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Critical Success Categories and their Effect on ESS outcome

A study on Employee Suggestion Schemes within the food industry in Sweden

by

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Abstract

Title: Critical Success Categories and their Effect on ESS Outcome - *Employee Suggestion Schemes within the food industry in Sweden*

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Keywords: Employee Suggestion Scheme (ESS), Motivation, Creativity, Expectancy Theory

Purpose: The purpose of this thesis is to understand and measure critical success factors and their impact on ESS outcome, and draw conclusions regarding what makes an ESS successful.

Theoretical perspectives: The study has reviewed previous research within Employee Suggestion Schemes and key success factors behind it. Vroom's (1964) Expectancy theory of motivation has been used in order to explain employees' motivation towards the schemes. Frey's (1997) Crowding theory has also been used to support explaining certain aspects of motivation. Based on previous research, hypotheses have been set up and connected to the Expectancy theory in order to help understand the results.

Methodology: A mixed method approach has been used in order to collect the necessary data for the results. A case study design was applied and a survey as well as two interviews was conducted in the two participating case companies.

Empirical foundation: The empirical data has been gathered through a survey that employees from both case companies answered. In total, 132 responses were registered. Furthermore, in order to collect information about the current ESSs at the companies, interviews were conducted with managers at the companies.

Conclusions: Five of the six hypotheses were confirmed. Consequently, this study suggests that managers can boost the outcome of the company's ESS by (1) having suitable individual attributes, (2) an innovative culture, (3) strong system capabilities, (4) focus less on rewards, (5) working actively with communication and networking and (6) to have support from different parts of the organization.

Acknowledgements

This thesis represents the final project at our Master Programme in International Strategic Management. Through the thesis we have had the chance to apply the insights we have gained during the year in practice, which has been both interesting and educational. We hope that our findings can be help managers in practice when they are designing their ESS and that it inspires others to continue research within the field of study.

Firstly, we would like to express our gratitude to the study's two anonymous case companies for their time and useful insights into their ESSs as well as their work with it. We would also like to thank all the respondents that participated in the survey for their opinions about what motivates them to contribute with ideas and suggestions to the system. Lastly, we would like to dedicate a special thanks to our supervisor Merle Jacob for her useful feedback and support throughout the process.

We hope the reader find this study pleasant to read.

Henrik Prior

Charlotte Laurén

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1 Introduction

1.1 Background

The way companies are perceived today differs a lot from a century ago. Taylor and his principles for scientific management (1911), promoting standardized processes and structures, does not fit our society anymore. Although business is still being influenced by his theories and ideas, a lot has changed. Around fifty years ago, companies only faced competition from local regions. Today, a newly-introduced product on the market will quickly be outcompeted by other, better ones. Moreover, customers have far higher expectations than a few decades ago, and are constantly expecting new solutions and products. The only way for companies to maintain competitive and succeed in the long-term is to relentlessly innovate.

Whether we talk about radical innovations that can change the conditions for companies within the marketplace completely, or incremental improvements, the root of every innovation comes from human creativity (Glynn, 1996). The ideas from employees are very important for companies, since it is the employees who are working on the shop floor and are hence encountering disadvantages and advantages every day at work (Du Plessis, Marx & Wilson, 2008). Progress is dependent on adopting new, better processes and products. Innovating in this way starts with coming up with creative ideas, and in order for companies to continuously do successful innovations, there needs to be a stream of ideas being generated within the company to fuel the innovation (Björklund, 2010). Although creativity is a natural human capability (de Bono, 1970), some tend to be more creative than others. Most people have, however, the potential to generate ideas that can bring value to the company. To make this happen, companies need to find different ways to inspire the employees to think more creatively, and manage the resulting ideas and suggestions efficiently and effectively. One big challenge for managers is to capture the ideas, apply it to relevant opportunities and problems, and finally convert it to innovation that brings value. Creativity is difficult to recognize and exploit, which is one of the most profound challenges management is facing (Hamel, 2000).

Today, it is more crucial than ever for companies to seriously consider the extent to which ideas are being generated in order to develop a well-balanced portfolio of potentially successful innovations. To obtain this, the ideas need to be selected and prioritized due to resource constraints that makes it impossible to manage each idea being generated (Kock, Heising & Gemünden, 2015).

1.2 Employee Suggestion Schemes

There are many different ways that companies can encourage, enhance, motivate and manage creativity within an organization. This work focuses on a particular way of doing so, which is through adopting an Employee Suggestion Schemes (ESS) within the organization. ESSs has been proven to be a great way of involving teams and individuals in order to improve company performance (Crail, 2006). The suggestion schemes falls under the category of a company's Total Quality Management, where all members of the organization participate in developing and improving processes, services, products and the culture in which they work (ASQ, 2018). The ESS is basically a formalized mechanism, where a company's employees are asked to contribute with suggestions of how the company can improve in several ways, for example regarding its products, services, operations, etc. (Cambridge Dictionary, 2018). Cooley, Helbling & Fuller (2001) provides a simple explanation of it, stating that the suggestion schemes will elicit suggestions from employees, who are classified by being dispatched from the "experts" of the organization. The "experts" can be categorized as either managers or dedicated committees, who evaluate the suggestions and enforces the implementation of the chosen ones. Moreover, the employees might be rewarded for providing the suggestion. The reward can be in many forms, and might take place both if the suggestion is approved, or rejected. If the latter, the employees might be rewarded with a token, for example. Furthermore, the suggestion schemes can take place in two formats; the formal, and the informal. The formal processes set procedures for obtaining and acting upon employees suggestions, such as through suggestion boxes, forums or internet feedback mechanisms. The informal methods means information gathered from employees that occur on a day-to-day basis. For example, an idea generated from a discussion between a manager and an employee at the lunch break, or during a discussion in a meeting (BPIR, 2018).

1.3 Problem discussion

Many previous studies have been made about the advantages of the ESS. For example, it can help organizations address improvement and cost-related problems. Studies have shown that implementing the system can improve product quality, processes and work environments (Du Plessis et. al, 2008). It can increase job satisfaction, since the employees feel that they can positively influence the organization, and increase employee morale since a well-designed ESS enables employees to improve their own work processes (Shrivathsan, 2012). This fosters a sense of ownership which can increase employee engagement, by enabling them to play an active role in the organization's future direction. Today, employee suggestion schemes have become a normal functioning part of organizations (Glover, 2000). They have been widely adopted in Japan, where Toyota is a great example of how to successfully manage the schemes, which has led to hundreds of thousands ideas generated by employees that have been implemented in Japanese organizations (Jobandwork.asia, 2016).

Although there are many advantages that can be realized within the organization, it is not an easy task to craft a successful ESS that adds value to the company. If the schemes are not managed well, little research show that the schemes will have a negative impact on company performance, in comparison to if the schemes did not exist. However, some have pointed out potential negative effects of the schemes. One example is that the schemes could lead to a decrease in motivation, if they are not managed correctly. This could occur if employees' suggestions/ideas are not taken seriously, for example in terms of lack of feedback or follow-up from managers, or if the management style is traditional and autocratic (Hayward, 2010). There is also a risk that the employees sense that the managers are taking credit for their suggestions/ideas if they are not managed well (Mishra, 1994). Nevertheless, although an unsuccessful scheme will probably not damage the company performance significantly, crafting and sustaining a successful one is still a great tool since it works as a vehicle for innovation.

In order for ESSs to be successful, they need to be managed correctly, and they only work if they are implemented in an integrated effort to create a continuous improvement of the organizational culture. The schemes will only contribute to future growth and health if they are tied to the foundation of a company's core values of continuous improvement, and if the employees feel

motivated to be creative and hence contribute with suggestions and ideas. With this being said, the schemes will not yield results unless everyone within the organization is actively involved, from managers to employees, and necessary resources need to exist to accomplish this. Since creative ideas from individuals and teams sow the seed for innovation (Amabile, Schatzela, Monetaa, & Kramerb, 1996), companies must seriously consider the factors that impede or generate these ideas to craft a successful ESS and hence an increased company performance.

1.4 Relevance of study

In today's knowledge economy, with a fast-paced business environment requiring continuous change and adaptation, more and more pressure is put on companies. To obtain organizational growth and sustainability, companies must relentlessly innovate to keep up and stay competitive. Of course, there are many ways companies can innovate, and adopting a suggestion scheme is just one of them. The schemes have, however, proven to be a great tool for companies for fueling innovation (Carrier, 1998), and to continuously do this is today more important than ever, and will continue in the future to be even more so. In addition, although suggestion schemes are widely spread throughout Western companies, they still seem to have a hard time in successfully implementing and sustaining the schemes (Lasrado, Gomiseck & Uzbeck, 2017). ESSs are generally successful during the first period of its implementation, but keeping up the momentum has proven to be challenging in the long run (Lawler & Mohrman, 1985). Therefore, investigating what makes an ESS successful within a Western country (in this case Sweden) is of great relevance. Since Sweden can be considered to be a relatively homogenous country in relation to other western countries (SGI, 2016), we believe it is a good country to investigate since a lot of the results from this survey is estimated to have a high generalizability to other western countries. Furthermore, the food industry was chosen to investigate since it is one of the most important industries for the national economy within the European Union. During the last decade, people's' perception of food has changed considerably, and people are today increasingly believing that food directly contributes to their health. The traditional function of food to satisfy hunger has been extended tremendously, and people are more and more aware of the importance of eating the right things to avoid nutrition-related diseases and to improve mental and physical

health (Bigliardi & Galati, 2013). With this being said, a lot is happening within the food industry, making it an interesting and relevant industry to investigate. Since a lot is happening, companies within the industry need to innovate relentlessly to keep up with the continuous development occurring here. Hence, having a well-functioning ESS can help companies a lot with their innovation process, making it a relevant area to study.

1.5 Purpose and Objectives

This study will look into what makes an ESS successful. A "successful ESS" can be defined as an ESS that adds value to the company, which hence increases company performance. Examples of this can be in terms of obtaining reduced costs (Lloyd 1996), address cost-related problems, improved product quality, improved processes, better commitment and sense of accountability of employees, an increased job satisfaction (Marx 1995), better employee security, an increased employee confidence (Gupta, McDaniel & Herath 2005), or new revenue generation (Carrier 1998).

In order to investigate what makes the system successful, some of the most relevant critical success factors will be measured. In this study, a critical success factor is defined as a necessary element for a project or an organization to reach its mission. In this context, the "mission" would be creating a successful ESS that adds value to the company. Previous researchers have, through a variety of surveys, tried to identify several critical success factors of the ESS that lead to a positive outcome of the schemes and hence makes the ESS successful (Fairbank & Williams, 2001; Cooley et. al, 2001; Du Plessis et. al, 2008; Lasrado et. al, 2017). This study aims to understand and measure several factors derived from previous literature, and apply them through a case study of two large companies active within the food industry in Sweden. The identified factors will be presented later in the text. The idea is also to identify which of the chosen factors that are of most importance for companies to take into consideration, in order to create a successful ESS. Furthermore, the factors will be structured by categorizing them into six different categories (suitable individual attributes, innovation culture, system capabilities, rewards, communication & networking and support). These categories will then be translated to

hypotheses, and tested and measured using a survey questionnaire answered by employees at the two case companies that have the possibility to contribute to the company's ESS. As different employee suggestion schemes are already used by organizations all over Sweden, the aim is not to see if such schemes are appropriate to use. The aim is rather to study and measure different factors and their importance in order for the employees to feel motivated to participate in contributing with ideas to the system, no matter how the system is structured.

Although there are many factors that can influence the outcome of ESSs, not each and every one can be investigated. The authors have chosen to apply Vroom's (1964) expectancy theory of motivation in the selection of factors that could be relevant for the study. Using the three elements of the theory (valence, expectancy and instrumentality), factors that the authors consider fit in the best within the theory have been chosen. Fairbank & Williams (2001) explain that one of the commonest weaknesses for ESSs is the motivation for employees, as simply rewarding the employees who post suggestions which are implemented is not enough. The expectancy theory can be used to explain why that is the case, as it explains that "rewards will only motivate behavior if the rewards are valued, if they are closely linked to successful performance, and if employees believe that they can perform successfully" (Fairbank & Williams, 2001). Thus, the expectancy theory is a valid theory to apply when studying employees' motivation in ESSs.

Naturally, there are many models and theories that can be applied when discussing ESS and employees' inclination to contribute. One theory that could be of particular interest is the agency theory, as there is a clear information asymmetry between the employees (agents) and the managers (principals). Eisenhardt (1989) explains that there are two potential problems in agency relationships that the theory deals with. The first problem is the agency problem which occurs when there is a goal conflict between the principal and the agent, and it is hard for the principal to know how the agent is actually behaving. The second problem concerns risk sharing, as the principal and agent may not have the same attitude towards it as a result of different risk preferences. (Eisenhardt, 1989). However, there will always be asymmetries in general between employees and the management. As motivation is one of the most important factors in deciding whether to contribute with ideas or not, as well as its importance for the system in general, a

theory concerning motivation seems more applicable to the problem in hand. One of the most empirically validated theories about general employee motivation is the expectancy theory (Schwab, Olian-Gottlieb & Heneman, 1979; Fairbank & Williams, 2001). Therefore, the theory seems to provide a good starting point for the study.

To summarize, this study will look into certain critical success factors which can make an ESS successful. The factors will be derived from previous literature and chosen based on the three elements of the expectancy theory, and then structures into six different categories. These categories will then be translated into hypotheses, which will be tested and measured in a Swedish business context using two case companies within the food industry. The purpose is to be able to draw conclusions out of the results and generalize these to other companies working with ESSs. Hence, the purpose is not to draw conclusions regarding what makes the two case companies ESSs successful, but rather what makes ESSs successful for companies within the food industry in general. This study will provide decision-makers with a deeper understanding and recommendations of which ESSs success factors to consider and focus on, which will help them to better organize and plan for process-improvement efforts made within organizations.

1.6 Delimitations

The starting point is to study Employee Suggestion Schemes in a Swedish business context in the food industry. Although the participating companies are large in size, it may not be possible to generalize their answers to the entire country or even the entire industry. There are also many types of ESS on the market and this thesis will only study the ones used by the case companies. Thus, the main focus is on two forms of ESSs, which will be presented for the reader to understand what type of conclusions that can be drawn. Moreover, there are different type of ideas that might be generated by employees, e.g. either radical or more incremental ones. Although the amount of radicalness/incrementality might affect company performance substantially different, no distinction between them will be made. Instead, with the terms “ideas” and “suggestions”, the authors mean all different types of ideas/suggestions. This is mainly because it can be hard for employees to connect motivation to a particular type of idea, and the

interest in this study is on key success factors in general for the ESSs rather than for specific types of idea generation. Furthermore, since there are many different schemes, there are also many factors that can influence and become key success factors. As the expectancy theory is the study's theoretical framework, the focus will lie on the factors that can be connected the expectancy theory.

1.7 Outline of the thesis

To begin with, the study's theoretical starting point, the Expectancy theory (Vroom, 1964) and its three components will be thoroughly explained. Previous research and theories about different types of motivation as well as the Crowding theory (Frey, 1997) will also be presented. The chapter will also review the existing literature within the field of ESS including its history, success criteria, success factors and aspects that might affect it will be provided. Thereafter, the study's hypotheses and the survey questions linked to them will be presented, as they are derived from previous research. The hypotheses will be followed up by the study's methodology, where the research approach and design will be explained. The chapter will also discuss the data collection method as well as how the collected data is intended to be analyzed. Furthermore, the chapter will end with an evaluation of the study's validity and reliability. The following chapter will present the empirical findings, starting with an introduction of the case companies as well as how they are currently working with ESSs. After this, empirical findings from the interviews and the results from the survey linked to the hypotheses will be introduced. Furthermore, variables supporting the results of the survey will be presented. The empirical findings and results will naturally be followed by an analysis and discussion, beginning with a confirmation or rejection of the individual hypotheses. The following part of the chapter will focus on explaining why the results may have occurred, and this will be explained with support of the presented literature, the chosen theories, interviews and the conducted survey. In the end, a conclusion and suggestion for future research that may be interesting to explore will be given.

Figure 1. The outline of the thesis, illustrated by the authors

2 Theory and literature review

The chapter begins with a presentation of the Expectancy theory. Further, an introduction of the concepts of motivation, reward and crowding-out theory will be given. This in order to give the reader a nuanced image of possible events that may occur in organizations given people's different motivation and desire for rewards. Afterwards, a review of previous literature within the area of ESS will be made. The part will begin with a background of ESSs elaborating on its history, nature and significance in today's business. Furthermore, previous research has identified additional critical success factors, but in the study, the focus has been on the ones that the authors believe can be best explained using the three elements of Vroom's (1964) expectancy theory. These critical success factors will be elaborated on below, and they are structured using 6 different categories; (1) Suitable individual attributes, (2) innovation culture, (3) system capabilities, (4) rewards, (5) communication and networking and (6) support. In the end of each category, a hypothesis linked to that particular category will be formulated. Lastly, the study's hypotheses will be presented in connection to the Expectancy theory.

2.1 Expectancy theory

Vroom (1964) made the first attempt to form a general theory of work motivation, where motivation is considered as the driving force that makes a person perform a specific action. (Lawler & Suttle, 1973). Unlike need theories of motivation, which mainly focus on explaining what motivates employees, expectancy theory deals with how the antecedents relate to each other (Lunenburg, 2011). The theory "is based on the idea that people believe there are relationships between the effort they put forth at work, the performance they achieve from that effort, and the rewards they receive from their effort and performance." (Lunenburg, 2011). Simply put, if effort will lead to decent performance, which in turn will lead to anticipated rewards, the person will feel motivated.

The expectancy theory consists of three key elements, namely expectancy, instrumentality and valence, which are based on four assumptions. The first assumption is that an employee in an

organization has expectations about motivations, needs and previous experiences that will influence how they will react. The second assumption is that there is a conscious choice that will result in the individual's behavior, which is free and based on the individual's expectancy calculation. The third assumption is that employees prefer different things from the employer, for instance a high salary, job security etc. The fourth, and final assumption, is that individuals will want to optimize their personal outcome and will consequently choose the alternative that best suits them. (Lunenburg, 2011). Given the three key elements, Lunenburg (2011) explains that "[a] person is motivated to the degree that he or she believed that (a) effort will lead to acceptable performance (expectancy), (b) performance will be rewarded (instrumentality), and (c) the value of the rewards are highly positive (valence)." (Lunenburg, 2011).

Furthermore, Lunenburg (2011) explains that Vroom suggests that the three elements are connected to each other, which can be shown by an equation:

Motivation = Expectancy * Instrumentality * Valence

Given the equation, the multiplier effect plays a significant role. If any of the elements has a value of zero, the total level of motivation will be zero. If, on the other hand, one element has a high value, the entire equation will have a significantly higher value. (Lunenburg, 2011). The key elements of the Expectancy theory together with the explanation from Lunenburg (2011) is combined in figure 2.

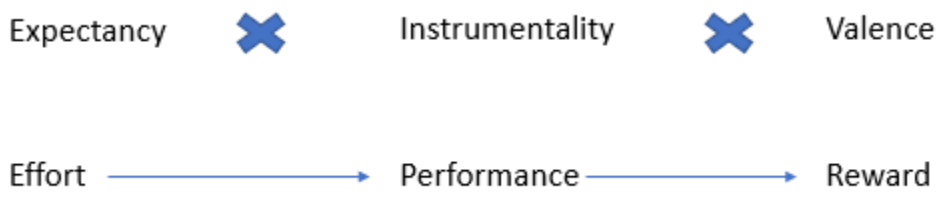

Figure 2. The three elements of the Expectancy theory, illustrated by the authors.

2.1.1 The three elements

Expectancy

Lunenburg (2011) explains that the range for expectancy is 0 to 1, depending on the probabilities that a given level of performance will be achieved from an effort related to the work. The stronger the expectancy that the effort will generate the wanted performance level, the closer to 1 will be the value and vice versa. (Lunenburg, 2011)

Instrumentality

Instrumentality can be explained as "[…] an individual's estimate of the probability that a given level of achieved task performance will lead to various work outcomes." (Lunenburg, 2011). The instrumentality also ranges from 0 to 1, where 1 is achieved if there is a high chance that/always the case that a good performance will result in a wanted reward and vice versa. (Lunenburg, 2011).

Valence

Valence can be described as how strong the preference for a particular reward is for the employee, whether it is in the form of a promotion, recognition, monetary reward or another type. In contrast to expectancy and instrumentality, valence is either positive or negative, ranging from -1 to 1. A positive valence is received if the employee strongly wants to receive the reward and negative if he or she strongly does not want it. Valence will consequently be 0 if the employee is indifferent towards the reward. (Lunenburg, 2011).

Since Vroom (1964) developed the theory, several authors have tried to refine and expand it (Lunenburg, 2011). Wabba & House (1974) explains that there have been four developments to the Vroom model: "(1) the distinction between first level and second level outcomes; (2) identification of intrinsic sources of valence; (3) the distinction between Expectancy 1 and Expectancy 2; and (4) elaboration to predict the effect of given additional variables in the work situation (e.g., the incorporation of ability and role perceptions to explain job performance, and the concept of equity to explain job satisfaction, etc.)." (Wabba & House, 1974). Several authors, including Graen (1969) and Porter & Lawler (1968) make a distinction between first and second level outcomes. Work behavior, e.g. job performance, is considered a first level outcome, while

rewards and events to that first level outcomes are expected to lead are considered second level outcomes. Galbraith & Cummings (1967) extended the theory further by making a distinction between extrinsic and intrinsic valences associated with the outcomes. House (1971) differs between two types of intrinsic value, and Lawler (1970) and Campbell, Dunnette, Lawler & Weick (1970) takes it one step further by making a distinction between two types of expectancies, Expectancy 1 and Expectancy 2. If the task goal will be fulfilled by the individual or not is defined as expectancy 1, while expectancy 2 regards the rewards and whether or they are contingent on the accomplishment of the task goal. (Wabba & House, 1974).

