quantify sustainability. There is an overall prominence of financial data and a realisation that sustainability, in order to have a larger impact, needs to be connected to monetary value.

Finally, the respondents reasoned that it is wise to handle and treat sustainability data like “regular” data. By not differentiating sustainability measures as something with lower priority it is possible to reduce many of the complications and improve the controlling. Measuring sustainability data as frequent as other data and striving to have the same processes and deadlines are also ways of creating routines around sustainability. Companies can, according to the respondents, benefit a lot when controllers stop treating sustainability issues as something to do because they have to and instead, comparable to financial data, integrate sustainability within the controlling.
7.1 Academic and Practical Contributions

This study could be beneficial from several academic aspects. Considering the little amount of existing research on sustainability implementation, this exploratory study could be seen as a natural starting step for future research. To my knowledge, no other study has looked upon sustainability implementation from the perspectives of the person, the package and the process together. This study has with basis of three parts, in a larger theoretical context, helped to increase the understanding on how to implement sustainability. The results from this study have further contributed to an increased understanding over the controller’s role with the new sustainability demands as well as his or her connection to the controlling process or the development of control systems.

There are also practical contributions. The study has been able to identify and exemplify how controllers are developing management control systems in order to incorporate sustainability within the company’s controlling process. The study can therefore function as a practical tool for companies that realise the need for improved controlling and wants examples of how controllers work with implementing sustainability. Lastly, the study has also provided a better understanding of sustainability implementation within a Swedish context among Swedish controllers.

7.2 Limitations and Suggestions for Future Research

As explained above, the study suggests there are differences in how a controller implements sustainability depending on the controllers’ background. No direct connection is within the present study shown when it comes to the controllers’ experience (long or short) and type of tasks. This could be further investigated with a larger number of respondents. Considering the conduction of an exploratory study, the relationship between background and sustainability implementation was something noticeable along the way. In order to give additional explanations around the influence on sustainability implementation, a more thorough selection of the respondents with respect to their background, tasks and experience is necessary. Within the present study the respondents were selected only with the criteria that they needed to have experience from both controlling and sustainability. The controllers’ background, tasks and degree of experience were, by interpretative research, something that “only happened” more than planned choices.

Future research could consequently be investigating the relevance of these criteria further. There are, for example, possibilities that controllers with longer experience implement
sustainability different then that of controllers with shorter experience. A study over what is to be preferred, could for example also be held. It could possibly be true that controllers with longer experience have more troubles integrating sustainability within the controlling process since they are trapped in old ways of dealing with excluding sustainability. On the other hand, it could also be assumed that it would be easier for them due to their long experience and knowledge about organisational change. The analysis does not suggest that any such differences occur but more research could investigate the possibilities further.

This study’s choice to investigate the person, the package and the process, is meant to illustrate the need of investigating sustainability implementation from a broader perspective. Instead of only focusing on the organisational structures and frameworks, the role of the controller is added. The use of the P-P-P structure can be considered fruitful not only because it broadens the perspective but also since the analysis suggests that all parts are of importance and closely connected. Yet, the study simultaneously recognises that this study’s interpretation of the different parts most likely is not flawless. There are certainly also other ways of interpreting the parts. As an example, this study questions if the package described by Malmi and Brown (2008) always exemplifies the available control systems in the best way possible. What could be seen from the study was that the control systems, from an individuals perspective, also could be looked upon as separate puzzle pieces instead of as a package. Future studies might interpret, label or separate the parts in other ways than what has been done in this study. New significant parts might even be added. Despite possible modifications, this study has hopefully encouraged future researchers to investigate sustainability implementation from a broader perspective.
References


Appendix I - Terms and Definitions

Throughout this master’s thesis, below terms and concepts are used repeatedly. Since these conceptions are crucial for the understanding and interpretation of the study are they here introduced and explained.