Kopelman & Thompson (1976) introduces the idea that five boundary conditions should be taken into account, including time and level of rewards. The authors argue that "expectancy theory predictions will be strengthened by controlling for the effects of several boundary conditions which usually have been ignored." (Kopelman & Thompson, 1976). Isaac, Zerbe & Pitt (2011) explains that Porter and Lawler (1968) build on Vroom's work and "[…] developed a theoretical model, suggesting that the expenditure of an individual's effort will be determined by *expectations that an outcome may be attained* and *the degree of value places on an outcome in the person's mind."* (Isaac, Zerbe & Pitt, 2011).

The expectancy theory has also received some critique, both in general and for the separate elements. For instance, Wabba & House (1974) discuss several issues in their article "Expectancy Theory in Work and Motivation: Some Logical and Methodological Issues". The authors present critique that empirical research is ignoring the choice behavior, which is the essence of the theory. Critique is also given that most studies dealing with the theory only concerns limited parts of it rather than the theory as a whole. Moreover, Wabba & House (1974) discuss some of the elements separately and show critique for each of them. For instance, in regard to expectancy, the authors explain that as expectancy is dependent on subjective probability, a lack of clarity of it in terms of a theoretical concept will lead to issues arising. (Wabba & House, 1974). Furthermore, the authors explain that "[…] several issues result from the lack of theoretical clarity of the concept of valence as applied to work situations. These are the inconsistency of the concept of instrumentality and the non-additivity of valences of different outcomes." (Wabba & House, 1974).

In addition, Lawler & Suttle (1973) explains that major criticisms for Vroom's model comes from the "lack of explicitness in defining and distinguishing between actions and outcomes, and between the different types of expectancies associated with each." (Campbell, Dunnette, Lawler & Weick, 1970 see Lawler & Suttle, 1973).

2.2 Motivation and Rewards

Ryan & Deci (2000) explains that people have different types of orientation of motivation, in addition to different amount of motivation. Different orientation of motivation comes from goals and attitudes that result in the action, i.e. why you want to perform a specific task. A simple distinction between intrinsic and extrinsic motivation can be done. Extrinsic motivation refers to doing something because you will get a separable outcome from it, while intrinsic motivation stems from performing a task because doing the task itself is enjoyable or interesting. There are several types of extrinsic motivation, as there are several outcomes that can be attained by performing the task, e.g. it can be valuable for your future career or you can receive a monetary reward for performing it. (Ryan & Deci, 2000). Thus, an intrinsic reward could be the sense of accomplishment from performing the task, while extrinsic rewards can take many forms, such as money or higher promotion opportunities. Depending on if a person behaves in a specific way for intrinsic or extrinsic reasons, research has shown that the quality of performance can be different. (Ryan & Deci, 2000). In explaining causes for behaviors in the workplace, the expectancy theory mostly relies on extrinsic motivators as opposed to intrinsic motivators. (Isaac, Zerbe & Pitt, 2001).

2.3 Crowding theory

A crowding-out or a crowding-in effect of intrinsic motivation can result when an external intervention occur. If marginal benefit from performing a task is negatively affected, a crowding-out of intrinsic motivation will occur, while if the marginal benefit is positively affected, a crowding-in of intrinsic motivation will occur. (Frey, 1997).

If an employee has high intrinsic motivation, i.e. takes pleasure in performing the task, and receives external intervention, e.g. in the form of monetary rewards, the agent will be 'over motivated', as he or she would perform the task even if one or both motivations were lowered. Consequently, the motivation that is under the employees control, namely the intrinsic motivation, will be reduced and substituted by the external work motivation. If the external intervention is later reduced, the employee will not automatically compensate with intrinsic motivation and may not be willing to perform the task at all anymore. In order for external interventions to be able to crowd out work morale, two conditions have to be fulfilled, (1) the employee/individual must have a (rather) high intrinsic work motivation to begin with and (2) there must be conditions for crowding out present. (Ryan & Deci, 2000). There are many reasons for people to have intrinsic motivation but three are of more importance, as intrinsic motivation will be higher; (1) the more interesting a task is for the individual, (2) the more personal relationships there are between the principal and the agent as this implies loyalty and trust, and (3) the more extensive the possibilities are for the agent to participate. (Ryan & Deci, 2000).

2.4 History, nature and significance of ESS

Suggestion schemes have been around for a long time and can be traced back to 1721, when Yoshimune Tokugawa introduced the first one by placing a box where people could put their suggestions to his subject outside the Edo Castle in Japan. This ESS is the absolute most basic form known, but the more advanced and industrialized ESS were introduced during the 19th century. This was when a Scottish shipbuilder, William Denny, asked his employees for suggestions regarding how to improve the building of the ships (Islam, 2007). The Kodak company was next, which pioneered this endeavor by introducing an ESS in 1896 (Carrier, 1998). With this being said, the introduction of a structured, formal suggestion scheme within the business context started over a hundred years ago and has continued ever since (McConville, 1990). Since then, associations such as the Employee Involvement Association (EIA) have popped up which have together improved the systems throughout the years by making them more formalized, professional and objective. Furthermore, the EIA has together with other

associations created statistical, educational and professional education programs with the purpose of creating best practice solutions of how to encourage, implement and develop ideas that together lead to increased company performance. Another example is IdeasUK, an organization that was founded in the UK in 1987, with the objective and purpose to assist both private and public companies by providing them with employee promotion and involvement programs. Today, the organization has over 100 members worldwide. Moreover, suggestion schemes have a long history in both USA, Asia, Europe and the Middle East and have continuously increased in popularity since they were introduced (Cooley et. al, 2001).

The suggestion schemes have developed a lot since Tokugawa introduced the first one, from being in the form of simple boxes to more advanced, sophisticated computed based electronic systems (Ahmed, 2009; Fairbank & William, 2001). Although the ESSs today has many good and beneficial elements making them a great way of involving employees, their appeal, style of operation and the results they deliver is today almost unrecognizable (McConville, 1990).

2.5 Critical success criteria and outcomes of the ESS

The critical success criteria is represented by the outcome of a system, and it can be described as system benefits as viewed by the stakeholders. As stated before, examples of this can be cost savings (Lloyd 1996), triggered customer satisfaction (Marx 1995), new revenue generation (Carrier 1998), commitment and accountability from employees, their well-being, employee security, employee confidence with more (Gupta et. al 2005). Applying this taxonomy to ESS, the critical success criteria can be seen as the achieved results stemming from inputs using the suggestion schemes, and this is measured using pre-defined criteria for success. Furthermore, the outcome of the ESS is what determines whether the ESS will be successful and sustainable or not.

2.6 Critical success factors and critical success categories

A critical success factor can be explained as those areas within an organization, for example resources, teams, leadership, publicity, strategy or policy, where levers can be pulled that can lead to a positive effect on the ESS outcome (Westerveld, 2003). The critical success categories consist of several critical success factors, that have been bundled together and structured under the categories. Table 1 describes the categories that are considered important to take into consideration in order to craft a successful and sustainable ESS. Within each category, several critical success factors are included. Worth noting here is that the categorization of the critical success factors appear to overlap. For example, being supportive is a part of an individual's attribute, while the term is also included in the support category. As a result, this demonstration of interrelations warrants further investigation. The table also presents the hypotheses of the survey that are directly linked to the categories. After the table, the definition and description of each category will be further elaborated on to give the reader a broad view of each category, and why they might be relevant to craft a successful and sustainable ESS, e.g. lead to a positive outcome of the ESS. In the following chapter, each hypothesis will be connected to the expectancy theory by categorizing them to its three elements.

Categories summarizing the critical success factors	Critical success factors	Hypotheses
Suitable individual attributes*	● High self-efficacy ● Complex jobs ● Support from supervisors ● High competence	*H1: Suitable Individual attributes will positively affect ESS.*
Innovative culture	● Openness towards new products/ideas/processes ● Creativity ● Flexibility ● Risk-taking ● Spontaneity	*H2: An Innovative culture will positively affect ESS.*
System capabilities	● Easy to use ● Suggestions promptly and rapidly evaluated ● Dedicated administrators ● Necessary resources for idea realization ● Feedback	*H4: Strong System capabilities will positively affect ESS.*

Rewards	• Extrinsic rewards • Intrinsic rewards	*H3: Rewards will positively affect ESS.*
Communication & Networking	• Free flow communication • Interaction • Influence each other	*H5: Strong Communication and Networking will positively affect ESS.*
Support	• Organizational support • Supervisor support • Co-worker support • Top management support	*H6: Strong Support will positively affect ESS.*

Table 1. The critical success categories, critical success factors and hypotheses, illustrated by the authors.

*Suitable individual attributes in this context means a person having high self-efficacy, having a complex job, support from his/hers supervisors and a high competence.

2.6.1 Suitable Individual Attributes

There are many things that determine the effectiveness of innovations being generated in any type of system. One of the most crucial are the individuals since they are the ones who invent, identify or propose useful innovations (Monge, Cozzens & Contractor, 1992). Individual's characteristics determine their ability to come up with creative suggestions, and one central determinant is the person's self-efficacy (Bell, 1997; Lipponen, Bardi & Haapamäki., 2008). A person's self-efficacy can be defined as that individual's ability to succeed in certain situations or accomplish a task. A person with a higher self-efficacy tend to come up with more creative suggestions (Anggarwati & Eliyana, 2015). The self-efficacy is dependent on several elements, such as previous experience, encouragement/discouragement, psychological feedback with more (Redmond, 2010). Moreover, in order for an individual to provide ideas, the person in question needs to be open to change and identify with the organization to feel motivated enough to think creatively and hence contribute with suggestions (Bell, 1997; Lipponen et. al., 2008). Human characteristics such as their perceptions, personality, attitude, intrinsic motivation and credibility are all determinants of the ESS's success (Björklund, 2010). Furthermore, individuals tend to be more creative when they have more complex jobs and when they have the support from supervisors that do not try to control the individuals behavior (Yuan & Zhou, 2008). Also, if the employees' find their work interesting, satisfying and challenging, they tend to be more creative (Yuan & Zhou, 2008). Lastly, an individual's expertise (or competence) is considered a

determinant of the person's creativity. People having more information, skill and power to make decisions regarding all kinds of issues, tend to be more creative than others (Lipponen et. al, 2008; Powell, 2008; McLean, 2005). In conclusion, the success of ESSs can be determined by the organizations employees' attributes in terms of their behaviors and attitudes since this affects their ability to think and act creatively (Arthur, Aiman-Smith & Arthur, 2010; Yuan & Zhou, 2008; Leach, Stride & Wood, 2006).

H1: Suitable Individual attributes will positively affect ESS.*

2.6.2 Innovative Culture

This chapter will review literature from the innovation culture of a firm and how it might affect company performance. The subject is brought up since research has shown that employee participation can be dependent on the innovation culture within their organization, meaning that the more of an innovation culture, the more employees tend to participate by providing ideas and suggestions regarding organizational improvements (Lasrado et. al, 2017).

Within an organization's innovation culture, the members share a belief that openness towards new products, ideas or processes are distinctive values of the company (Hurley & Hult, 1998; Rubera & Kirca, 2012). In turn, the values provide norms of how to behave within the development process and the launch of new products (Damanpour, 1991; Deshpandé, Farley & Webster, 1993). An organization nurturing an innovation culture emphasizes creativity, flexibility, risk-taking, spontaneity etcetera while de-prioritizing control, tradition, rigidity or stability (Burns & Stalker, 1966; Chatman & Jehn, 1994; Hurley & Hult 1998). Furthermore, the idea that companies having an innovation culture enjoy better performance has received much support within research (Rubera & Kirca, 2012; Tellis, 2012; Hurley & Hult, 1998).

Moving from organizational to the managerial level, managers attitude and behavior conducive to innovation is associated with the culture of innovation. A culture of innovation relates to managers' willingness to cannibalize (Chandy & Tellis, 1998), the extent to which managers tolerate risk (Cooper, Edgett & Kleinschmidt, 2004) and their willingness to accept and deal with uncertainty (Büschgens, Bausch & Balkin, 2013). Hence, a company culture of innovation will

lead to/help managers as well as employees to mitigate the negative association stemming from innovation failures while encouraging them to take risks and consider alternatives they otherwise might not have considered (Gumusluoğlu & Ilsev, 2009). In conclusion, the literature review shows that innovation culture can be related to managerial decision-making that in turn affect the employees and the company's conditions to innovate. However, specific mechanisms of how innovation culture affect the outcome of a company's ESS in front-end innovation remains unknown.

H2: An Innovative culture will positively affect ESS.

2.6.3 System capabilities

The third category consists of three critical success factors that fall under the category of system capabilities of the ESS. In order to create a successful ESS, this literature review suggests that the ESS should (1) have an effective administrative system, (2) there should to be resources that support idea realization, and (3) feedback should be provided to the ones contributing with ideas/suggestions.

Having a well-functioning system

Employees' knowledge will only add value to the firm if they have the opportunity and motivation to contribute with their suggestions and ideas, and an effective and efficient way of sharing and utilizing the knowledge so that it benefits the organization (Arthur & Kim, 2005). With this being said, a mechanism being able to elicit the ideas and suggestions is crucial where these can be posted by the employees. The system is beneficial since it enhances the amount of ideas being generated as well as the quality of them (Koc & Ceylan, 2007). To make the system efficient, developing an infrastructure that is easy to use is key in order for companies to get the best out of their ESSs (McConville, 1990). By focusing on creating a great usability, innovation among employees will be improved, leading to more and better suggestions being posted (Arif, Aburas, Al Kuwaiti & Kulonda, 2010). By doing this, the employees will become more comfortable using the system, which will result in better outcome of the ESSs, leading to more money being saved within the organization (Mishra, 1994). Furthermore, the suggestions should be rapidly and promptly processed preferably within between 30 to 60 days, meaning that they

should be administered expertly (Marx, 1995). Since the idea with the suggestion schemes is that the suggestions can come at any time from any part of the organization, for example from any hierarchical level within any business area (McConville, 1990), different people have different tools, knowledge or skills of how to put the suggestions forward. Therefore, organizations should have skilled and dedicated administrators who guide the employees of how to formalize and post the suggestions (Marx, 1995). Otherwise, there is a risk that employees will hesitate and might avoid putting their ideas forward.

Necessary resources

To create a successful suggestion scheme that lead to increased company performance, the ideas being generated must be implemented in a good way. To make this happen, resources that support the idea realization must be allocated here since even the best ideas otherwise risk not being fruitful to the organization. In addition, management commitment combined with the allocated resources (Neagoe & Klein, 2009) is necessary to obtain a successful implementation and should be evident within three different steps; the idea generation, idea landing and idea follow-up. When this happens, the creativity by employees will be transferred onto practicable ideas, providing the organization with a stream of new ideas being generated by its employees (Van Dijk & Van den Ende, 2002). By allocating enough resources to the ESSs for administrative costs consisting of for example promotional activity, support and the costs for rewards meant for the employees providing suggestions, creativity can be boosted (Amabile et. al, 1996; Van Dijk & Van den Ende, 2002).

Feedback

There are several reasons why feedback is important. Firstly, a lack of it can lead to the employees feeling dissatisfied and ignored. Providing feedback can also help the organization to discover errors, from where the employees can continue to improve the quality of ideas that are based on the received feedback (Verdinejad, Mughari & Ghasemi, 2010). If there is no feedback, employees' perception could be that management takes credit for the suggestions the employees have generated (Mishra, 1994), and the employees' therefore might feel demotivated to continue providing suggestions. Providing continuous feedback can instead help to keep the employees motivated, and this goes not only for implemented ideas, but also for non-implemented ones to

keep up the momentum of suggestions within the schemes (Van Dijk & Van den Ende, 2002; Powell, 2008; Bakker, Boersma & Oreel, 2006; Du Plessis et. al, 2008). Lastly, the feedback should provide the employees with details regarding the status of their suggestion, whether it is going to be implemented or not, whether they will receive rewards or not with more (Verdinejad et. al., 2010). To work actively with feedback demonstrates that the schemes within the organization are taken seriously and work effectively and efficiently, which should increase employees' motivation to participate by providing suggestions (Leach et. al., 2006).

H4: Strong System capabilities will positively affect ESS.

2.6.4 Rewards

Another critical success category that is considered an important element in the literature to create a successful suggestion scheme is rewards. There are different types of benefits that can be used to reward the employees, either extrinsic or intrinsic ones (Ahmed, 2009). Extrinsic rewards are financial ones, for example bonuses, pay raises or other financial benefits. On the contrary, intrinsic rewards are internal rewards, for example if the person in question feel meaningfulness, progress, having a free choice and a feeling of being competent enough when performing a task (Thomas, 2009). Of course, employees are motivated by different types of rewards. Therefore, it is crucial for companies to consider which rewards they should offer their employees to boost the motivation the best. Nevertheless, existing incentives can be important within ESSs in terms of rewards to make them feel motivated to put an effort in contributing with suggestions (Du Plessis et. al, 2008). The rewards could be for example in terms of monetary rewards or recognition, and the employees should be rewarded and recognized both in-house and externally to the organization (Klijn & Tomic, 2010).

Although rewards may be beneficial in the use of ESS, it is important for managers to make sure that by promoting extrinsic rewards, the individual's intrinsic motivation is not extinguished (Fairbank, Spangler & Williams, 2003). Amabile (1996) and Oldham & Greg (1996) explains that when an employee is intrinsically motivated, their creativity is at its highest. Other factors that can also increase creativity is the challenging jobs and feedback, while both creativity and

intrinsic motivation can be increase if the employee perceive the work as significant. However, the need for intrinsic motivation does not exclude the importance of extrinsic motivators, as employees must also feel motivated to actually submit their creative ideas, which extrinsic motivators is better for. (Fairbank et al., 2003). Consequently, both extrinsic and intrinsic motivation is important to encouraged in order for the ESS to be as effective as possible (Fairbank & Williams, 2001).

H3: Rewards will positively affect ESS

2.6.5 Communication and networking

Communication has been considered a relevant factor to consider by many researchers, and it has been continuously cited ever since it was first done so in 1964 (McConville, 1990; Arthur et. al, 2010; Björklund; 2010; Shalley & Gilson, 2004). The communication can take place in many forms, for example face-to-face communication, cross-functional communication and support by friends or family. Moreover, the information being communicated should be that of free flow, both vertically throughout the organization and across units belonging to the same level of hierarchy (Aoki, 2008; Recht & Wilderom 1998; Ahmed, 2009). Moving on to networking, the creativity within an organization emerge from people sharing information with each other (Bakker et. al, 2006). In order to come up with and create something new, both information, social and economic support is necessary (Madjar, 2005). Furthermore, creative ideas are not very often crafted by people thinking in isolation, but rather a result of interaction and influence, which indicates the importance of networking even more (Yuan & Zhou, 2008). An important note here is that the networking and information sharing does not necessarily have to take place within the organization, but creative ideas being implemented here can also be influenced by sharing information with non-work-related people (Madjar, 2008). Hence, communication and networking can referring to previous literature be considered having an impact on ESS outcome.

H5: Strong Communication and Networking will positively affect ESS.

2.6.6 Support from different parts of the organization

Under the heading for support, several elements are included. These are organizational support, supervisor and co-worker support, and top management support. Previous research has shown that the outcome of an ESS can be dependent on the degree of support employees achieve from different parts of the organization. The three elements will be elaborated and discussed below.

Organizational support

To begin with, the employees' participation is dependent on the organizational support and the extent to which useful and new knowledge will be generated (Malaviya & Wandhwa, 2005). This has to do with how the employees perceive the work environment, which affect the creativity amongst them (Amabile et. al, 2004). For managers, it is important to "put the people first" since it facilitates the employees' ability to be creative, and this can be done by holding the managers accountable for the systems, for example. Another important aspect is for managers to encourage employees' self-initiative (Aoki, 2008). Moreover, the support within an organization should be tailored to the company's own culture, since these of course differ from company to company. Other advantages to ESSs are teamwork and team-based schemes (Aoki, 2008; McLean, 2005; Fairbank & Williams, 2001; Shalley & Gilson, 2004). If the support and encouragement comes from groups of people, the likability that employees will generate creative ideas increases (Rapp & Eklund, 2007; Aoki, 2008).

Supervisor and co-worker support

There is a very little chance that ideas will generate organizational profit in the long-term if the suggestion schemes occur in isolation and there does not exist close support from managerial practices (Carrier, 1998). Instead, it is important that the supervisors work close with the employees' and their ideas, and are doing so by continuously guiding their thinking, assisting them in coming up with ideas etcetera (Tatter, 1975). Hence, supervisory support can definitely affect the outcome of ESSs (McLean, 2005; Arif et. al, 2010; Lloyd, 1996). In addition, co-worker support has proven to be helpful when speaking of individual's creativity. If an employee is dissatisfied for some type of reason, having supportive and helpful colleagues can help the person in question to be creative (Zhou & George, 2001).

Top management support

In terms of commitment, leadership and practice, managers' support is a factor worth considering to craft a successful suggestion scheme (Marx, 1995; Carrier, 1998; Klijn & Tomic, 2010; Ahmed, 1998; Griffiths-Hermans, 2006). Senior management should actively demonstrate the importance of, and their faith in the ESSs. Thereby, they hold a responsibility in how the schemes are being perceived throughout the organization. This could be done by promoting, supporting and encouraging each manager to view the schemes as a positive driver of improvement within the organization (McConville, 1990). Furthermore, top management can ensure that supervisors recognizes the importance of the schemes by, for example, including the commitment from supervisors in the evaluation of their job-performance (Tatter, 1975). In short, management can do a lot to influence the employees' participation of the schemes, and this can be done by for example creating an organizational culture that is supportive in order to involve employees in the future direction of the company. Moreover, the management style should not be very autocratic, since this can affect the engagement and motivation from employees negatively. For example, threats, coercive tactics or intimidation has proven to discourage employees' creative behavior (Anderson & Veilette, 2008).

H4: Strong Support will positively affect ESS.

2.7 Hypotheses

Based on the previously mentioned aim of the study and the presented literature review, several hypotheses have been set up. The hypotheses will be tested through a survey of two case companies within the food industry. Multiple questions will be used to test each hypothesis and the aim is to not only see whether they prove accurate, but also if there is one or more which have a significantly larger impact on the outcome of the ESS. The proposed hypotheses are here connected to the expectancy theory and separated based on which element they will affect. Thus, the formerly introduced hypotheses connected to the theory are:

Expectancy

H1: Suitable Individual Attributes will positively affect ESS

H2: An Innovative Culture will positively affect ESS

H5: Strong Communication and Networking will positively affect ESS

H6: Strong Support will positively affect ESS

Instrumentality

H4: Strong System Capabilities will positively affect ESS

Valence

H3: Rewards will positively affect ESS

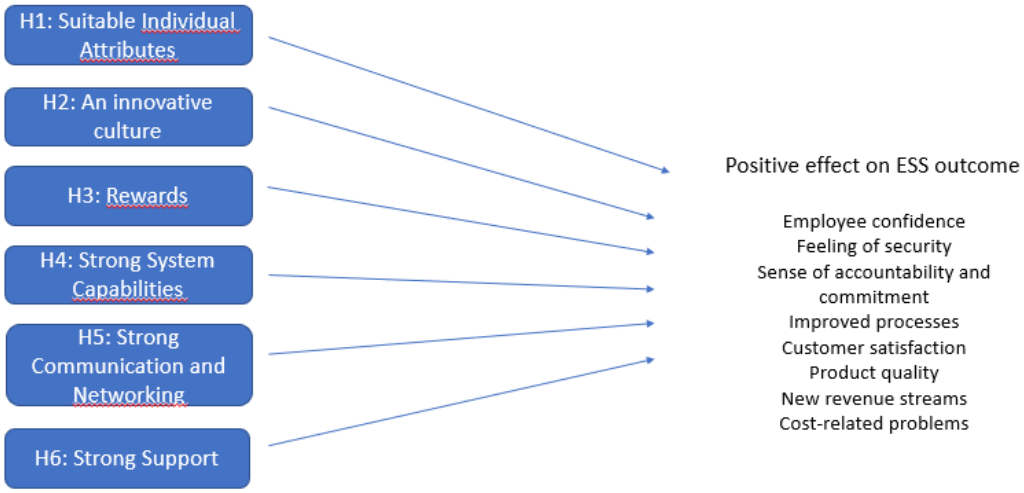

Figure 3. The stated hypotheses, illustrated by the authors

From the above stated hypotheses, questions were formulated, and asked in the survey and answered by employees at the two case companies. The idea was to formulate questions that are closely linked to the hypotheses, meaning that the hypotheses can be explained by the results from the survey of the questions to see the effect on ESS outcome. In addition, the questions were formulated based on the previously presented literature review of critical success factors, which were structured using the six critical success categories. The hypotheses and the survey questions linked to them will be stated below.

H1: Suitable Individual Attributes will positively affect ESS

- Q5: I am more inclined to contribute with ideas/suggestions if I have good knowledge/tools regarding how to think creatively
- Q6: More experience and knowledge would probably make me put a greater effort in contributing with ideas/suggestions
- Q7: Varying and challenging work tasks facilitates my ability to think creatively
- Q8: Varying and challenging work tasks encourage me to contribute with more ideas/suggestions
- Q15: I am more motivated to contribute my ideas/suggestions if I believe my effort can truly make a difference within the organization

H2: An Innovative Culture will positively affect ESS

- Q4: A creative environment facilitates my ability to think creatively

H3: Rewards will positively affect ESS

- Q18: The possibility of having my contribution acknowledged if it is implemented is an important motivator for me
- Q19: I would be more inclined to participate with ideas/suggestions if there is a monetary reward for participation
- Q20: In general, rewards are important in order for me to feel motivated to contribute with ideas/suggestions

H4: Strong System Capabilities will positively affect ESS

- Q11: I am more inclined to contribute my ideas/suggestions if the system to post ideas/suggestions is easy to use
- Q12: Accessibility to necessary resources to think creatively increases my inclination to contribute with ideas/suggestions
- Q13: The existence of a system where I can contribute with ideas/suggestions increases my motivation to contribute, compared to if no system would have existed
- Q16: I feel motivated to share my ideas/suggestions if I know they will be evaluated quickly
- Q17: To me, it is important with feedback in order for me to feel motivated to contribute with ideas/suggestions

H5: Strong Communication and Networking will positively affect ESS

- Q9: Good communication between me and my managers increases my inclination to contribute with ideas/suggestions
- Q10: My motivation to contribute with ideas/suggestions increases if I have the possibility to collaborate with others
- Q14: I find it helpful to know what types of suggestions have been implemented in the past when deciding if I want to contribute with ideas/suggestions

H6: Strong Support will positively affect ESS

- Q1: I am more motivated to contribute with ideas/suggestions when I feel I have support from my managers
- Q2: I am more motivated to make an effort to think creatively when I get encouraged by my managers
- Q3: Collegial support is an important consideration for me if I am to contribute with ideas/suggestions

3 Methodology

The methodology chapter begins with the study's research approach and research design, followed by the chosen data collection method for both primary and secondary data. Furthermore, a presentation about the data analysis will be given and the quality of the data will be discussed in order to give the reader a critical perspective.

3.1 Research approach

As motivation is of vital importance when working with ESS, a theory concerning motivation seemed appropriate. The expectancy theory is a broad and well-developed theory concerning motivation, making it a credible theory to use in the study. As previously mentioned, there is much research about the expectancy theory and ESS separately, but there is not as much research combining the two. Fairbank and Williams (2001) have, however, attempted to combine the two in their article "Motivating Creativity and Enhancing Innovation through Employee Suggestion System Technology". Lasrado, Mohammed & Aftab (2015) have found 21 success factors for employee suggestion schemes. Lasrado et al. (2015) applied the framework in practice in their article "Effectiveness of employee suggestion schemes - from critical success factors to outcomes", where they studied critical success factors in The Arab Emirates. Thus, an interest sparked to see which factors that motivates employees to contribute with ideas to ESSs within Sweden. Moreover it would be interesting to see if the findings from the thesis could be explained by the expectancy theory, as Fairbank and Williams (2001) claim. By combining a theory about motivation with the specified hypotheses, the aim is to not only state if certain aspects positively influence the ESS, but also give a discussion why this may be the case from a theoretical perspective. Although the expectancy theory is highly relevant and broadly applied, it is important for the reader to understand that it is a simplification of reality and that it therefore cannot be considered a "truth".

The study will take a mixed methods approach, as a purely quantitative or qualitative approach would not generate enough information themselves, also known as "filling the gaps" (Bryman &

Bell, 2007). The qualitative approach will be mostly in focus in the data collection from the interviews, while the quantitative approach is the focus in terms of the hypotheses testing with the related survey. Both approaches have been equally important for the study and therefore the study follows a partnership design (Easterby-Smith, Thorpe & Jackson, 2015). In terms of sequencing, both approaches have been taken simultaneously as the interviews have been conducted at the same time as the surveys were sent out to the respondents. As both approaches have equal importance for the study and required about the same time and resources, there is no dominant approach, but rather a balance between the two (Easterby-Smith et al., 2015).

Quantitative research has been extensively criticized, mainly by spokespersons of qualitative research (Bryman & Bell, 2007). Among the critique, there has been arguments that "quantitative researchers fail to distinguish people and social institutions from 'the world of nature'" and that "the reliance of instruments and procedures hinders connection between research and everyday life" (Bryman & Bell, 2007 p. 174). However, the lack of attachment/emotions towards the targets in the study can be an advantage in that it avoids biases. By combining quantitative and qualitative elements in a mixed method, the study aims to combat the aforementioned problems while still having the advantage in avoiding bias. In regards to the avoiding of potential problems associated with one single research approach, the study's design also has a compensatory design (Easterby-Smith et al., 2015).

As the study aims to test hypotheses based on existing knowledge on gathered empirical material, the study takes a deductive approach. The six steps in the process of deduction; (1) Theory, (2) Hypothesis, (3) Data collection, (4) Findings, (5) Hypotheses confirmed or rejected, and (6) Revision of theory (Bryman & Bell, 2007) has been followed, as the process is rather straightforward and applicable on a study of this kind.

3.2 Research design

In order to fully understand the ESS and what motivates employees to contribute to it in practice, a case study design was chosen. The case will therefore act in a supportive purpose representing ESSs in practice, and the individual case companies participating are not the primary interest for the study. By using a case study with multiple companies, the aim is to be able to generalize the results to other companies and their ESSs as well. Although there is a common misunderstanding that a case study is not suitable for hypothesis testing, Flyvbjerg (2006) explains that Eckstein has a contrary view on the topic and even argues that testing hypothesis rather than producing them are what case studies are better at. As the case study is introduced in order to understand a practical phenomenon, it is considered the best way to test the hypotheses in reality.

In general, hypothesis testing can be beneficial when researchers want to test a certain phenomenon and have a predetermined idea of what reality looks like. The aim is to either confirm or reject the particular idea by testing it. When researchers want to see how something works in practice, a case study can be desirable as it gives the researcher an opportunity to study a smaller environment and draw conclusions based on the findings within the environment (Seawright & Gerring, 2008).

If the authors would only be interested in seeing if the previously stated hypotheses would hold in theory, a simple hypothesis testing by looking at previous literature would be a useful approach. However, research have previously looked at ESSs and factors influencing them in theory and concluded that these should have an effect on the outcome of the system. The expectancy theory has been used to explain the theoretical results, as it may provide a useful explanation to why people act the way they do in theory. Consequently, using the same theory must be considered appropriate for this study as well.

If the authors were instead only interested in seeing how ESSs are used in a specific company, a regular case study would be applicable. By adopting a case study design, the authors could learn about the specific scheme and what the employees thought of it. However, interviewing the number of employees that would be needed to say something about the system that could be

generalized to a larger population would require a lot of resources and time. Even if that could be done, the results may be too company-specific to even be generalized to the entire system or industry. Since there already is material about factors that, although from a theoretical perspective, should be considered success factors, trying to find them once again would not contribute much to research.

In contrast, what research is now needing is the combination of theory and practice. In order to see if the theoretical findings actually hold in practice, a case is needed. It is easy to get stuck in what "should" be the perfect way to organize a system according to theory, but as long as no one looks at it from a practical perspective, companies will never be able to adjust and use the system in an optimal way. This is something that seems to be hard for companies today, and maybe one of the reasons why the Western companies have an easy time implementing the systems but a harder time making them sustainable (Lasrado et. al, 2017). By working with the systems in a successful way, the companies could use the ideas from employees and beat their competitors, hence surviving longer on a market that is more fast-changing than ever before. Companies and the business world is not a theoretical phenomenon, but rather something that goes on in the real world every day. It involves people who act in their own interest and not always in a rational way. Consequently, it is not enough to assume how the systems should look based on a perfect theory. Reality is something entirely different and it can be completely lost if you only assume something that would be rational based on a theory. Thus, a study that combines the theoretical elements studied by previous researchers in the form of hypotheses, together with empirical evidence that can be generated through a case study, can contribute with something research has not yet focused on. The study therefore aims to combine hypothesis testing with a case study in order to provide findings that can be useful not only for research, but also for companies when implementing and adjusting their employee suggestion schemes.

Case selection

All industries can benefit from a successful ESS, and since the cases were intended to act as supportive elements in order to test the hypotheses in practice, the decision about which industry to focus on was not the primary focus. Bigliardi & Galati (2013) explains that within the European Union, the food industry is considered to be one of the most important industries for

the national economy. As mentioned, the food industry is quickly changing and the companies within needs to stay innovative, which can be eased through the implementation of an ESS. For the companies that have already implemented it, making sure the employees stay motivated can be a challenge. As research, so far, has not focused on the food industry, and the industry is facing enormous change in demand from the customers, the decision was taken that a case from the food industry would be applicable to test the hypotheses on.

All contacted companies within the industry operated in Sweden, to correspond to the aim of focusing on a country-specific study. Company X was the first company chosen to participate. The company works in the food industry and focuses on meat (Company X, 2012a). They have designed their own system, which was originally only implemented in Sweden and was called "Enkelt" [Simple], but when they launched it all over the organization they changed the name to "continuous improvement" (Interview Company X, 2018) The second company chosen was Company Y, which mainly work with grocery retail. The company has a system called C2, which is centrally designed and used in many other large organizations (Interview Company Y, 2018). As Company Y both operates in the food industry and is a major player within it, the company was considered interesting as a participant in the study. As the companies have slightly different focus in the food industry, more parts of the industry will be represented. However, the two selected case companies are similar in many aspects, making it relevant and reliable to use results from them to accurately do an industry analysis.

The companies were initially contacted by email, where a presentation was given about the topic of the study as well as some information about the researchers. Once the companies had agreed to participate in the study, emails with more information about the planned study were send out. This was followed by a telephone call where we explained the process in greater detail, what the companies could hopefully gain from participating in the study, as well as getting more information about the number of employees that could potentially answer the study. Before sending the surveys out to the employees, the people we had been in contact with were sent it. This enabled them to come with constructive feedback and see if there were any uncertainties or questions they would not be able to answer. Afterwards, the survey was slightly altered and sent

out to the companies. At the same time, interviews with managers at both case companies were scheduled to gather the necessary information about the current work with the systems.

3.3 Data collection method

3.3.1 Primary data

As the aim of the study is to confirm or reject the previously stated hypotheses by testing them empirically in an organization, it was suitable to collect the data quantitatively, as opposed to qualitatively. The chosen method to gather the quantitative data is by conducting a survey, as surveys, if conducted well, may be beneficial in gathering data about opinions and behaviours (Easterby-Smith et al., 2015). The goal with the surveys was to get a clear view on what the employees valued in regards to the ESS, thus making a survey a good choice of data collection method. Information about the ESSs used by the companies today, as well as information about what the companies considers important to motivate the employees within to contribute to the system were also collected through telephone interviews with both companies. The following section will start with a description of the conducted survey and end with information about the conducted interviews.

Surveys

The type of survey chosen is a self-completion questionnaire, which takes the form of a web-based survey or postal questionnaire survey. The questionnaire can be found in Appendix A. One of the case companies did not have the possibility to answer the questionnaire online, and hence a paper version was constructed for the employees to answer. Both types of surveys have the advantage of being a cheap and an easy way to gather information, while at the same time being accessible for the employees to participate at a time of their convenience. (Easterby-Smith et al., 2015). Another advantage was the possibility to explain concepts that could be interpreted in various ways, such as the word ‘systems’ which is one of the surveys main focus areas. Furthermore, using Google Forms enabled data to be stored and downloaded in an easy manner while keeping the respondent anonymous (Easterby-Smith et al., 2015).

Naturally, sending out surveys minimizes the control over who actually answers the survey, which is one of the major downsides of self-completion questionnaires (Easterby-Smith et al., 2015). An alternative would have been to do interview-administered questionnaires, but this would be too time-consuming in order to generate enough answers to analyze. Furthermore, since interviews were conducted with people responsible for the ESS at both case companies, a self-completion questionnaire was considered applicable to gather information from the employees.

Another downside of using surveys is that important information may not be accessible for the researcher through a premade questionnaire (Bryman & Bell, 2007). In order to combat the problem, the questionnaires have been designed to be as thorough as possible. In addition, by using a web-based survey as opposed to interview-administered questionnaires, the interviewer effect was avoided, and the questions were asked in the same order and the same way for all respondents (Bryman & Bell, 2007). By keeping a ”distance” from the respondents, personal bias can also be avoided which is considered an advantage of quantitative research in general.

As there was more than one question regarding each hypothesis, the aim was that each question should express one single idea. In order to make it easy and quick for the respondents to answer, simple language was used to also avoid misinterpretations. Moreover, as the authors lack knowledge of the industry, and expressions might differ from company to company, all forms of industry jargon was avoided. To further simplify the process, no negatives were used so the respondents would not answer the question wrong simply because they missed a word. Naturally, leading questions were avoided to avoid pushing opinions to the respondents. Thus the questionnaire aimed to follow the principles of structured design (Easterby-Smith et al., 2015).

In order to be able to measure the strength of the opinions and not miss any subtly, a 1-5 point likert scale was used in the surveys (Easterby-Smith et al., 2015). The questions in the survey have been grouped together according to the hypothesis they are supposed to test, in order for the respondent to be able to think about all aspect of the topic and give reflective answers (Easterby-Smith et al., 2015). For instance, questions regarding the system capabilities were bundled together while questions regarding support were asked in another part of the survey. As not all

respondents had Swedish as their primary language, an English version was also constructed. This version was simply a translated version of the Swedish survey and consequently had the same questions and format. In order to avoid the risk of errors in the translation, a native English speaker helped in the process to make sure the translation was properly made and the questions in the different questionnaires corresponded to each other. Naturally, all respondents were informed that their answers would be treated anonymously in order for them to feel completely safe and comfortable in expressing their opinions (Bryman & Bell, 2007). Moreover, the respondents were also informed that it was only the sum of all answers that would be presented on an industry level in the published paper.

There were 80 surveys sent to company X and 150 to company Y. Both companies are large and therefore have many employees at different departments. While company X has over 7000 employees, company Y has around 8000 employees (Company X, 2012b; Company Y, 2018a). When the companies had been contacted and agreed to participate in the study, the contact persons were asked how many respondents they could send the survey too and which location/department they worked at. The aim was to get a fair distribution between both companies and the locations/departments within them. The contact persons had greater knowledge in which employees that would suit the survey, as they had more information about which employees that had the possibility to contribute to the system. As a result, the study took a snowball sampling strategy, which is a good strategy when it is hard to single out who would meet the criteria for inclusion (Easterby-Smith et al., 2015).

In total, the study has 73 respondents from company X and 59 respondents from company Y. Thus, the response rate was 91,25 percent from company X and 39,33 percent from company Y, making the total response rate 57,39 percent. As can be seen, the response rate in percent for the two companies are significantly different but the number of respondents from each company are rather similar. The respondents are employees at the companies who are able to contribute with ideas/suggestions to the system. The respondents work at different departments and locations. Out of the 132 responses that were registered, 78 percent were male while 22 percent were female, however the age distribution was rather similar. Table 2 below presents the number of respondents from each location in the companies. As seen, there are more respondents from

certain locations. The number of participants from each department is similar, which is of high importance since the aim was to get respondents from all over the companies. In addition, the number of respondents from each company are roughly the same. Consequently, not much attention should be given to the fact that there are more respondents from certain locations.

Company X	
Location	**No. of respondents**
Kristianstad	29
Linköping	25
Halmstad	10
Skara	9

Company Y	
Location	**No. of respondents**
Helsingborg	37
Kungälv	22

Table 2. Respondents from each location, illustrated by the authors

Interviews

To complement the surveys, one interview was held with two managers at Company X and one interview with a manager at Company Y. The aim of the interviews was to get a deeper understanding of the systems used by the companies today as well as information about what they believed were important factors in regards to the system. The contact person at Company X recommended two managers that would be suitable for interviews, making it a snowball sampling (Easterby-Smith et al., 2015). As the contact person had much more knowledge about the organization, the system and the people who had expertise about them, a snowball sampling was considered beneficial for the study.

The interviews were scheduled to take place at the same time as the surveys were sent out to the employees. As the aim of the interviews was to learn more about the companies' systems and their current work with ESS, a semi-structured method was considered appropriate in order to get as much information as possible (Easterby-Smith et al., 2015). In order for the managers who were going to be interviewed to feel prepared, the questions from the survey together with the planned questions for the interview were sent to them before the interview was made. The questions for the interviews can be found in Appendix B. One interview was conducted by telephone and the other by Skype, and they took approximately 30 minutes each. The reason for choosing telephone over face-to-face interviews, which would also have been a viable options, was mainly because the respondents were situated in different parts of the country. Moreover, the information needed was possible to gather without a face-to-face meeting, as it was mostly objective information about the system and not much subjective opinions from the respondents that was requested.

In general, face-to-face interviews have the advantage over telephone interviews since it can be easier for the interviewer to obtain trust when the interviewee gets to meet the interviewer (Easterby-Smith et al., 2015). Before the interviews took place, the interviewers took contact with the interviewees in order to develop an open and trusting relationship before the interviews were conducted. This was also strengthened by sending out the questions on beforehand, making it possible for the interviewees to prepare and inform if there was anything they did not feel comfortable to answer. The interviewee at Company Y was also the person we had been in contact with during the entire project. As this person had seen the questions for the survey and was thoroughly informed about every step in the process, the problem to generate trust when not conducting a face-to-face interview should not be considered a problem for the study.