**Sustainability**

The term *sustainability* is among both practitioners and researchers a rather extensive and unlimited term. It can include various factors and numerous names (e.g. CSR, Corporate Responsibility, Triple Bottom line etc.) exist. In order to not get too restricted by the different names and definitions is within the present study the broader term that is including all sustainable actions used. Not defining sustainability was beneficial during the interviews as the respondents themselves could interpret what sustainability meant to them.

**Controller**

The term controller is both within Sweden and internationally rather inconsistently used among both practitioners and researchers. Within the present study is a wider definition used. A slightly broadened term can be justified since all fragments of the controller profession should be captured and since companies often call similar professions for different things (Anthony & Govindarajan, 2007; Lindvall, 2009). According to Burns and Vaivio (2001) and Lindvall (2009), there is also a hybridisation of the management accountant’s/controller’s role. Taking this hybridisation in mind together with the fact that all companies are different, an exclusion of the people without controller titles would not have captured the entire width of the phenomenon. If the person is involved in the controlling and the development of control systems within the company is the person within the present study referred to as a controller. The result of this justification was that all respondents within the study, even though having diverse titles, were considered being controllers.
Appendix II - Interview Enquiry

Headline: Interview enquiry - Controlling

Dear (persons name)

My name is Joachim Areskär and I study at Uppsala University. I am currently writing my master's thesis in which I focus on Swedish company's work from a controlling perspective. My aim is to investigate how controllers are working on integrating sustainability into the company's control systems.

My hope is that you let me interview one or more controllers or employees within similar position for this. As I intend to describe examples of successful controlling are there positive effects from participation. Each interview is expected to take up to 30 minutes.

Within the thesis the company and/or the respondent's name, if you want to, can stay anonymous. If this email has come to the wrong person, I hope it is forwarded to the appropriate person. Please email me if any questions would arise.

Best Regards
Joachim Areskär
Appendix III - Interview Guide

General (warm-up) Questions

1) Can I please record this conversation?
2) Do you want your name and/or the company name to be anonymous?
3) What (and how big) are the major sustainability challenges for your company?
4) What is your position? How long have you worked for this company? Could you briefly tell me about your background?

The Person

5) Could you describe your role? What are the expectations on it and from whom do these expectations come from? Unified expectations?
6) What is your connection to sustainability work within the company? What are your responsibilities when it comes to sustainability?
7) What other persons/units are involved within sustainability work? What is your connection to them? What do they do?
8) How does controlling affect your work? How are you involved in the design/development of the control systems? What are your responsibilities and your limitations?
9) What possible other actors are involved in this design/development? In what ways and in what connection to you?
10) To what extent do you work creatively to construct control methods/tools for sustainability and to what extent does it exist “ready to use”/traditional tools that can be used?

The Package

11) What types of controlling methods/tools/practises do the company use (more/less of) to align the goals of the firm with the goals of the employees? Is a single system used or are you looking at it as several subsystems within the framework of control systems? Explain!
12) Within literature, there are thoughts that the control system is a package (I will here be showing figure 1). I would like to hear how you reason about this idea and how similar you find this idea to your description?
13) How are these control systems interrelated within the company?
14) In what types of control systems do you find it easier/more difficult to include sustainability?
15) In what control systems have you been able to include sustainability? Explain how this has been done!
16) In what control systems has it not been possible or at least challenging to implement sustainability? Explain what the difficulties are and how they are occurring? What are the consequences?

The Process

17) How far have your company come in showing your sustainability work externally? How does the company show that?
18) What are your personal thoughts about the company’s reports/communication about sustainability?
19) How are the reports about sustainability used when you are developing control systems? Or is it the other way around?
20) What are the benefits of including sustainability also internally within the company? In the controlling processes?
21) How are the developed control systems getting communicated to others within the company?
22) Do you recognise any difference if it lately has been easier/more difficult to include sustainability? How do you see the situation in 5-10 years?
23) What advice can you generally give other companies/controllers who have problems with implementing sustainability in their controlling process?