Furthermore, before the interviews started, all interviewees were asked for consent to be recorded. The risk of recording interviews is that the interviewee might feel restricted when giving answers, as they will be recorded. However, all interviewees were informed that they would be confidential in the report and that they, as well as their answers, would be treated anonymously. Moreover, they were informed that they would get the chance to read the report

before it was submitted, which altogether reduced the risk of restriction in the interviewees answers.

3.3.2 Secondary data

Apart from the primary data that has been gathered through the survey, secondary data has also been gathered, mainly to ensure that the theory and primary data could be applied in the best possible way. The secondary data collection has mainly been done by looking at the participating company's website to give the reader a clear view of the company. It should however be kept in mind that although multiple sources have been used to generate a broad view, there is still a risk that the content is partially biased as not all references are objective.

3.4 Data analysis

The collected data has been analyzed both descriptively and through SPSS. By using Google Forms, data from the surveys were gathered and summarized through the program, enabling easy download to excel. The paper versions were posted to Google Forms in order to make a coherent analysis of all material. The program also presented the summarized answers from each question as a bar chart, which made it easy to interpret the data descriptively. Two tests were conducted in SPSS, Cronbach's alpha and Pearson Correlation. Before conducting any tests, the layout of the excel file was changed so it could be imported to SPSS. Once the data was in SPSS, the scales were stated so the program could perform the desired analyses using the data gathered from the surveys. From the excel file, the average value and pooled standard deviation was calculated for both the individual questions and the hypotheses as a whole. Thus, the results will be presented in two different ways, both from a statistical view (through the two tests performed in SPSS) and from a descriptive view (through the information gathered in Google Forms).

Starting with the first test, Cronbach's alpha, the internal consistency is measured and expressed as a number between 0 and 1. Whether or not, and to what extent items in a test measure the same concept is a simple description of the concept of internal consistency. As it is important to ensure validity for both examination and research purposes (Tavakol & Dennick, 2011), the test was chosen to be the first to be performed for the study.

In general, a higher alpha is gained if the items correlate to each other, but a high value is not automatically interpreted as a high degree of internal consistency. The reason is that the length of a test can impact the value of the alpha, where a too short test will result in a reduced alpha. An acceptable alpha is reached somewhere between 0.70 to 0.95 (Tavakol & Dennick, 2011), which is also what the study is aiming for. Just as a too low value is bad, a too high alpha can indicate that some items are in fact testing the same question but in a different setting, making them excessive. Therefore, the study aims to not exceed the recommended value of 0.90 (Tavakol & Dennick, 2011).

The second test performed in SPSS was the Pearson correlation. The test is used to measure how strong the linear association is between two variables. The correlation coefficient takes a value between -1 to +1. A value of 0 indicates no association, while a higher value indicates a positive correlation, and a lower indicates a negative correlation. A positive correlation means that when the value of one variable increases, the other one will also increase. Naturally a negative association indicates the opposite, if the first variable increases the other one decreases. (Lund Research, 2018). By calculating the Pearson correlation for the individual questions, it will be possible to see if they are positively correlated or if there is any question that would receive a lower score when the score for another increases.

3.5 Quality of the data/Validity and Reliability

Validity, Reliability and Replication are three of the most eminent criteria within research in business and management (Bryman & Bell, 2007). When conducting a study, they are important to keep in mind to ensure as high quality as possible. High replicability is attained if someone else can easily replicate the study. This can be ensured by thoroughly describing every process in the study. Therefore, the method section has systematically described every step on the way in great detail. The concepts of validity and reliability will be discussed in the next paragraphs.

3.5.1 Validity

Bryman & Bell (2007) describes that validity concerns if a measure of a concept actually measures the particular concept or not. There are several types of validity, but internal and external are most often discussed. Internal validity deals with causality and if a concluded causal relationship is plausible. External validity is more concerned with generalizability of the results elsewhere than in the particular research context. Another type of validity is construct validity, where "the researcher is encouraged to deduce hypotheses from a theory that is relevant to the concept" (Bryman & Bell, 2007 p. 165). This form of validity has also been important for the study as much attention has been given to forming the hypotheses based on previous literature.

Since the variables being measured in this study were derived from concepts discussed in previous literature, there is a clear link between them, which boosts the internal validity. What should be noted, however, is that motivation is a wide term and employees can have multiple predictors of it. Consequently, there could still be room for alternative explanations to why certain aspects are viewed as more motivational than others, which naturally decreases the study's internal validity. In order to strengthen the internal validity, several case companies with different departments have been used in an attempt to generate more useful information from more employees with different backgrounds. More respondents would of course enable a more accurate result and consequently a more precise conclusion.

In terms of external validity, the two case companies are major players in the industry, which ought to enable a generalization of the results to the industry. Although the response rate for the study is considered high (57,39 percent), the number of respondents in total is merely 132. Such a low number could potentially indicate that it is not sure that the sample can represent the entire population in an accurate way. Naturally, the validity is negatively affected as a result. Furthermore, it must be noted that motivating categories can be different depending on company size, which part of the industry the company operates in, and also what position the employee has in the organization. The two companies are roughly the same size but operate in slightly different parts of the industry. As the participating employees come from different departments in both companies, the generalizability for the industry is strengthen. In contrast, the findings from the study cannot be considered generalizable to other industries or countries. As the aim of

the study is to only focus on one particular industry and draw conclusions from the findings within it, generalizability to other industries or countries is something that should not be expected.

In order to strengthen the validity, a mixed method approach has been taken. A classic triangulation has not been performed, but interviews have been conducted to back up the survey and a literature review has also been performed to see what research has previously concluded as important. From the literature, the hypotheses have been constructed and tested through the survey and the interviews have been used to gain complementary knowledge. By combining these elements, the study can ensure a higher validity and reliability.

3.5.2 Reliability

The consistency of a measure of a concept is referred to as reliability. Simply put, if the results of a study are repeatable, the study has a high reliability. Reliability is important in quantitative research and there are three factors that has to be taken into account in terms of whether a measure is considered reliable or not. The factors are *stability (*if the measure is stable over time), *internal reliability* (if scores on one indicator has a tendency to be related to scores on other indicators) and *inter-observer consistency (*when more than one 'observer' is involved a potential lack of consistency in their decisions arises). (Bryman & Bell, 2007).

The results of the study should be easily repeatable by following the same method that has been shown in this chapter. There is a high relatedness to the scores of different indicators, which is also shown in the results in chapter 5, boosting the internal reliability. Nevertheless, as previously mentioned, the fact that motivation differs between individuals can indicate that if the study was repeated, the results could potentially differ. In terms of inter-observer consistency, there are more than one 'observer', risking a lower consistency. However, the authors have throughout the process had an agreed goal about the study, the construction of hypotheses and the survey to test them, as well as the interviews conducted. Furthermore, by performing tests using SPSS, the potential risk of lacking consistency is reduced, as it is not the 'observers' that interpret the data. In contrast, the descriptive analysis is performed by the authors and requires

consistency. To ensure consistency, the five-point Likert scale was discussed prior to the surveys being sent out and a confirmation point of the hypotheses was decided at results having a mean value above 3. The continuous dialogue between the authors throughout the process further strengthens the inter-observer consistency.

4 Empirical findings

The chapter begins with an introduction of the two case companies. Following the introduction is the respondents explanations from the interviews of how they work with their ESSs. Afterwards, findings from the interviews that are linked to the hypotheses will be presented, followed up by results from the survey of the individual questions and a short interpretation of the numbers. After, results on Cronbach's Alpha and Pearson Correlation are presented. The chapter ends with a presentation of the mean value and standard deviation of the hypotheses.

4.1 Company X

4.1.1 The company

Company X is part of a larger group and operates within the food industry in Sweden, mainly with meat and chark. (Company X, 2012a). The group is one of the largest organizations within the European food industry and is publicly traded. The larger group has over 7000 employees and export to over 50 countries. (Company X, 2012b).

4.1.2 The work with ESS in Company X

Company X has worked with improvements for a long time. Today they are focusing on lean, working with a system that they have designed themselves. The current system was first launched in Sweden and was at the time called "enkelt" [simple]. When the system was implemented in other countries too, the name changed, and it is now called "continuous improvement". (Interview Company X, 2018).

The system is similar to an ordinary excel file, where the user adds a suggestion by typing in which category of suggestion it is. The system works on a country-base, so each country has their own version of the system where suggestions are posted. Before adding suggestions, the user therefore has to choose a country, site, department and group. The system has two different

categories, depending on how much time that is needed to solve the problem; “just do it” and “kaizen”. If it is something that can be addressed immediately, it should be treated in the “just do it” category. Suggestions that are classified as “just do it” will be started by the person who posted the suggestion when he or she feels they have time to fix it, and then they are responsible for coming up with a solution in five days before it gets sent to another person who will then have five more days to fix it and so on. (Interview Company X, 2018).

The idea to work with specific time limits for “just do it” is to not get stuck with ideas that cannot be fixed by one person. Instead the suggestion is sent to a higher level where a new person gets to see it with fresh eyes and try to come up with a solution. By doing it this way, the company can see if the suggestion can lead to potential benefits. Moreover, if the “kaizen” suggestions are not possible to fix in three months, they are not part of the continuous process and by moving them to another system they can get the attention they need. By keeping all suggestions, no matter if they are implemented or not, the employees can feel that their ideas have been taken seriously and that they can come back to them if they should be more useful later. (Interview Company X, 2018).

If the suggestion requires experts from a department, such as tech, production or operation development, the suggestion should be treated as a “kaizen” and a group, of three to seven people, should be formed to address it. The group contains people who are well-educated to work with root cause and analysis. The “kaizen” suggestions are often more complex and therefore have around one to three months to be solved. If they are still unsolved after three months, they will be moved into another category as they are not continuous improvements, but rather something that would require much more attention. Kaizen suggestions require some more fields to be filled, namely a root cause/analyze box, where the problem will be filled in. (Interview Company X, 2018).

When a suggestion is started it is turned yellow, to mark that it is in progress. Once someone puts in the finishing date, the suggestion will be marked as finished and turn green. If the suggestion cannot be solved at the moment, it will be marked red, for instance if there is not enough money

to fix it now. The suggestion will still remain in the system, so users can go back to it when the necessary resources to fix it is available. (Interview Company X, 2018).

Furthermore, the company has made it possible to print out the file, so the workers can see where the suggestions are at. The history is also displayed at start-up meetings, steering meetings during the week and also board meetings. At the board meeting they have seven areas that they focus on, where lean is one of them. They have one day dedicated to the kaizen groups, one for findings from last week and one for the actions that should be taken for the just do it category for next week. Suggestions that are not implemented will also remain in the list, so they can be reviewed again if needed. In general, the company opts for minimum two ideas for each employee and three activities of kaizen in each area, which will be followed up on the weekly meetings. (Interview Company X, 2018).

4.2 Company Y

4.2.1 The company

Company Y is a segment of a larger organization with six segments. The majority of the segments operate within the food industry and the other segments act as supportive businesses for the core, in order for the organization to further develop towards new business opportunities. (Company Y, 2018b). The company is the leader within the FMCG/food retail industry with its 36 per cent market share. With around 8000 employees in over 1200 stores, the company operates all over Sweden. (Company Y, 2018a). The larger organization has a focus on innovation and believes that constant improvement can stem from it, which can also be seen in one of their three values, namely the value about entrepreneurship. (Company Y, 2018c).

4.2.2 The work with ESS in Company Y

Since 2012, Company Y uses a system called System C2 (Interview Company Y, 2018). The system is created by C2 Management and has around 150 000 users in the world (C2 Management AB, 2018a), with 20 of the client companies being publicly traded (C2

Management AB, 2018b). The system can be used for multiple purposes, everything from customer complaint to employee suggestions. (C2 Management AB, 2018a). The system can be adjusted to the particular case the company needs help managing, but the workflow is always build in the same way with some basic steps. (C2 Management AB, 2018c). For company Y, who uses the system for their employee suggestions, the first step is for an employee to hand in their suggestion to the system. This can be done either by using the web-version of the program and identifying themselves with their employee number, or by using the faster version through their telephone. When the employee decides to hand in a suggestion through their telephone, they are sent to an easier version of the system and can choose if they want to submit the suggestion with their name or not. (Interview Company Y, 2018). The next step is to make a decision about the suggestion. The suggestion might need further examination before it can be determined if it is viable or not. Otherwise, the suggestion can be cancelled or continue to the third step and be carried out. The suggestion should then be followed up to move to the fifth and final step, where the suggestion is implemented and followed-up in the organization. (C2 Management, 2018c).

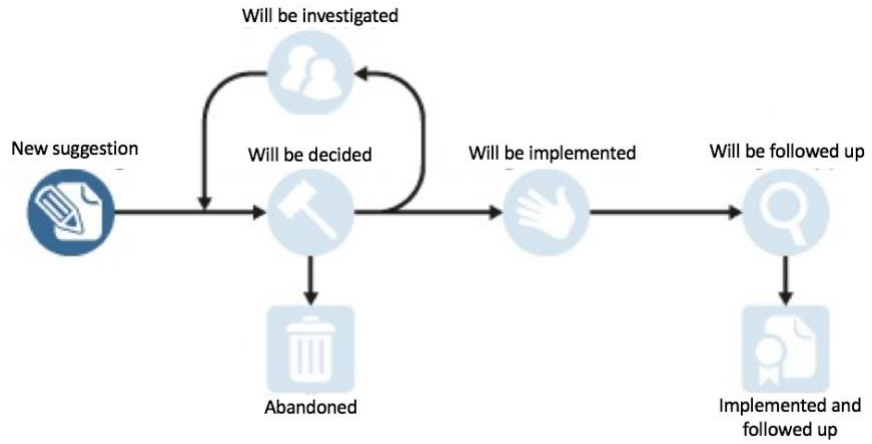

Figure 4. Simple suggestion management with System C2. Source: C2 Management, 2018c), translated by the authors.

There is a manual build in the system where the employees can learn more about the program and also test it. Apart from that, the respondent usually has a meeting where the system is presented and walked-through. It is also common that the employees help each other if someone is not familiar with the system. (Interview Company Y, 2018). Moreover, the System C2 has an automatic tracking of each suggestion. This enables all users to, at any time, log into the system

and see which step all suggestions are at, who is responsible for it, when it is due to be finished, and the results of the implementations. (C2 Management, 2018c). The respondent from company Y (2018) explains that it is easy to get useful statistics from the system and that the average time from the first step to the final is around 34 days. Moreover, the respondent explains that one of the benefits of having the same system within the entire organization and the automatic tracking feature is that anyone can log into the system and search for keywords to see a suggestion that has already been implemented in another part of the organization (Interview Company Y, 2018).

4.3 Empirical findings from the interviews and the survey that are linked to the hypotheses

This part of the chapter is divided into six different parts that represents each of the six hypotheses that were tested. Each part will begin with a coded version of the two interviews with Company X and Company Y, where the authors have collected the most interesting findings from the interviews. After each paragraph, results from the survey will be presented (Table 3-8). In tables 3-8, the mean value for each of the survey question is presented and the mean values standing out will be noted. The survey questions have been summarized, but the question number is the same as stated in chapter 2.7. To read the survey questions in its entirety, please see chapter 2.7.

4.3.1 (H1) Suitable Individual Attributes

Findings from the interviews

No interesting findings from the interview linked to suitable individual attributes were identified.

Results from the survey

As can be seen in table 3, Q6 corresponds to the significantly lowest mean value (3,68). Apart from this, the rest of the questions linked to individual attributes have similar mean values, except for Q5 that corresponds to a slightly lower mean value (4,03).

Individual attributes	Mean
Q5: Knowledge/tools to be creative	4.03
Q6: More experience	3.68
Q8: Varying work tasks encourages me	4.17
Q7: Varying work tasks facilitates creativity	4.16
Q15: Effort to make a difference	4.18

Table 3. Survey questions mean value for questions linked to individual attributes

4.3.2 (H2) An Innovative Culture

Findings from the interviews

An innovative culture is something the respondent from Company Y believes can be beneficial, as the company would then have a common goal. The current culture shows sign of being innovative when it comes to larger activities but when it comes to the minor, more constant improvements, the company has had better and worse periods over the years. (Interview Company Y, 2018).

Results from the survey

Innovative culture	Mean
Q4: Creative environment	4.16

Table 4. Survey questions mean value for questions linked to innovative culture

4.3.3 (H3) Rewards

Findings from the interviews

There are no rewards connected to the system today in Company X, but there was a financial reward connected to a previous system around ten years ago. The respondents at Company X (2018) explains that they tried monetary rewards, but that they expect people to be involved today and would like to involve even more people. Moreover, the employees know that they get a salary increase every year and the production needs to improve as well in order for it to work financially. Therefore, the company aims for the employees to see it as part of their daily work to

participate in the process of contributing with new suggestions and ideas. (Interview Company X, 2018).

In Company Y, there are no monetary rewards or bonuses for contributing with suggestions, but every month the company appoints "the improvement/suggestion of the month", which is for all the units in the country. Every department nominate one suggestion as the "suggestion of the month" and the chosen suggestion is posted on the company's intranet. Every year the company also appoints "the improvement of the year", "the leader of the year" and "årets eldsjäl" [the enthusiast of the year]. The improvement and enthusiast of the year is connected to the system, and the winner is usually someone who has posted multiple suggestions, and preferably also good ones, since it is more about quality than quantity. (Interview Company Y, 2018).

Results from the survey

Viewing table 5, Q18 corresponds to the lowest value. Furthermore, Q19 and Q20 corresponds to similar mean values.

Rewards	Mean
Q18: Reward contribution acknowledged	2.75
Q19: Monetary reward	3.01
Q20: Rewards in general	3.00

Table 5. Survey questions mean value for questions linked to rewards

4.3.4 (H4) System Capabilities

Findings from the interviews

When the system is implemented in a new part of the company at Company X, the first step is to only have the supervisors responsible to take care of the list, and the supervisors are the ones putting all of the suggestions in to the system. This is because the company wants the manager to feel that it is their departments and their list. When the system has been used for some time, more people will be able to fill in the list, but the company believes it is important that the lead of the work with continuous improvement is taken by the supervisors. However, they also want everyone to be involved in posting suggestions, which is partly why they have the meetings in the mornings (Interview Company X, 2018). Company X believes that it is best to let the

supervisors put the suggestions into the system when it is newly implemented since they are the ones who have the greatest knowledge about what is going on in the department. As a consequence, the supervisor can help his or her own expert group with "kaizen"-suggestions or help with the "just do it" suggestions if the employee does not find the solution within the five days (Interview Company X, 2018).

Feedback on the proposed improvements and ideas in Company X, and to keep the employees satisfied and creative to think from their working stations, is considered important by the respondent (Interview Company X, 2018). The company believes that an overall picture of the situation can work as a feedback system as all employees can see the results. The company also sends out the results from the information that is posted in C2, which also works as a form of feedback. However, the respondent explains that there are many unreported suggestions as a result of continuous improvement work that does not get registered. Although the suggestions are being implemented, there are still some employees that feel that registering it into the system requires extra work. Therefore, the company works hard with reminding the employees and really pressing on the importance of system and its benefits. One of the toughest challenge is how to keep the employees motivated to contribute. The respondent describes that there are three factors that are crucial in order for the employees' motivation to persist. The first factor is that "det verkligen händer någonting" [that something actually happens] (Interview Company Y, 2018), meaning that everyone takes responsibility in making sure they are actively working to ensure that the process runs smoothly. The second is feedback, which is considered crucial for employee motivation. One of the benefits with the system is that it is enabling feedback as long as there is information about who posted the suggestion (Interview Company Y, 2018).

Results from the survey

In table 6, Q13 corresponds to the lowest mean value (3,61) and Q17 corresponds to the highest mean value (4,24). The rest of the survey questions can be considered to correspond to similar mean values.

System capabilities	Mean
Q11: Easy to use	4.19
Q12: Access necessary resources	4.03
Q13: System existence	3.61
Q16: Quick evaluation	3.97
Q17: Feedback	4.24

Table 6. Survey questions mean value for questions linked to system capabilities

4.3.5 (H5) Communication and Networking

Findings from the interviews

Contact with the employees is something the respondents from Company X perceive as extremely important in order for the system to succeed. For example, it is considered important to keep the employees updated on the status of the work with the implementation of posted suggestions and also to include them in the progress (Interview Company X, 2018).

Weekly meetings are held in Company X which the respondent believe are important in order to give the operators an update about what is happening with the suggestions each week. By having short meetings every morning at each department, the employees also get a more frequent update about what is going on with the suggestions at their workplace. In order to secure continuity between the meetings at the departments, there is a handbook designed for the meetings. Moreover, the company encourages local freedom at every factory since they are a bit different from each other (Interview Company X, 2018).

In order for Company Y to inform about the demand for suggestions, and also to visualize the current work with the different suggestions, the company has an improvement board where information about everything regarding the system and suggestions can be shown. The board works as a complementary item for the system, which is computerized (Interview Company Y, 2018).

Results from the survey

Table 7 illustrates that Q9 has the significantly highest mean value (4,36), while Q10 and Q14 corresponds to similar mean values.

Communication & networking	Mean
Q9: Communication w/ managers	4.36
Q10: Cooperation w/ others	4.05
Q14: Earlier suggestions implemented	3.97

Table 7. Survey questions mean value for questions linked to communication and networking

4.3.6 (H6) Support

Findings from the interviews

Company X has worked with lean for some years and the current system is therefore not the first to be implemented at the company. The first lean house the company worked with was called "radical collaboration". When working with the system, the company perceived it important to involve employees, asking them about their feelings towards work, how they felt in general and let them influence the work the company was then doing (Interview Company X, 2018).

The respondent at Company Y states that in order to keep the employees motivated, the company believes that managerial commitment is important. The managers should be involved in the work with improvements, both in promoting the suggestions and encouraging employees to think creatively and participate. Moreover, the company feels that it is important to prioritize the work with the system and the improvement groups they have in their daily business. When the managers are more committed, the company has noticed a difference from the employees too. Thus, the company believes that the group managers have a large responsibility in involving the employees to participate. The improvement groups can also come with suggestion as a team but apart from that it is not common for people to give suggestions in groups (Interview Company Y, 2018).

Furthermore, the respondent at Company Y believes that it is very important to involve the employees in the process. This is done by giving the employees a change to participate and work with their suggestions. One way to motivate employees to participate is to start with the ones who show an interest and then let their enthusiasm inspire others to also participate. An easy starting point is to work with an existing problem that has occurred and try to find a solution to the specific problem instead of trying to find a universal solution (Interview Company Y, 2018).

Results from the survey

Table 8 shows that Q1 corresponds to the highest mean value (4,10), while Q2 and Q3 have similar mean values.

Support	Mean
Q1: Managerial support	4.10
Q2: Managerial encouragement	3.84
Q3: Collegial support	3.88

Table 8. Survey questions mean value for questions linked to support

4.4 Cronbach's Alpha and Pearson Correlation

This part of the chapter presents the results from Cronbach's Alpha and Pearson Correlation that were performed in SPSS.

The 230 surveys that were sent out had a response rate at 57,39 percent. As mentioned, the gender distribution was not ideal. However, no significant difference between the answers from the male and female respondents were found, which indicates that the slightly skewed gender distribution plays no significant role to the results of the study. Moreover, the distribution between companies, department and location yielded a rather similar distribution.

4.4.1 Cronbach's Alpha

As can be seen in the table below (table 9), the Cronbach's alpha for the study was ,865 for the 20 items in the survey. As an acceptable alpha is reached at approximately 0,70 (Tavakol & Dennick, 2011), the value for the study was considered sufficient. All individual questions left the Cronbach's alpha about the same if deleted, and no question had a higher alpha if deleted, which implies that all questions measured the same concept and were useful for the survey, and therefore provide useful insight to the results. The full table with the Cronbach's alpha for each question can be found in Appendix E.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,865	,868	20

Table 9. Cronbach's alpha for the survey

4.4.2 Pearson Correlation

Almost all correlations between the variables were positive, with the exception of the correlation between Q10 "Cooperation w/ others" and Q19 "Monetary rewards" (-0.107). A table containing information about how each question correlate to the other can be found in Appendix F. Below, table 10 shows the highest and the lowest correlations. As can be seen in table 10, the highest correlation can be found between Q20 "Rewards in general" and Q19 "Monetary reward" (0.809). The lowest correlation was found between Q2 "Managerial encouragement" and Q11 "Easy to use" (0.012).

Variable	Highest correlation	Lowest correlation
Q1: Managerial support	Q2 (0.556)	Q10 (0.071)
Q2: Managerial encouragement	Q3 (0.564)	Q19 (0.148)
Q3: Collegial support	Q2 (0.564)	Q17 (0.099)
Q4: Creative environment	Q5 (0.468)	Q17 (0.068)
Q5: Knowledge/tools to be creative	Q10 (0.502)	Q19 (0.264)
Q6: More experience	Q5 (0.403)	Q11 (0.019)
Q7: Varying work tasks facilitates creativity	Q8 (0.783)	Q17 (0.096)
Q8: Varying work tasks encourages me	Q7 (0.783)	Q20 (0.057)
Q9: Communication w/ managers	Q2 (0.458)	Q11 (0.143)
Q10: Cooperation w/ others	Q8 (0.423)	Q20 (0.029)
Q11: Easy to use	Q4 (0.401)	Q2 (0.012)
Q12: Access necessary resources	Q16 (0.472)	Q19 (0.218)
Q13: System existence	Q5 (0.526)	Q16 (0.176)
Q14: Earlier suggestions implemented	Q16 (0.475)	Q4 (0.118)
Q15: Effort to make a difference	Q8 (0.442)	Q11 (0.061)
Q16: Quick evaluation	Q14 (0.475)	Q10 (0.062)
Q17: Feedback	Q16 (0.458)	Q11 (0.044)
Q18: Reward contribution acknowledged	Q20 (0.637)	Q8 (0.068)
Q19: Monetary reward	Q20 (0.809)	Q11 (0.023)
Q20: Rewards in general	Q19 (0.809)	Q10 (0.029)

Table 10. Correlation between the variables, illustrated by the authors

4.5 Mean value and standard deviation for the hypotheses

In Table 11, the mean value and standard deviation for each hypothesis is presented. The hypotheses have been summarized using the first letter of each word. Please see chapter 2.7 for the whole name of the hypotheses. As can be seen in table 11, the highest mean value corresponds to H2 (4,17), and the lowest value corresponds to H3 (2,91). However, it is worth noting that there was only one question in connection to hypothesis H2. While the rest of the hypotheses show a similar mean toH2, H3 is the one which stands out with a significantly lower number. The standard deviation has the highest value forH3 (1,12), while H4 has the lowest value (0,84). In general, the standard deviation value for the hypotheses can be considered similar.

Hypotheses	Mean	SD
(1) SIAWPAE	4.05	0.93
(2) AICWPAE	4.17	0.88
(3) RWPAE	2.91	1.12
(4) SSCWPAE	3.99	0.84
(5) SCANWPAE	4.11	0.93
(6) SSWPAE	3.95	0.99

Table 11. Mean and standard deviation for the survey

*****See Appendix G for each question in the survey's mean and standard deviation

5 Analysis and Discussion

The chapter aims to analyze and discuss the study's result in relation to previous literature, the presented theory and the gathered empirical material. The analysis will both concern the hypotheses as well as the individual questions in the survey. The information from the interviews will also be used in order to generate a nuanced analysis of the results.

The confirmation/rejection of each hypothesis is based on the mean score for the hypotheses. A high mean score implies that employees' motivation is strongly connected to the hypothesis, and vice versa. Consequently, a high mean score implies that the hypothesis should be confirmed, while a low score implies that the hypothesis should be rejected. As a five-point Likert scale has been use, all mean score that exceed a mean value of 3.0 should be confirmed, while a mean value below 3.0 should be rejected. Thus, as can be seen in table 11, five of the six hypotheses can be confirmed, while hypothesis 3 (rewards) has a mean score below 3.0 and should therefore be rejected.

The hypothesis that received the biggest support was hypothesis 2 (an innovative culture) with a mean value of 4,17. Consequently, having an innovative culture appears to play a significant role in motivating the employees to participate in the system. The importance of company culture is frequently discussed in literature (Rubera & Kirca, 2012; Tellis, 2012; Hurley & Hult, 1998) and the respondent at Company Y also agreed about its importance, stating that it can provide a common goal (Interview Company Y, 2018). The respondents believe they are rather innovative when it comes to the larger activities and explains that they are working at becoming so on the constant improvements as well (Interview Company Y, 2018). Their focus thus seems to be in line with what is desired from an employee perspective, and if the effort is proven successful, the entire outcome of the system could greatly improve.

In Company X, each suggestion passes supervisors within the firm which also are the ones putting in the suggestion in the system. The respondents from Company X explains that the reason is to make the supervisors get a sense that it is their own department, and their own list where suggestions are being posted (Interview Company X, 2018). This contradicts with what

characterizes an innovative culture, since this type of culture tend to de-prioritize control, which appears to be present at Company X, as the supervisors are the only ones that are able to put suggestions into the system. Referring back to the literature review, it could result in a negative effect on ESS outcome. Consequently, a decreased company performance could be attained since there is a possibility that the company will receive fewer suggestions if they have to pass through bureaucracy. On the other hand, Company Y has a system where every employee have the possibility to post their own suggestion (Interview Company Y, 2018). This results in a more flexible system, and flexibility is one of the characteristics to obtain an innovative culture. Consequently, this way of de-prioritizing control and the employees ability to easily get their suggestions posted could imply a more innovative culture. As a result, more suggestions might be posted which can benefit improvement processes within the organization.

Hypothesis 5 (communication & networking) scored the second highest mean value (4,11), which was slightly lower than hypothesis 2 (innovative culture). However, there was only one survey question in relation to hypothesis 2, whereas hypothesis 5 was measured using several. As a consequence, the mean value from hypothesis 5 can be considered more accurate in explaining the hypothesis connection to ESS outcome. In general, a mean value of 4,11 is considered a high score, implying that the survey respondents agree with findings from the literature review that communication and networking is important in order to craft a successful ESS (McConville, 1990; Arthur et. al, 2010; Björklund; 2010; Shalley & Ginson, 2004). Each respondent from both Company X and Company Y stressed the importance of managers/supervisors role in actively communicating the working process with the ESS by keeping the employees updated and including them in the working process of posted suggestions (Interview Company X, 2018; Interview Company Y, 2018). For example, respondents from Company X expects their employees to be included in the future direction of the company and claims that this is part of their work and their original salary. In addition, Company X has daily morning meetings for 5-6 minutes with the purpose of keeping the employees updated in the company's current work with various suggestions (Interview Company X, 2018). Furthermore, the respondent from Company Y explained in the interview how suggestions sometimes, although not very often, are posted collectively, which is also highlighted as a way of improving the outcome of ESSs throughout the literature review (Yuan & Zhou, 2008). This can be interpreted as the employees' way of

communicating as well as networking. In summary, communication in particular but also networking can be considered important in order to craft a successful ESS. Looking back at Figure 3 and the positive effects on ESS outcome, collaborating in this way can in one way or the other have an impact on many of the positive effects. For example, if managers actively communicate with the employees, the employees will feel more committed to the improvement processes, making them more engaged which will boost their motivation to keep posting suggestions and take accountability for the future direction of the company.

The hypothesis that received the third highest score, hypothesis 1 (individual attributes), also appears to be an important factor to consider when aiming to motivate the employees to participate with suggestions. Previous research has concluded that varying work tasks is beneficial for motivation and creative thinking (Arthur et. al, 2010; Yuan & Zhou, 2008; Leach et. al, 2006). The respondents seem to agree, which is shown by the high mean score for the survey question (Table 3). The reason may be because varying work tasks requires creative thinking in themselves, giving the employees a chance to practice. As with most things, people like doing what they feel comfortable with. If the work tasks give the employees a chance to practice their creative thinking in general, there is a high probability that the creative thinking will also be used for other things, such as thinking of ideas that can be considered suggestions for improvement.

Moving on to hypothesis 4 (System capabilities), the mean value of 3,99 implies that system capabilities can be considered important to take into consideration in order for an ESS to become successful. By making the system easy for employees to use and giving them necessary resources, companies would likely receive more ideas, as employees would feel more motivated to post their ideas into the system. One of the reasons why only supervisors within Company X can post suggestions is since only a limited amount of personnel has the necessary education on how to properly post the suggestions (Interview Company X, 2018). As a consequence, an interpretation of Company X's system is that it is not very easy to use, which could negatively affect ESS outcome (McConville, 1990). Furthermore, the results from the survey implies that the respondents agree with the importance of having an easy system, since the mean value of 4,19 is considered a very high number. If the system is complicated and difficult to manage, a

likability is that the employees will ignore posting their suggestions, which could lead to that potentially valuable inputs never will be utilized. However, having a complicated system might not be a great barrier to suggestions being posted. If the companies for example actively support their employees and educate them regarding the function of the system, having a complicated system might not reduce the amount of suggestions being posted.

Moreover, feedback must be considered extremely important when looking at the results from the survey, something that is also supported by previous literature (Verdinejad et. al, 2010; Mishra, 1994; Van Dijk & Van den Ende, 2002; Powell, 2008) and the respondents from the companies (Interview Company X, 2018; Interview Company Y, 2018). If the employees do not get any feedback on their contribution, they will probably not feel the desire to post more ideas. Even if the suggestions will not be implemented, companies can greatly benefit from having a system that gives clear feedback, no matter which form it will take. Both case companies use systems that enable easy feedback in themselves, by enabling the user to enter the system and check how all suggestions are doing (Interview Company X, 2018; Interview Company Y, 2018). Given the results, this appears to be a great way to keep employees motivated. However, simply relying on feedback is not enough, since there are many variables that affect how the system is perceived. The employees would also feel more inclined and motivated to contribute if they know the evaluation will be quick. Therefore, companies must also focus on creating an efficient system and dedicate much resources to it.

Hypothesis 6 (support) received a mean value of 3,95, which can also be considered a high number, meaning that companies should actively support and encourage employees. By doing this, employees will, referring to the survey, feel more motivated to contribute with ideas, leading to a positive effect on ESS outcome and hence an increased company performance. The benefits with support and encouragement from different parts of the organization is thoroughly elaborated in the literature review (Malaviya & Wandhwa, 2005; Tatter, 1975; McLean, 2005; Arif et. al, 2010; Lloyd, 1996). Furthermore, each respondent from both Company X and Company Y agree that it is important to work closely to their employees, involving them in their work and supporting them in the working process. For example, the respondent from Company X consider it to be extremely important to have contact with the employees in order to create a

successful ESS (Interview Company X, 2018). Moreover, respondents from Company Y mentioned how it is very important to continually encourage the employees to think creatively and thereby be a part of improvements within the company (Interview Company Y, 208). In summary, the results from the survey, the respondents from the interview and the presented literature review implies that support from different levels of the organization is important and will lead to a positive outcome of the ESS. By being part of a supportive organization, the employees will feel more motivated to be a part of improvement processes within the company. Otherwise, there is a risk that the employees will feel excluded which will affect their commitment and sense of accountability negatively, decreasing their motivation to contribute.

The hypothesis that received the least support, and also the only one to be rejected, was the effect rewards would have on the outcome on ESS. Previous research has concluded that it is important for companies to think about what type of rewards they are offering, as employees may feel motivated by different rewards (Du Plessis et al., 2008). While Company Y has never had any type of monetary rewards connected to their system, Company X has previously had it (Interview Company X, 2018; Interview Company Y, 2018). The employees at Company Y most likely feel intrinsically motivated in participating if they do so. On the other hand, the employees at Company X could potentially have had their intrinsic motivation crowded out when they started implementing monetary rewards. Monetary rewards may be problematic as it is not easy to distinguish when to give the reward and/or how much money that should be connected to the suggestions. The respondents at Company X agrees with it, and it is also part of the reason for why they decided to remove the monetary rewards in connection to the system (Interview Company X, 2018). However, by removing the monetary rewards, the company could risk losing participation from the employees who highly value a monetary reward. According to the crowding theory, the intrinsically motivated employees may have lost some of their intrinsic motivation when the rewards were implemented, and the motivation does not automatically come back when the extrinsic rewards are taken away (Ryan & Deci, 2000). As company X has recently launched the system all over the organization and also renamed it for the Swedish part as well, the problem with motivation could be reduced if the employees felt that this was a different system than the previous one.

When looking at the responses for Q18 and Q19, it is clear that the employees prefer monetary rewards over having their name and contribution acknowledged. Company Y described that they are not working with monetary rewards, but rather use their improvement board to showcase suggestions and their results (Interview Company Y, 2018). However, it does not appear to be the best way to motivate employees in general, as 45,8 percent gave the category a 1 or a 2 in the questionnaire. Worth noting is that 32,4 percent felt the same way about monetary rewards, showing that the answer is not to replace the rewards with money either. In general, the employees seem to feel more motivated to contribute to the system if there are rewards in general than they have stated about the monetary rewards and having their names recognized. This is interesting in the sense that employees do appear to value some form of reward, but not the kind that either company seems to be working with today. What form a reward connected to an ESS should take in order for employees in general to feel motivated is however unclear. As all people have different forms and amount of motivation (Ryan & Deci, 2000), there may not even be any optimal form of reward. Instead, having no reward associated with the system could be beneficial since the intrinsically motivated employees will take pleasure in enjoying the task of contributing. At the same time, there would be no risk of motivation being crowded out. Since there are still many other factors that would positively influence the outcome of the system, the companies would most likely be better off focusing on them. However, as some employees still perceive rewards as something important, the companies could risk decreasing the motivation for these people if they would not offer any type of reward. It can therefore be considered a double-edged sword as no rewards could be equally bad as too many or the wrong kind of rewards. How this should be approached is most likely different from company to company and could be affected by other factors such as corporate culture and the system design itself.

The expectancy theory can be used to explain the outcome of the results. As stated before, all three elements in the expectancy theory (expectancy, instrumentality and valence) work as a multiplier for each other. Consequently, if one element receives a score of 0, the individual's motivation will also be 0. (Lunenburg, 2011). Given that the employees do not appear to value rewards such as having their name acknowledged, companies implementing systems that promote such forms of rewards may find themselves receiving fewer contributions in comparison to if there existed no rewards. The crowding theory can also help in understanding why

companies that previously had a monetary reward but removed it, may receive much less suggestions to the system than before. The explanation lies in the fact that by implementing monetary rewards, the employees who felt intrinsically motivated had part of that motivation crowded out by the extrinsic rewards that were launched. While employees who had previously had no intention in contributing may find the rewards motivating, the former intrinsically motivated employees had their motivation substituted (Ryan & Deci, 2000). When the monetary rewards were taken away, the extrinsically motivated employees did not feel any motivation to participate, as expected. However, the formerly intrinsically motivated also lost their motivation as they no longer took pleasure in performing the task as they did before. For companies, the decision to implement rewards, no matter which form they may take, should therefore not be taken lightly. It may even be more beneficial for them to stay away from rewards completely and try to focus on other factors that can trigger more motivation for the employees.

In general, given the result from the hypotheses, it appears that the focus should instead be on the categories that can be connected to the element of expectancy in the expectancy theory. Three of the four questions in regards to expectancy received the highest score in the survey, which should probably not come as a surprise, given that expectancy is the first element in the theory. If the individual (employee) does not feel as their effort would lead to a performance that was considered desirable, the employee would most likely not make the effort even if the performance would be rewarded (instrumentality) and the reward was valued (valence).

For managers, the results can indicate which categories that should be in the focus in order for them to build a successful ESS. The results from the study indicate that certain categories are more important than others. With support from the survey, and also the interviews with the companies, an innovative culture is something that is of vital importance for a company. If the culture is innovative, more employees may feel motivated to contribute with ideas. However, an innovative culture alone is not enough. Instead, the different categories are interlinked to each other and managers can benefit from focusing on several at the same time, given that each gets the attention they deserve. Individual attributes could greatly impact on the system, as different attributes may be preferable for different ideas. Even if a company has an innovative culture and employees who possess desired individual attributes, the ESS will not necessarily be successful

if the individuals for example does not feel like the system is easy to use. Therefore, managers should probably devote much attention to the design of the system. The system needs to be easy to use and the employees must feel like they can access the necessary resources to use it. Moreover, feedback is something that appears to be important according to the survey, and also supported by the respondents at the interviews. When the system is at place, the managers should therefore focus on feedback and evaluating the suggestions quickly in order to keep the employees motivated to contribute with more ideas. Activities such as morning meetings where the posted suggestions are discussed, such as the case at company X, or a board that is reviewed where all suggestions are shown, such as the case at company Y, can likely have a positive impact on the employees' motivation. In contrast, rewarding suggestions in any form is, as previously mentioned, is not as important and managers should therefore carefully consider the time and effort spent on such activities.

6 Conclusion

The final chapter will present the conclusion of the study based on all empirical material as well as the discussion and analysis above. The chapter will end with suggestions for future research that could be interesting to further investigate.

6.1 Important categories for successful ESS outcome

The aim of this study was to understand and measure some critical success factors derived from previous literature and their impact on ESS outcome, and to consequently be able to draw conclusions regarding what makes an ESS successful. The chosen factors were summarized into six categories, which were translated into hypotheses. In conclusion, five out of the six categories were confirmed, meaning that if companies focus on improving areas within their organization connected to these five categories, this study suggests that companies can boost the outcome of their ESSs. This can be done by (1) having a workforce possessing suitable individual attributes, (2) an innovative culture, (3) strong system capabilities, (4) focus less on extrinsic and intrinsic rewards, (5) working actively with communication and networking and (6) to have support from different parts of the organization. Worth noting is that the above presented categories tend to be interlinked. As a consequence, focusing on only some of the categories and ignoring others, might affect the overall outcome on ESS negatively. With this being said, companies should try to find a healthy balance in their work connected to the categories to increase the chances of crafting a successful ESS.

6.2 Future research

With a wide topic, many directions for future research become inevitable. This study focused on ESSs within the food industry in Sweden. The sample size of the study is not massively big, and a similar study with more respondents would be a natural proceeding study, in order to verify the conclusions drawn from this study. Moreover, since there are many other industries in Sweden, it

would also be interesting for future research to focus on another industry to see if there are differences between them. As there could also be differences between the same industry in different countries, research focusing on one industry in multiple countries would also be of great interest. Within Sweden, and many other countries too, there is a distinction between the private and public sector and it would be interesting to see whether employees in the different sectors also value various factors when it comes to the outcome on ESSs. Furthermore, as the focus on ESS and success factors has been on an country- and industry-specific level so far, it would be intriguing to study various industries in different countries to look for similarities and differences both between countries and industries. However, this would require significant resources both timewise and moneywise.

Moreover, it would be interesting to hear more about what the employees perceive as most important in order for them to feel motivated to contribute to the system. One possible way of studying it would be through a qualitative approach. In this study, interviews were held with managers at the company to get more information about the systems and learn about what the company does to motivate the employees today. By conducting interviews with the employees instead, a new perspective would open up and the findings could be combined with findings from both this study and previous research. Interviewing enough employees to be able to draw conclusions would naturally be time-consuming, which is partly why it was not done in this study. However, should a researcher have the necessary resources it is likely that the findings could contribute with something research has not yet seen in connection to the systems.

Lastly, there are multiple theories that could have been applied to the same phenomenon. A theory of motivation was considered viable for the study, but other interesting theories to use as a starting point in order to explain the outcome could be Eisenhardt's (1989) Agency theory which was briefly described in chapter 1.

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Appendix

Appendix A: Survey Questions in Swedish and English

Hej!

Inledningsvis vill vi rikta ett stort tack till dig som svarar på denna enkät. Vi heter Henrik Prior och Charlotte Laurén och just nu skriver vi vår masteruppsats inom programmet Internationell Strategisk Ledning vid Lunds Universitet. Målet med denna undersökning är att ta reda på vad det är som är viktigast för företag att fokusera på för att anställda ska känna sig motiverade till att lämna idéer och förslag till förbättringar inom organisationen. Ditt svar på denna enkät kommer tillsammans med andras svar att användas för att mäta olika faktorer och dess relevans i frågan. Resultaten från studien kommer att vara tillgängligt för allmänheten, men ditt svar kommer behandlas helt anonymt.

Enkäten tar cirka sju minuter att genomföra och du kan när som helst välja att avbryta den. Om du har några frågor eller synpunkter, tveka inte att höra av dig till oss på eko14cla@student.lu.se eller eko14hpr@student.lu.se, så svarar vi gladeligen.

Slutligen vill vi rikta ett stort tack till Dig för din medverkan i denna studie. Detta hjälper vårt arbete enormt!

Med vänliga hälsningar,

Henrik Prior och Charlotte Laurén

Vilket företag tillhör du? _____

Vilken avdelning arbetar du på? _____

Vilken ort arbetar du på? _____

Vilket kön har du?

Man ○ Kvinna ○ Annat ○ Vill ej svara ○

Hur gammal är du?

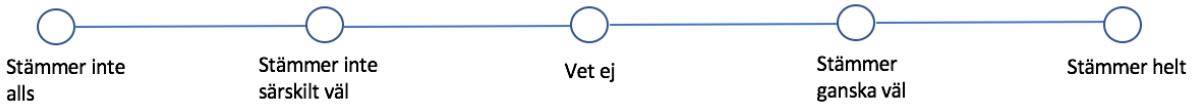
15-24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+ ○

I enkäten används begreppet “systemet”. Med system menar vi det ställe i företaget där idéer/förslag från anställda lämnas. Det kan till exempel vara ett företags datasystem, en e-mailadress, eller en låda i kafferummet som samlar ihop alla idéer/förslag som genereras av anställda inom företag. Alltså, om en anställd kommer på en idé eller ett förslag, så publicerar personen i fråga detta i “systemet”.

1. För mig är det viktigt med stöd från mina chefer för att jag ska känna mig motiverad att bidra med idéer/förslag till förbättring

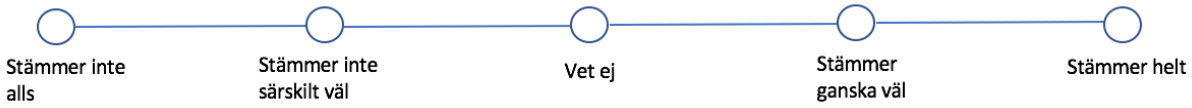
2. För mig är det viktigt med uppmuntran från mina chefer för att jag ska anstränga mig till att tänka kreativt

3. För mig är det viktigt med stöd från kollegor för att jag ska känna mig motiverad att bidra med idéer/förslag till systemet



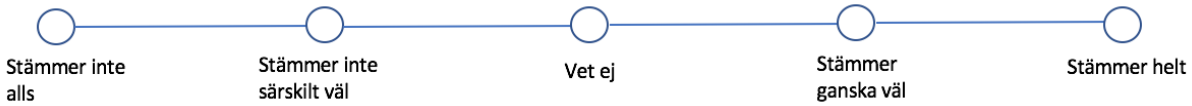
4. En kreativ miljö underlättar min förmåga att tänka kreativt

5. Jag är mer benägen att bidra med idéer/förslag om jag har god kunskap/verktyg gällande hur man tänker kreativt



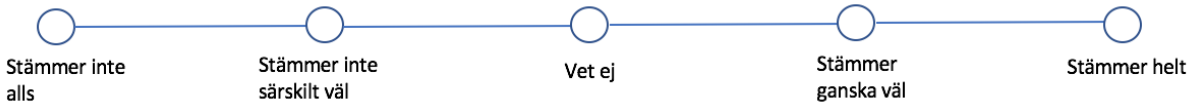
6. Mer erfarenhet och kunskap skulle troligtvis göra att jag ansträngde mig mer till att bidra med idéer till systemet

7. Ett varierande och utmanande arbete underlättar min förmåga att tänka kreativt

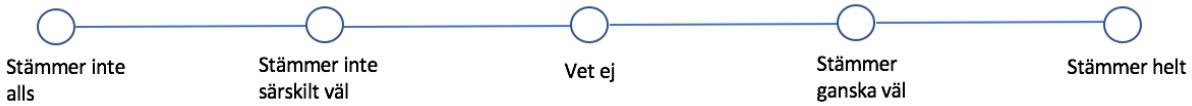


8. Ett varierande och utmanande arbete uppmuntrar mig till att bidra med fler idéer/förslag

9. En god kommunikation mellan mig och mina chefer ökar min benägenhet till att bidra med idéer/förslag

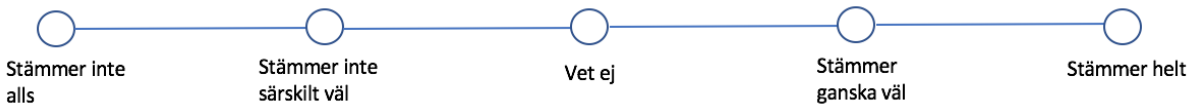


10. Min motivation till att bidra med idéer/förslag ökar om jag har möjlighet att samarbeta med andra

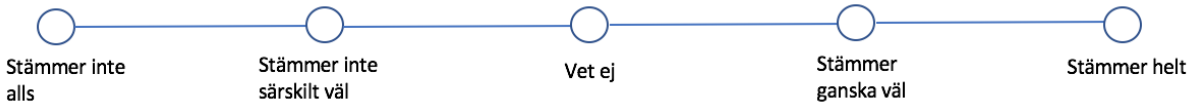


11. För mig är det viktigt med ett system som är lätt att använda för att jag ska anstränga mig/känna mig motiverad att bidra med idéer/förslag till systemet

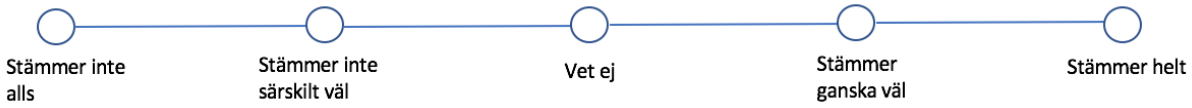
12. Tillgång till nödvändiga resurser för att tänka kreativt ökar min benägenhet att bidra med idéer/förslag



13. Det faktum att ett system dit jag kan lämna idéer/förslag existerar, ökar min motivation till att bidra med idéer/förslag, i jämförelse med om ett system inte hade existerat



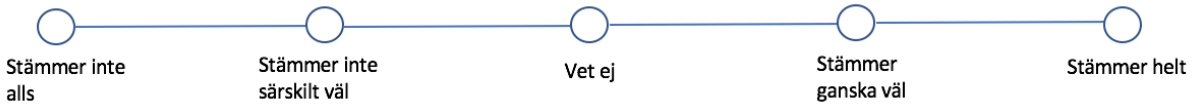
14. För mig är det viktigt att veta att tidigare förslag implementerats för att jag ska känna mig motiverad att bidra med idéer/förslag



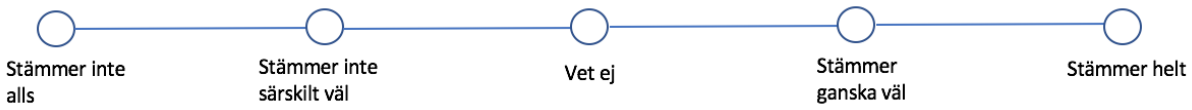
15. För mig är det viktigt att jag tror att min ansträngning verkligen kan göra skillnad inom organisationen för att jag ska känna mig motiverad att bidra med idéer/förslag

16. För mig är det viktigt att mina idéer/förslag snabbt utvärderas för att jag ska känna mig motiverad till att bidra med dessa

17. För mig är det viktigt med feedback för att jag ska känna mig motiverad till att bidra med idéer/förslag



18. För mig är det viktigt att jag får en belöning i form av att mitt namn och mitt bidrag uppmärksammas om det implementeras för att jag ska känna mig motiverad till att bidra med idéer/förslag



19. För mig är det viktigt med monetära belöningar för att jag ska anstränga mig till att bidra med idéer/förslag

20. Belöningar är generellt viktigt för mig att jag ska känna mig motiverad att bidra med idéer/förslag

Stort tack för din medverkan!

Med vänlig hälsning,
Henrik Prior och Charlotte Laurén

Hi!

Initially we would like to thank you for answering this survey. Our names are Henrik Prior and Charlotte Laurén and we are currently writing our master thesis within the programme International Strategic Management at Lund University. The aim of this survey is to find out what is of most importance for companies to focus on in order for their employees to feel motivated to contribute with ideas/suggestions regarding improvements within the organization. Your response on this survey will, together with other people's answers, be used to measure different factors and their relevance. The results from the study will be available for the public, but your response will be treated anonymously.

The survey takes approximately seven minutes to complete and you can choose to end the survey at any time. If you have any questions or comments, do not hesitate to contact us at eko14cla@student.lu.se or eko14hpr@student.lu.se.

Lastly, we would like to thank you for participating in this survey. This helps our work tremendously!

Best regards,
Henrik Prior & Charlotte Laurén

Company? _____

Department? _____

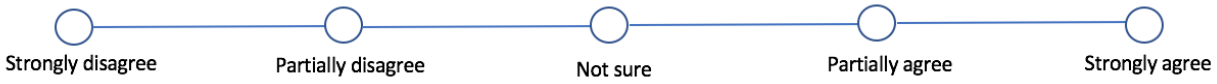
Location? _____

Gender?

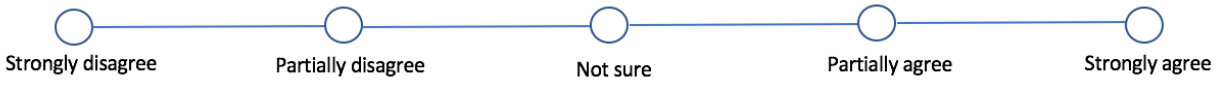
Age?

In the survey, the word “system” is being used. With “system”, we mean the place in the company where ideas/suggestions from employees are being posted. For example, it can be a company’s computer system, an email address or a box in the coffee room, that collect all of the ideas/suggestions that have been generated by the employees. That is, if an employee comes up with an idea/suggestion, the person in question posts this in the “system”.

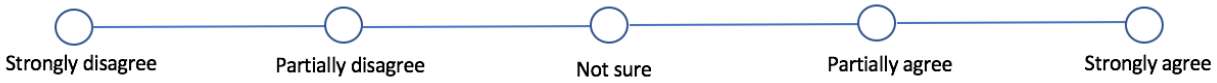
1. I am more motivated to contribute with ideas/suggestions when I feel I have support from my managers



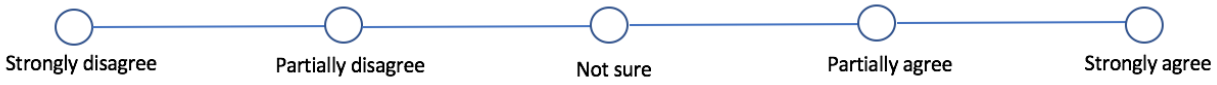
2. I am more motivated to make an effort to think creatively when I get encouraged by my managers



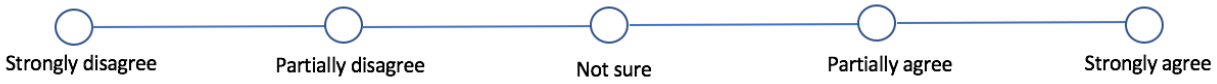
3. Collegial support is an important consideration for me if I am to contribute with ideas/suggestions



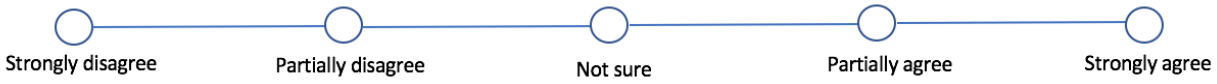
4. A creative environment facilitates my ability to think creatively



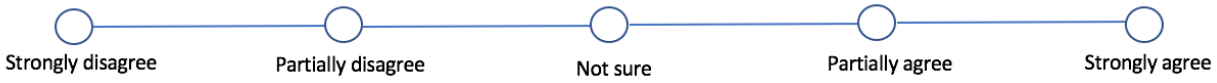
5. I am more inclined to contribute with ideas/suggestions if I have good knowledge/tools regarding how to think creatively



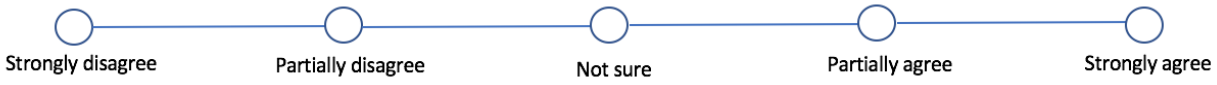
6. More experience and knowledge would probably make me put a greater effort in contributing with ideas/suggestions



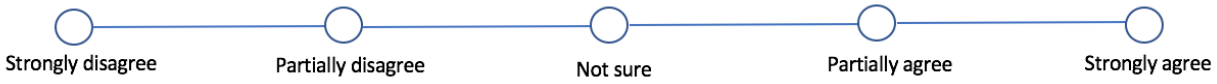
7. Varying and challenging work tasks facilitates my ability to think creatively



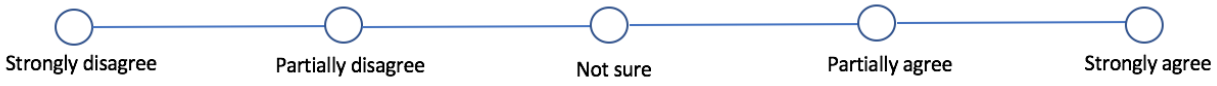
8. Varying and challenging work tasks encourage me to contribute with more ideas/suggestions



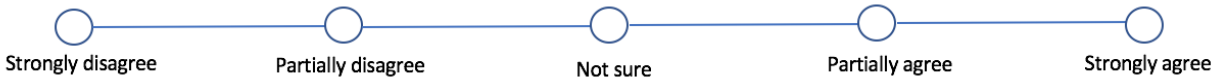
9. Good communication between me and my managers increases my inclination to contribute with ideas/suggestions



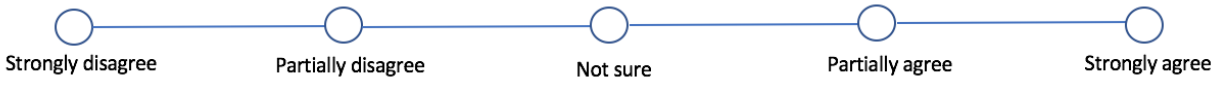
10. My motivation to contribute with ideas/suggestions increases if I have the possibility to collaborate with others



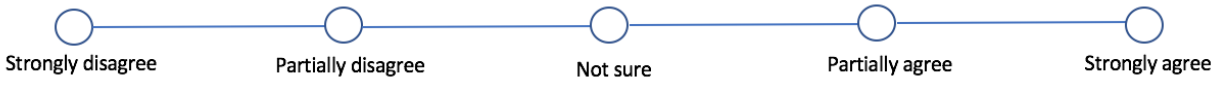
11. I am more inclined to contribute my ideas/suggestions if the system to post ideas/suggestions is easy to use



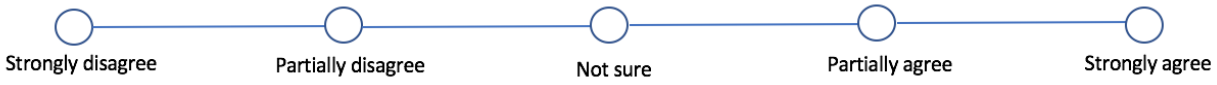
12. Accessibility to necessary resources to think creatively increases my inclination to contribute with ideas/suggestions



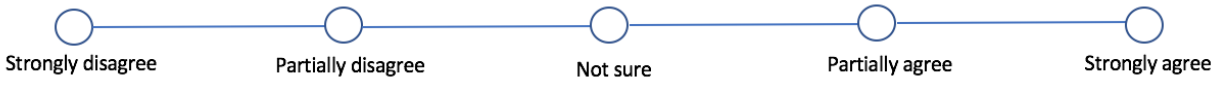
13. The existence of a system where I can contribute with ideas/suggestions increases my motivation to contribute, compared to if no system would have existed



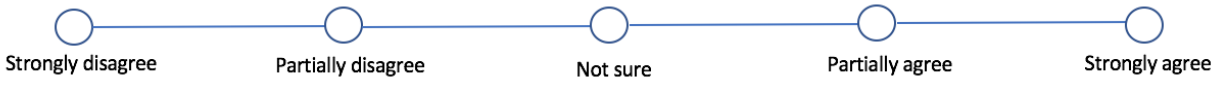
14. I find it helpful to know what types of suggestions have been implemented in the past when deciding if I want to contribute with ideas/suggestions



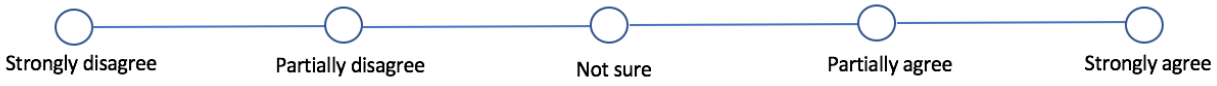
15. I am more motivated to contribute my ideas/suggestions if I believe my effort can truly make a difference within the organization



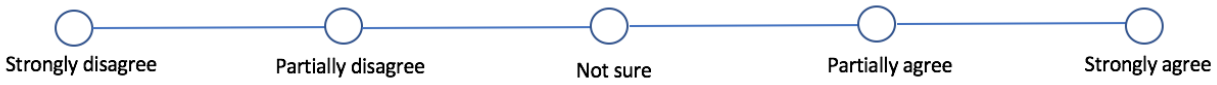
16. I feel motivated to share my ideas/suggestions if I know they will be evaluated quickly



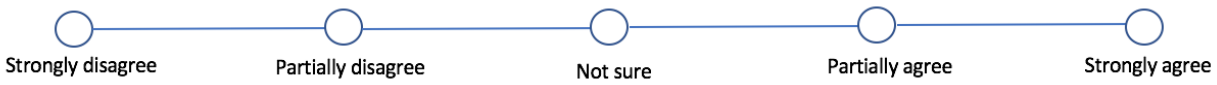
17. To me, it is important with feedback in order for me to feel motivated to contribute with ideas/suggestions



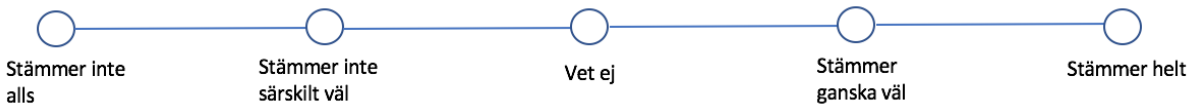
18. The possibility of having my contribution acknowledged if it is implemented is an important motivator for me



19. I would be more inclined to participate with ideas/suggestions if there is a monetary reward for participation



20. In general, rewards are important in order for me to feel motivated to contribute with ideas/suggestions



Thank you for your participation!

Kind regards,
Henrik Prior and Charlotte Laurén

Appendix B: Questions for Interviews

Swedish version

1. Kan du berätta lite om dig själv och din roll på företag X/Y?
2. På vilket sätt är du involverad i systemet?
3. Hur jobbar ni med att motivera anställda till att delta med idéer/förslag gällande förbättring?
4. Vad tror du är viktigast att tänka på för att anställda ska känna sig motiverade till att bidra med idéer/förslag till förbättring?
5. Hur upplever du er företagskultur i företag X/Y?
    a. Skulle du säga att den upplevs som innovativ eller ej?
6. Vad heter det system ni arbetar med idag gällande förbättringsförslag och hur länge har det funnits på företag X/Y?
7. Hur fungerar ert system?
    a. Är systemet lätt att använda?
    b. Har ni någon typ av belöning kopplat till systemet? När delas denna i så fall ut (om förslaget implementeras enbart, eller annars också)?
    c. Har ni någon typ av utbildningsprogram eller dylikt gällande systemet och dess funktion?
8. Ungefär hur lång tid efter att ett förslag skickats får personen som skickade förslaget respons?
9. Hur arbetar ni allmänt med feedback på förslagen?
10. Är det vanligt förekommande att de anställda lämnar förslag i grupp?
11. Hur arbetar ni med support till anställda i syfte att uppmuntra till att bidra med idéer/förslag till systemet?

English version

1. Could you tell us about yourself and your role at Company X/Y?
2. In what way are you involved in the system?
3. How do you work with motivating employees to participating with ideas/suggestions for improvement?
4. What do you think is of most importance to consider for the employees to feel motivated to contribute with ideas/suggestions?
5. How do you perceive the corporate culture at Company X/Y?
6. What is the name of the system you are currently working with and how long have you had that system at Company X/Y?
7. How does your system work?
    a. Is the system easy to use?
    b. Do you have any rewards linked to the system? If so, when is the rewarded being distributed? Do you only distribute rewards if the suggestion is implemented?
    c. Do you have any type of educational programs regarding the system and its function?
8. Approximately how long after the suggestions has been posted will the employee posting it receive feedback?
9. How do you work in general with feedback at Company X/Y?
10. Is it common that employees hand in suggestions collectively?
11. How do you work with support to employees with the purpose of encouraging them to participate with ideas/suggestions?

Appendix C: Interview with Company Y

I = Interviewer
R = Respondent

I: Innan vi börjar höra om det är okej att vi spelar in samtalet?

R: Jo men absolut det går bra. Jag har ett möte kl 13, lite mitt fel att vi blir sena

I: Ingen fara alls, vi hinner det. Då kan vi börja med första frågan och om du kan berätta lite om din roll på företaget och på vilket sätt du är involverad i systemet.

R: Jag jobbar som förbättringsledare, en form av verksamhetsutvecklare. Man är konceptägare kan man säga inom logistikenheten. Vi pratar enheter lokalt. Sen har vi den centrala funktionen som är mitt gränssnitt som består av förbättringar mer med lean så att säga. Alla olika verktyg vi jobbar med inom det. Utöver det jobbar jag också mycket med projektledning. Sen är jag också systemansvarig för C2 lokalt för enheterna. Det är vårat administrativa system för att handha, bokföra förbättringar. Står för creative culture. Som jag nämnt tidigare så är det ett konsultföretag i Stockholm som heter C2 management som utvecklat detta system. Jag jobbar mycket med konsultverksamhet men också att sälja in det här systemet.

I: Hur länge har ni haft systemet på Company Y?

R: Sedan 2012. Efter sommaren där

I: Okej om vi går vidare till fråga 3, hur jobbar ni med att motivera anställda att bidra med idéer/förslag, finns det något speciellt ni gör, i form av uppmuntran eller dylikt.

R: Jo det är en svår fråga att ge ett bra svar på. Generellt är vi kanske inte så bra som man vill på det. En viktig faktor är att vår ledningslinje, dvs alla chefer måste vara engagerade i förbättringsarbete, promotea förbättringsförslag och så vidare. Det speglar tydligt hur, vilket engagemang vi märker från den stora massan.

I: Okej, på vilket sätt kan de vara engagerade då?

R: Jo vi ser hur mycket förslag vi får in, och hur bra vi sköter våra förbättringsgrupper, vi har dessa i verksamheten, och att man prioriterar tiden för det. Men det hänger ju också mycket på hur man styr tiden och verksamheten. Sen försöker vi informera att vi efterfrågar förslagsarbete och försöker göra detta arbete synligt. Vi har en stor förbättringstavla i matsalen, där vi ska samla information kring massa olika saker.

I: Ok är den ämnad för anställda, eller? Komplement till själva systemet?

R: Justja, för att visualisera och så. Där har vi även månadens förbättring, och det är inte bara för vår enhet utan för enheter från hela landet.

I: Okej, kan du berätta lite mer om månadens förbättring?

R: Jo absolut, den kommer lite i någon fråga senare.

I: Jaha, den här belöningsfrågan kanske?

R: Jo det kan man väl säga, nämnde det även på sista frågan tror jag… Kan du ta frågan igen bara?

I: Jag tänkte mest om du kunde berätta lite om den här tavlan, är det dit anställda kan gå och skriva förslag, eller?

R: Nja alltså den här tavlan är mer för att visualisera resultat, läge, utsedda månadens förbättring på våra enheter i landet och vår egen.

I: Som en form av feedback där man kan se hur allt ligger till?

R: Ja precis, det är en samlad bild. Sen gör vi också utskick på resultat av det som är registrerat i C2. Det är egentligen ett stort mörkertal, vi försöker få så många som möjligt att registrera saker som vi kan relatera till förbättringsarbete. Men det görs ju egentligen väldigt mycket förbättringsarbete, men vi är inte tillräckligt bra på att registrera allt som vi gör. Det hade varit mycket mer om vi hade varit bättre på att registrera detta. Ganska många upplever att det blir lite extra arbete att göra registreringen, och man gör sitt förslag men det är inte självklart att allt ska registreras i vårt system. Det innebär ju lite extraarbete. Där försöker vi påminna och trycka på det, just för att det finns så många fördelar med att ha ett system. Dels ser vi hur vi gjort, men vi gör det också sökbart för andra enheter. Inom hela Company Y kan man söka på nyckelord i C2. Då kan man få upp ett helt arbete som någon gjort, på en helt annan ort. Så det har ju sina fördelar.

I: Just det. Om vi ska gå vidare till ytterligare en fråga, vad tror du är viktigast att tänka på för att anställda ska känna sig motiverade till att bidra med idéer (FRÅGA 4) och förslag till förbättring?

R: Det här är också en sådan där tuff fråga, som vi ständigt brottas med. Man vill hitta någon universallösning.

I: Är det någon del ni brottas med mer än andra?

R: Jo, om det är någon del som är viktig, som kanske inte alltid är så lätt även om man är medvetet om det, det är att man måste se till att det verkligen händer något. När man gör en liten kampanj för att få liv i förbättringsarbetet, gäller det att plocka lågt hängande frukter, så att anställda ser att det händer något. Sen att man måste vara duktig på att återkoppla, och det bjuder C2 in till så länge det finns information om vem det är som har lämnat förslaget, så vill den loopa det sista… Vi har två sätt att lämna förslag i C2, antingen är man en användare och har kontouppgifter i det, men systemet är bara webbaserat, det är

ganska enkelt på det sättet. Då loggar man på och lämnar förslaget i ett standardformulär för inlämning. Den andra varianten är att man via sin smartphone via en kod eller att man sparat adressen i webbläsaren, så kommer man in i en förenklad som påminner mycket om originalet men det är förenklat. Där får man själv fylla i vem man är och e-mail, och då möjliggör ju det återkopplingen. Om inga uppgifter lämnas så blir det ju svårt. Men det är otroligt viktigt med just uppföljning och återkoppling. Det har vi insett. Så två faktorer där, att det verkligen händer någonting, att man försöker vara på tå och visa och sen uppföljning och återkoppling, och en tredje faktor skulle jag säga är involvera medarbetarna, att de får möjlighet att vara med och jobba med de förslagen som de lämnat.

I: Och då snackar du om implementeringen eller?

R: Ja precis, eller bara att jobba med förslaget. Om du utgår från ett problem, att man liksom jobbar med rot ur saken för att sen komma med ett förslag. Ett förbättringsförslag kan ju egentligen handla om att man har ett problem, och det är många gånger ett bra sätt att hantera eller angripa exempelvis en dålig miljö. Och det finns många saker att ta på, men en universell lösning är kanske inte alltid så lätt, men man utgår från ett problem och sen vänder det till ett eller flera förslag som är mer konkreta. Så att i det här att involvera medarbetare så är poängen att fånga de som visar intresse och engagemang. Om man får med dem ordentligt så har man en chans att se att det rotar sig. Och det smittar av sig på andra. De personerna är i sig lågt hängande frukter för oss som jobbar med det mer.

I: Och vems roll tycker det är att få med folk på banan?

R: Mycket handlar det om våra gruppchefer, så det handlar om att få med dessa på tåget. Sen ett dilemma med våra gruppchefer är att de har väldigt många olika arbetsuppgifter, och lyckas lägga pusslet hela tiden, det har jag också förståelse att det är svårt. Så det blir ju en prioriteringsordning.

I: Just det. Kan det vara lite upp till andra, typ medarbetare eller så att få med folk och få dem att tänka till, sker det till exempel ofta att folk tillsammans lämnar förslag?

R: Jo just det. Om jag förstår frågan korrekt så är det inte så vanligt. Däremot har vi förbättringsgrupper som jobbar, och det är väl inte helt ovanligt att de kommer med förslag.
I: Hur skulle du uppleva er företagskultur, de som arbetar med det här, upplevs den som innovativ eller nytänkande?

R: Det är väl lite både och, vi har visat på ganska innovativa saker när det är lite större aktiviteter, men när det gäller det här lilla som är mer typiskt med ständiga förbättringar, så går det lite upp och ner kan man väl säga. Så har vi upplevt det genom åren.

I: Tror du det är viktigt att ha en innovativ kultur för att det ska funka så bra som möjligt och tänker kreativt, och anstränger sig till att bidra?

R: Ja det är klart, asså en innovativ kultur, det känns som att man då har nått någon form av mål, så att man befinner sig i ett stadie inom kulturen som är gynnsamt på många sätt. Det kan bara vara gynnsamt som jag ser det. Men alltså en kulturförändring är jättesvår. Det är ofta sådant som man pratar om lätt,

men det är väldigt svårt att genomföra. Det krävs jätteinsatser. Man måste hålla vid och alla måste vara budbärare och leva som man lär, det är först då få de riktiga effekterna av en förändring kulturmässigt.

I: Just det, och för att komma tillbaka till fråga 7B, vi tänkte höra mer om belöningar hur det funkar.

R: Vi har ingen belöning i någon form av pengar eller bonus eller någon form av priser, vi är ganska anspråkslösa på det sättet. Men vi jobbar med att man visualisera, omnämns i olika kanaler. Lokalt handlar det om utnämningar på möten, informations-TV, sådant vi har lokalt. I och med att vi jobbar med månadens förbättring så nominerar varje enhet sin månads förbättring till centrala funktioner. Och då jobbar vi med logistiksförbättring, och den omnämns på intranätet när det utnämns. Det är en ganska stor kanal. Utöver det utnämns årets förbättring, årets eldsjäl och årets ledare och det här görs på ett årligt forum, konferensaktigt. Det är ledningen oftast från enheterna, plus enheten från Sverige då.

I: Bara för att förtydliga, pratar du i allmänhet inom företaget eller är det här ett förslag som gått genom systemet, som kopplas via C2.

R: Ja det har gått genom systemet. Inte årets ledare kanske, men årets förbättring och årets eldsjäl är ofta starkt förknippat med de som varit flitiga med att lämna in förslag och haft kanske riktigt bra förslag också. Det är inte bara kvantitativt utan kvalitativt också.

I: Ok intressant. Vi får nästan hoppa vidare till ett par små frågor till eftersom du ska på möte snart. Det här systemet verkar vara lätt att arbeta, men har ni någon typ av guidning eller utbildningsprogram eller något sådant, till hur man använder det?

R: Jo det finns självinstruerande material i systemet, en meny där man kan lära sig mer om det. Man kan provköra det. Det vanligaste är att jag brukar hålla lite genomgång, det brukar gå väldigt fort. Det är blandat. Det är säkert många som lär sig av sina kollegor. Sen finns det ett antal funktioner som man kan gräva statistik ur, men det är framförallt hanteringen folk är intresserade av.

I: Okej. Men skulle du säga att de flesta har koll på att systemet existerar över huvud taget?

R: Den är svår. Man får nästan skilja på tjänstemän och kollektivanställda, asså bland tjänstemän ja, bland kollektivanställda, inte de flesta. De som jobbar ute på golvet då.
I: Du var inne lite på det här förut också, att ni kunde bli bättre med återkoppling. Har du någon typ av uppfattning mellan tummen och pekfingret hur lång tid det brukar ta ungefär innan personen i fråga som lämnar förslaget eller idéen får återkoppling på detta?

R: Ja vi har egentligen en funktion för att se dessa tider räknat i dagar, men vi har haft lite problem med hur den räknar, om den räknar rätt. Men det jag fick ut var 34 dagar. Men jag skulle behöva återkomma med det.

I: Det behöver inte vara särskilt exakt, men om du vill återkomma hade det varit snällt, verkligen.

R: Ja då, jag ska kolla på det.

I: Men ni är det nog dags för dig att gå på möte tror jag .

R: Ja exakt, kan inte ni maila gällande de frågor ni tycker att jag missat?

I: Jo absolut, vi kan se över det och inspelningen och så där men vi tycker du har gett mycket bra svar, absolut.

R: Jo vad kul, men är det något ni undrar över är det bara att skriva.

I: Perfekt! Stort tack för detta Thomas och för att du har varit så hjälpsam.

R: Tack detsamma, det var kul, kommer själv ihåg hur det var. En fråga där gällande er enkät, vi får tillgång till vår data väl?

I: Absolut, ni får tillgång till allt.

R: Jag gjorde ett komplement och skickade ut det till fler enheter i Sverige, sen om de nappar eller inte får vi se.

I: Det är klockrent, desto fler svar desto bättre.

R: Det kan bli ganska blandat.

I: Jo då men det är inga problem, vi kan bryta upp det. Förhoppningsvis har ni någon nytta av det också. Men då får vi tacka dig så mycket så hörs vi i dagarna.

R: Jajamen, tack själv, ha det gott!

Appendix D: Interview with Company X

I = Interviewer
R1 = Respondent 1, R2 = Respondent 2

I: Is it OK if we record?

R1: Yes of course, no problem. It would be nice if we get a chance to read it before

I: Of course, we will fix that. Should we jump into the first question? Can you tell us about your role at your company.

R2: I'm in R1's group within development, and I am working with different things but mostly with lean and right now I have two bigger projects, that is taking out my time. The main thing is lean, though.

R1: I am manager of operations development, which is a part of four groups in one Company X in Finland. Our group has been moved there last year, before we were under the production directly making report to him, but today it is a director in Finland and they are making similar group for the Finnish and the Baltic sight also, so today we have Sweden, Poland and Denmark. And basically we have had a lot of different names through these 15 years I have been working with this because it started of with that we had to understand that Sweden was going to EEC in 2000, and by that time I educated 60 people how to look into better efficiency in production sight. And after teaching, I get it all from after to come to Sweden and be the head of that department, and I said yes at that time, then I was starting of with 3 people and today we are 10 and on these 15 years, this efficiency have moved more or less everything today in another philosophy about what we are calling things. Today we are calling it lean. At the time I was educating, it was work starting methodic (?), but it is more or less the same we are doing, the 5s, waste, standardized work set-up, it was more or less the same as IT at that time but the company wanted us to move to that philosophy - Mi started a project in 2009 called "enkelt", "simple" in English.

R2: But in 2009, our company took this site to go against lean and they also took a leader in the occasion called radical collaboration and I am certified to educating that education. So we are 3 people right now within the company that can do that. That's one thing I do also, but 2009 was the start of this travel, and we are now 9 years later we have come a little bit on the way I think. Working with our own lean house and the last year we have done it together with the other countries in our company. So now is the thing for the old Company X. In the beginning it was only in Sweden, but now it's every country with us.

R1: is it possible if we take over the screen for us to see that we want to present something for you?

I: Yes, of course

Shares a powerpoint via Skype

I: There we see it.

R1: Here you see the whole as I said the last 15 years, we were first only Company X and in 2009 we make a merge with XX, or XX took over Company X and for the next 8-9 years we have moved the direction to the ones Company X and that happened last year. We were going for 1 Company X, that's why we make this new organization before it was more country-wise, everyone wanted to have their own production, everyone tried to keep everything in their own country and so on. But here you see where we are based today, all of our brands and down on this here you see our history, starting 2007 it started with the merge, and this Michael told about radical collaboration, our first lean house, we were starting, we were asking every 2nd year how our employees were feeling working, and on the right spot, let them have the influence on how we are working, if they feel with work etc. Then this year for a lot of things, we started with lean house in Sweden, which was only in Sweden and only in production we started that. Then in 2016, 2017, this company was coming where we are now focusing on two bigger thing, something we call one plan where we put all, for efficiency productivity, better work environment and so on, and then this continuous improvement that we do together with our workers. And you see here the Must Win Battle and drive efficiency and cost, this is our department here, really working on that place. Here you see the four headlines we have utilities, environment work groups, automatization, technology, maintenance, and then we have our group here in the middle, implement, lean, roadmap, supporting site, process development and solving proposal and processing, develop and so on. This is my group, and here you see how we do it today. We are at the left side, where we are setting up the rules, the game rules and it's the production and work out from what they have decided here, and my group are supporting the production and myself are supervising the site. Hopefully we will implement in all places in all Company X what we decide about as you see on the right our whiteboard meeting, our standardized work setup, how we train people, 5s, waste, continuous improvements, KPI's, TPM TOC and VSM, and basically all the time with work environment, quality etc. and in the front. Hopefully this give you a little example of what we are working with today.

I: Yes of course, absolutely. So you do have this employee suggestion system, which one are you using? What is it called?

R1: Today, it is called continuous improvement, before it was called something else, but when it came to Finland, we call it continuous improvement. When we get a suggestion from people, we select it into two rows, is it something you can do immediately, we call it just do it, if it is something requiring you to be a group of certain experts from the production, tech, or quality department, hygiene department or operation development, then they make a group of 3-7 people that have that problem up or something they want to solve. Then we use 30 minutes maximum each weak to discuss it. Those kaizen should be finished after 1-3 months, otherwise we will put them in another category. Then it's not continuous improvement. And just do it, we start if you get a suggestion, I park it here for at least two weeks since I have so much to do, but when you start it, you have 5 days to come up with a solution for the just do it. If you don't find any solution, you move it to the next step in the organization. We go from the supervisor to the production manager, then he have 5 days. If he can't come up with a solution, then it moves to the site manager. Of course if he can't solve it, it moves to the production director. And that is the new way of working that if you cannot solve a good idea, move it to the next step. We try to see if it is possible to get the benefits of that suggestion.

I: If someone is posting this suggestion, do you have any computerized system?

R1: Yes, we have it here. *Shows the system on the ppt*. This was new with the continuous improvement and it works within 17 factories around Denmark, Poland, Sweden, Finland and the Baltic. In Sweden, i think we have 36 or 34 different groups, so you could imagine if that's average, then it probably would be roughly that we have at least more than 150 groups in the whole Company X working, and with these 5 as you see here, you always pronounce it which country it is, which site etc and the department, which group etc. The process owner, the production manager, who is supervising in the area if we want to go back and find all of the suggestions behind it. Then it start of, when you get an activity, you put "add", and some problem down here, the type, what kind it is just do it or kaizen, and if it is just do it, you just do it. If it is kaizen, you have to go to this root cause/analyze, then this root cause is coming up where you can fill in the problem, YYY, everything in that, process you have to learn, supervisor, people within the kaizen group etc. Therefore, my people are specially educated with working with this root cause and analysis, and you can see that has a PDCA wheel, that we are working with. Hopefully we get around it and follow it up, and see it, solve it. There is a lot of headlines; solutions, who is responsible etc. We also try if possible to put our local money for that suggestion if it is anything. One thing more, we have, I can show you also, we have more on it so it is possible now to print it out so you have a history for the workers when you have the start-up meeting, board meeting, the steering we have every morning we all groups. Also from this part of our board meeting, we have divided this into seven areas; one of them is lean and here we are telling about the continuous improvement. Monday you tell the kaizen groups are working, on wednesday you tell what we found from last week to list week, print it out, put it on the board and on friday you tell them the actions you will take next week of just do it of the just do it.

R2: It is important to show the operators how it grows, so they every week can see what's happening, we think the steering meeting is very important, a short meeting every morning around 5-6 minutes, and every department is doing about this, and we have a handbook for that.

R1: We escalated you can see when we have the start-up, it goes to the production, up to our PC and the production manager, and the site manager. We have now moved it so it is already 9 in the morning, we want to have it as early as possible, so we can have it up and down. As I show here, was our own lean handbook and our own steering on white boards meeting as we call it. Now we have an operations development handbook, and the dark blue here, where we talk about work environment and safety, we have quality, production, lean maintenance, KPI's, information from HR, and action. This is the same all over Company X and here as you can see in the lean you see continuous improvement and the light blue here is the freedom for every factory because they are a little different. That is also part of locally freedom. As you also see, the whiteboard meeting starts here, and the continuous improvement is also helping us with the standardized working together with the 5s. Does it give us any sense?

I: Yes, a lot of sense, and you keep answering the questions we were supposed to ask. It's a lot but we understand most of it. To clarify, can anyone use the system throughout the organization and post suggestions; you talked about groups doing it, having different types of leaders that know how the system works, or can anyone do it?

R1: Those people here you see *Shows ppt* are well educated in this system, in the file and also how to work with the root cause analysis and then we have made…

R2: I can tell you one thing about this, when we go out in the whole company, it starts with the supervisors to take care of the list ,since we want them to feel this is my department, my list, and then - in the future - when they have done a lot of kaizen, probably a few good processes, then they can fill in the list and take care of the methods in the future. In the beginning, it's important that the supervisors take lead of the continuous improvement work. It's up to everyone who work to post suggestions, make anything better, that's why we are taking it up on the boarding meeting in the mornings. We want many to be involved in this.

R1: You see here, as I said *Shows ppt*, I have made this here, the whole Sweden, all of my employees (names a couple of people). Each person under this is the supervisor, and that means that M here is responsible for (mentions a few people). They are working as i showed before with the continuous improvement, and they first make a contract; where are we, which area, how many people in this place, who is working as supervisor, who support from my department, what time will we start? Then we start, we have worked with it before we will take over our own file, you can say when we have something we have not solved yet, we try to put in the new continuous improvement list, and when we have done this, we will go through so we are sure everyone understands whether it's just do it, kaizen, do we need root cause, analyze, then we make a kick-off for all employees in a lunch meeting or in smaller groups. How we are collecting information, or new good ideas, or whatever. Here you see also to put them in, we think that it's very important that it's the supervisors who puts it in, since he knows what's going on in his/hers department, and R2 is in one department, and he must know what is in, and of course he can help his own expert group with for example if it's just do it or kaizen, that's also a possibility. And here we explain for people what is just do it, so they totally understand, and as you see here, when they have suggested, we go for two ideas, not one, at least two for each employee and here is how we are working with kaizen groups (3-7 people). And we suggest maximum three activities of kaizen in each area, and maximum 30 minutes in a week, but all the activities in kaizen, they also promise to take up every week. Here was this to follow it up as I told you, that's also how we every monday, one in my department is following it up for all of the 70 factories, so everyone can go in from each factory to see how is it working. How well are we finding new suggestions, and how well are we doing these. Here you see the file more, as it is today. You can see there is coming filter and print layout, and here when it's yellow, you click on start, and it will start, and add date, of course when you add it in, when it's finished, you click here. If someone who is green you want to work with again, you just go up and click it and it will be yellow again. If it's white and blue, you have not started it up, you have just put it in the file. Then we have the red one, that is the part where we see we can't solve it at the moment, don't have money for it etc. but still, it will be in the list so everyone can see what they suggest, it come up and you show that even my suggestion is on the board and I can see the explanation why we didn't go into that.

R2: And our list here in Sweden is looking the same with this, so our kick-off is not taking so long time like in Finland or Balticum, because we are just going to do the titling; is it just do it, kaizen, needing any root cause analysis, then this is nearly the same as before. So we think it's a pretty simple work for them to get in to new lists and keep on working with this.

I: It's pretty easy to understand so to speak.

R1: Here you see, I have tried, here you more or less put everything in with how you work with things today, the one plan on continuous improvement, value target, or value words, and we try to do it under one thing we call must-win battles, which is the same for all countries. It's connected to the triangle I showed you before with working with efficiency and so on.

I: Ok. So do you have any types of rewards, if someone posts a very good suggestion, will they be compensated in some sort of way; will they get money or will their name be highlighted in some type of way?

R1: No. As you see here, every day on the whiteboard meeting in the morning, you can see monday, we will talk about the kaizen, and on wednesday we will follow it up, who have come up with it, what is the suggestion, that are we doing friday, just do it, but we don't give anything as money to people, we did that for maybe ten years before we were Company X, we had that kind of system where we gave some kind of money, we tried, but it's not anymore like that. It's expectation that people are involved, we like to involve more people within the company, and they also get to know that they get 2-3% in salary every year, and the production need to be 2-3% more efficiency, so we need that kind of, that's also to tell us because from one year to the next, I think it's 25 million we have to find at least here in Sweden, every time the salary goes up.

R2: And when we have this system we talk about, it's not coming so much ideas, even they can earn some money of it, but this is a much better, now we are working more structurally of it. Now it's everyone's responsibility to work with it. It's part of ordinary work, every day.
I: I think that you have already most of what we needed to know actually.

R1: You just have to listen to it one more time.

I: We will definitely do that. But I think that was it. It was a really good description of the system. Good presentation and everything. We are very, very thankful for this, it helps us a lot, really.

R1: Ok. How are you using this, what is your purpose in the future to show us, what is the report about.

I: What we've done is that we have looked in to previous research within the are of employee suggestion schemes in general, and we want to pick out some of the critical success factors using a theory of motivation, and we want to see what is of most importance for companies to think about in order for their employees to contribute with ideas and think creatively. We want to test this in a Swedish business context, in order to secure the highest possible outcome of the system itself. We used the survey to see the employees view of it. There are some questions like I would be more inclined to contribute if the system was easy designed, or good communication, or rewards, or support. Many different variables and we want to measure them and come to a conclusion of what's of most importance to think about basically. Hopefully you can use some of the data also.

R2: I have talked to XXX about the questions, and I think working with this a couple of years, an important thing is to succeed, the key thing is to always have the contact with your employees so you can give them feedback of the improvements they provide, their ideas, and to keep them, to make them creative, think of their own places where they stand, the machines, not so fun every day. But if they have this to think about, how can I do this better, how can this be better, you can make it more interesting. That's why supervisors are important.

I: Yeah, to involve the employees, make them feel included etc. That's a lot what the literature speaks about also. We are gonna have an interesting elaboration of that in the work that you will get to take part of also. But thank you very much for this, we will transcribe the interview and send it for your approval before we post anything in the report. And if you want to make any changes, or if you feel you told too much you weren't supposed to or whatever, just tell us and we will have it adjusted.

R1: That would be good since sometimes when you are saying things, maybe if you read it afterwards, it's good.

I: And feel free to add anything you want. And the report will also be finalized by early June I think, we are gonna send it to our examinator and some opponents in the beginning of June, then it will be submitted in the middle of June. And then we will send it to you of course also. Thank you very much, we really appreciate your help.
R1 + R2: Thank you too, have a nice day!

Appendix E: Cronbach's Alpha test

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Managerial_support	73,2845	94,205	,512	,578	,857
Managerial_encouragement	73,5517	92,719	,524	,592	,856
Collegial_support	73,5086	95,348	,431	,554	,860
Creative_environment	73,2328	96,632	,397	,415	,861
Knowledge_creative_thinking	73,3534	92,300	,651	,565	,852
More_experience_knowledge	73,7069	96,157	,359	,272	,863
variying_challenging_work_encourage_creative_thinking	73,2155	97,457	,394	,705	,861
Varying_challenging_work_simplify_ability_creative_thinking	73,2328	96,476	,464	,697	,859
good_communication_managers	73,0259	97,347	,446	,356	,860
cooperate	73,3362	97,599	,338	,461	,863
easy_system	73,1983	98,873	,275	,365	,865
access_necessary_resources	73,3534	93,500	,585	,489	,854
system_existence	73,7759	92,141	,526	,436	,856
implementation_previous_suggestions	73,4138	92,871	,540	,531	,856
effort_make_difference	73,2069	96,548	,425	,401	,860
ideas_quickly_evaluated	73,4224	94,681	,512	,572	,857
feedback	73,1466	97,361	,386	,414	,861
reward_name	74,6379	89,885	,545	,591	,855
reward_monetary	74,3793	92,272	,442	,811	,860
reward_general	74,3879	91,161	,461	,788	,860

Inter-Item Correlation Matrix

	Managerial_support	Managerial_encouragement	Collegial_support	Creative_environment	Knowledge_creative_thinking	More_experience_knowledge	variying_challenging_work_encourage_creative_thinking	Varying_challenging_work_simplify_ability_creative_thinking	good_communication_managers	cooperate	easy_system	access_necessary_resources	system_existence	implementation_previous_suggestions	effort_make_difference	ideas_quickly_evaluated	feedback	reward_name	reward_monetary	reward_general
Managerial_support	1,000	,578	,527	,097	,290	,259	,283	,336	,370	,089	,019	,346	,282	,444	,376	,312	,242	,166	,129	,152
Managerial_encouragement	,578	1,000	,552	,294	,325	,141	,129	,180	,436	,190	,212	,262	,267	,465	,224	,212	,251	,271	,151	,226
Collegial_support	,527	,552	1,000	,313	,332	,195	,223	,130	,277	,204	,135	,212	,291	,134	,245	,036	,093	,151	,208	,162
Creative_environment	,097	,294	,313	1,000	,435	,125	,173	,191	,224	,303	,412	,228	,191	,074	,126	,152	,044	,336	,191	,160
Knowledge_creative_thinking	,290	,325	,332	,435	1,000	,379	,261	,289	,248	,482	,276	,439	,525	,381	,246	,354	,285	,383	,260	,307
More_experience_knowledge	,259	,141	,195	,125	,379	1,000	,243	,260	,135	,184	,010	,363	,307	,242	,120	,212	,136	,192	,107	,126
variying_challenging_work_encourage_creative_thinking	,283	,129	,223	,173	,261	,243	1,000	,764	,267	,364	,054	,214	,290	,225	,396	,182	,136	,018	,078	,017
Varying_challenging_work_simplify_ability_creative_thinking	,336	,180	,130	,191	,289	,260	,764	1,000	,327	,339	,202	,280	,275	,326	,286	,245	,103	,191	,142	,065
good_communication_managers	,370	,436	,277	,224	,248	,135	,267	,327	1,000	,241	,127	,305	,146	,276	,262	,250	,304	,168	,161	,147
cooperate	,089	,190	,204	,303	,482	,184	,364	,339	,241	1,000	,252	,232	,320	,139	,163	,069	,079	,139	-,104	,015
easy_system	,019	,212	,135	,412	,276	,010	,054	,202	,127	,252	1,000	,314	,240	,128	,049	,101	,033	,193	,023	,110
access_necessary_resources	,346	,262	,212	,228	,439	,363	,214	,280	,305	,232	,314	1,000	,413	,385	,354	,502	,240	,356	,255	,220
system_existence	,282	,267	,291	,191	,525	,307	,290	,275	,146	,320	,240	,413	1,000	,359	,221	,158	,214	,282	,262	,265
implementation_previous_suggestions	,444	,465	,134	,074	,381	,242	,225	,326	,276	,139	,128	,385	,359	1,000	,358	,501	,443	,269	,184	,188
effort_make_difference	,376	,224	,245	,126	,246	,120	,396	,286	,262	,163	,049	,354	,221	,358	1,000	,453	,277	,185	,108	,072
ideas_quickly_evaluated	,312	,212	,036	,152	,354	,212	,182	,245	,250	,069	,101	,502	,158	,501	,453	1,000	,480	,348	,335	,288
feedback	,242	,251	,093	,044	,285	,136	,136	,103	,304	,079	,033	,240	,214	,443	,277	,480	1,000	,222	,127	,245
reward_name	,166	,271	,151	,336	,383	,192	,018	,191	,168	,139	,193	,356	,282	,289	,185	,348	,222	1,000	,625	,657
reward_monetary	,129	,151	,208	,191	,260	,107	,078	,142	,161	-,104	,023	,255	,262	,184	,108	,335	,127	,625	1,000	,836
reward_general	,152	,226	,162	,160	,307	,126	,017	,065	,147	,015	,110	,220	,265	,188	,072	,288	,245	,657	,836	1,000

Appendix F: Pearson's Correlation Matrix

Correlations

		Managerial_support	Managerial_encouragement	Collegial_support	Creative_environment	Knowledge_creative_thinking	More_experience_knowledge	Varying_challenging_work_simplify_ability_creative_thinking	varying_challenging_work_encourage_creative_thinking	good_communication_manages	cooperate	easy_system	access_necessary_resources	system_existence	Implementation_previous_suggestions	effort_make_difference	Ideas_quickly_evaluated	feedback	reward_name	reward_monetary	reward_general
Managerial_support	Pearson Correlation	1	,556**	,530**	,104	,277**	,229*	,289**	,264**	,350**	,071	,012	,348**	,248**	,396**	,356**	,326**	,239**	,140	,139	,170
	Sig. (2-tailed)		,000	,000	,237	,001	,008	,001	,002	,000	,420	,896	,000	,004	,000	,000	,000	,006	,110	,113	,051
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
Managerial_encouragement	Pearson Correlation	,556**	1	,564**	,328**	,353**	,177*	,219*	,156	,458**	,219*	,215*	,283**	,268**	,465**	,348**	,236**	,252**	,296**	,148	,235**
	Sig. (2-tailed)	,000		,000	,000	,000	,042	,012	,056	,000	,012	,014	,002	,001	,000	,004	,007	,004	,001	,091	,007
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
Collegial_support	Pearson Correlation	,530**	,564**	1	,347**	,262**	,212*	,172	,072	,313**	,210*	,146	,226**	,277**	,146	,274**	,126	,099	,182*	,247**	,239**
	Sig. (2-tailed)	,000	,000		,000	,000	,015	,051	,002	,000	,016	,099	,007	,002	,096	,002	,154	,262	,038	,004	,017
	N	131	131	131	130	131	131	129	129	129	131	129	131	129	130	129	130	129	130	131	131
Creative_environment	Pearson Correlation	,104	,328**	,347**	1	,466**	,154	,248**	,237**	,268**	,344**	,401**	,286**	,192*	,118	,177*	,158	,068	,338**	,195*	,171*
	Sig. (2-tailed)	,237	,000	,000		,000	,078	,005	,007	,002	,000	,000	,002	,029	,180	,044	,071	,447	,000	,025	,051
	N	131	131	130	131	131	131	129	129	129	131	129	131	129	130	129	131	129	130	131	131
Knowledge_creative_thinking	Pearson Correlation	,277**	,353**	,262**	,466**	1	,403**	,337**	,315**	,294**	,302**	,282**	,442**	,326**	,407**	,281**	,270**	,285**	,396**	,254**	,314**
	Sig. (2-tailed)	,001	,000	,000	,000		,000	,000	,000	,001	,000	,001	,000	,000	,000	,001	,000	,001	,000	,002	,000
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
More_experience_knowledge	Pearson Correlation	,229*	,177*	,212*	,154	,403**	1	,299**	,279**	,156	,229*	,219*	,218*	,323**	,282**	,181*	,236**	,133	,256**	,110	,130
	Sig. (2-tailed)	,008	,042	,015	,078	,000		,001	,001	,077	,008	,027	,000	,000	,001	,066	,007	,131	,003	,209	,137
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
Varying_challenging_work_simplify_ability_creative_thinking	Pearson Correlation	,289**	,219*	,172	,248**	,337**	,299**	1	,783**	,360**	,378**	,208*	,281**	,281**	,356**	,323**	,232**	,096	,238**	,143	,105
	Sig. (2-tailed)	,001	,012	,051	,005	,000	,001		,000	,000	,000	,019	,004	,001	,000	,000	,008	,281	,007	,106	,234
	N	130	130	129	129	130	130	130	128	128	130	128	130	128	129	128	129	128	129	130	130
varying_challenging_work_encourage_creative_thinking	Pearson Correlation	,264**	,156	,072	,237**	,315**	,279**	,783**	1	,308**	,423**	,370**	,241**	,277**	,259**	,442**	,196*	,134	,268**	,098	,057
	Sig. (2-tailed)	,002	,056	,422	,007	,000	,001	,000		,000	,000	,000	,006	,002	,003	,000	,025	,133	,444	,267	,520
	N	130	130	129	129	130	130	128	128	128	130	128	130	128	129	128	129	128	129	130	130
good_communication_manages	Pearson Correlation	,350**	,458**	,313**	,268**	,294**	,156	,360**	,308**	1	,289**	,143	,340**	,167	,315**	,318**	,296**	,284**	,221*	,148	,172
	Sig. (2-tailed)	,000	,000	,000	,002	,001	,077	,000	,000		,001	,106	,000	,059	,000	,000	,002	,001	,023	,096	,049
	N	130	130	129	129	130	130	128	128	130	130	129	130	128	129	128	129	128	129	130	130
cooperate	Pearson Correlation	,071	,219*	,210*	,344**	,502**	,229*	,378**	,423**	,289**	1	,257**	,262**	,316**	,190*	,235**	,062	,086	,175*	-,107	,029
	Sig. (2-tailed)	,420	,012	,016	,000	,000	,008	,000	,000	,001		,003	,002	,000	,030	,010	,481	,332	,046	,221	,743
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
easy_system	Pearson Correlation	,012	,215*	,146	,401**	,282**	,219*	,208*	,370**	,143	,257**	1	,323**	,254**	,136	,061	,126	,044	,195*	,023	,119
	Sig. (2-tailed)	,896	,014	,099	,000	,001	,027	,019	,432	,106	,003		,000	,004	,128	,496	,156	,623	,027	,795	,176
	N	130	130	129	129	130	130	128	128	129	130	130	130	128	129	128	129	128	129	130	130
access_necessary_resources	Pearson Correlation	,348**	,283**	,226**	,286**	,442**	,218*	,281**	,241**	,340**	,262**	,323**	1	,360**	,366**	,372**	,472**	,248**	,296**	,218*	,227**
	Sig. (2-tailed)	,000	,002	,007	,002	,000	,006	,004	,006	,000	,002	,000		,000	,000	,000	,000	,004	,001	,012	,009
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
system_existence	Pearson Correlation	,248**	,268**	,277**	,192*	,326**	,323**	,281**	,277**	,167	,316**	,254**	,360**	1	,366**	,202*	,176*	,211*	,308**	,251**	,240**
	Sig. (2-tailed)	,004	,001	,002	,029	,000	,000	,001	,002	,059	,000	,004	,000		,000	,022	,046	,017	,000	,004	,006
	N	130	130	129	129	130	130	128	128	128	130	128	130	130	129	128	129	128	129	130	130
Implementation_previous_suggestions	Pearson Correlation	,396**	,465**	,146	,118	,407**	,282**	,356**	,259**	,315**	,190*	,136	,366**	,366**	1	,381**	,476**	,435**	,342**	,200*	,139
	Sig. (2-tailed)	,000	,000	,096	,180	,000	,001	,000	,003	,000	,030	,126	,000	,000		,000	,000	,000	,000	,022	,030
	N	131	131	130	130	131	131	129	129	129	131	129	131	129	131	129	130	129	130	131	131
effort_make_difference	Pearson Correlation	,356**	,348**	,274**	,177*	,281**	,181*	,323**	,442**	,315**	,235**	,061	,373**	,202*	,381**	1	,429**	,298**	,212*	,099	,099
	Sig. (2-tailed)	,000	,000	,002	,044	,001	,068	,000	,000	,000	,010	,496	,000	,022	,000		,000	,002	,016	,262	,265
	N	130	130	129	129	130	130	128	128	128	130	128	130	128	129	130	129	128	129	130	130
Ideas_quickly_evaluated	Pearson Correlation	,326**	,236**	,126	,158	,315**	,236**	,232**	,196*	,296**	,062	,126	,472**	,176*	,476**	,429**	1	,488**	,360**	,256**	,213*
	Sig. (2-tailed)	,000	,007	,154	,071	,000	,007	,008	,025	,002	,481	,156	,000	,046	,000	,000		,000	,000	,000	,000
	N	131	131	130	131	131	131	129	129	129	131	129	131	129	130	129	131	129	130	131	131
feedback	Pearson Correlation	,239**	,252**	,099	,068	,285**	,133	,096	,134	,284**	,086	,044	,248**	,211*	,435**	,298**	,488**	1	,214*	,135	,227**
	Sig. (2-tailed)	,006	,004	,262	,447	,001	,131	,281	,133	,001	,332	,623	,004	,017	,000	,002	,000		,015	,125	,007
	N	130	130	129	129	130	130	128	128	128	130	128	130	128	129	128	129	128	129	130	130
reward_name	Pearson Correlation	,140	,296**	,182*	,338**	,396**	,256**	,238**	,068	,221*	,175*	,195*	,296**	,308**	,342**	,212*	,360**	,214*	1	,807**	,837**
	Sig. (2-tailed)	,110	,001	,038	,000	,000	,003	,007	,444	,022	,046	,027	,001	,000	,000	,016	,000	,015		,000	,000
	N	131	131	130	130	131	131	129	129	129	131	129	131	129	130	129	130	129	131	131	131
reward_monetary	Pearson Correlation	,139	,148	,247**	,195*	,254**	,110	,143	,098	,148	-,107	,023	,218*	,251**	,200*	,099	,256**	,135	,807**	1	,809**
	Sig. (2-tailed)	,113	,091	,004	,025	,003	,209	,106	,267	,096	,221	,796	,012	,004	,022	,262	,000	,125	,000		,000
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132
reward_general	Pearson Correlation	,170	,235**	,239**	,171*	,314**	,130	,105	,057	,172*	,029	,119	,227**	,240**	,189*	,099	,310**	,227**	,837**	,809**	1
	Sig. (2-tailed)	,051	,007	,017	,051	,000	,137	,234	,520	,049	,743	,176	,009	,006	,030	,265	,000	,007	,000	,000	
	N	132	132	131	131	132	132	130	130	130	132	130	132	130	131	130	131	130	131	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix G: Mean and standard deviation for the questions in the survey

Item Statistics

	Mean	Std. Deviation
Managerial_support	4,1034	,92670
Managerial_encouragement	3,8362	1,03792
Collegial_support	3,8793	,95239
Creative_environment	4,1552	,88075
Knowledge_creative_thinking	4,0345	,89376
More_experience_knowledge	3,6810	1,00951
variying_challenging_work_encourage_creative_thinking	4,1724	,79428
Varying_challenging_work_simplify_ability_creative_thinking	4,1552	,78689
good_communication_managers	4,3621	,72707
cooperate	4,0517	,88313
easy_system	4,1897	,85378
access_necessary_resources	4,0345	,88397
system_existence	3,6121	1,08565
implementation_previous_suggestions	3,9741	,99966
effort_make_difference	4,1810	,84028
ideas_quickly_evaluated	3,9655	,88397
feedback	4,2414	,81955
reward_name	2,7500	1,24324
reward_monetary	3,0086	1,23356
reward_general	3,0000	1,29883