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Thesis Advisor: Rune Lines

Work design and Change

A study of the implementation of operational excellence in Accenture Stavanger

By

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This thesis was written as a part of the Master of Science in Economics and Business Administration at NHH. Neither the institution, the advisor, nor the sensors are - through the approval of this thesis - responsible for neither the theories and methods used, nor results and conclusions drawn in this work

Executive Summary

During the last few years there has been a renewed interest in work design, and a major focus on the study of organisational change. This thesis combines the two by attempting to answer the research question "will an employee's perception of how his or her job will be affected by a change initiative lead to a change in behaviour?"

The different behavioural changes were categorised as passive, semi-active and active. The analysis showed that the active and semi-active employees had a more positive perception of the effect of change on their job characteristics than the passive employees. Motivation was also found to be higher among the active employees compared to the passive employees. The analysis found some support for the assumption that growth need strength has a moderating effect on the relationship between the three other factors in the model.

The analysis suggested that one should distinguish between "knowledge and skill" that enable an employee to implement her part of a change initiative and "knowledge about the change initiative". The level of knowledge and skill were found to be different between the passive employees and the two other groups. The findings suggest that knowledge and skill moderate the relationship between the three other factors in the suggested model. In addition the level of knowledge about the change initiative indicates how the employee will perceive the effect on her job characteristics.

Preface

This master thesis is written within the Master of Science in Economics and Business Administration at the Norwegian School of Economics. The thesis examine if work design theory can be used to explain employees' reaction to a change initiative. I was motivated to write about this topic as there has been a great focus on change management during the last few years. By writing this thesis I believe that I have gained a deeper insight in how change recipients react to change. In addition the work with the thesis has allowed me to develop my analytical skills as well as other practical skills such as interviewing.

The implementation of Operational Excellence in Accenture Stavanger has been the change initiative studied in my thesis, and I want to thank Edward Hensley and Charlotte Varlid as well as the other employees in Accenture Stavanger for taking time to help me get the information I needed. The analysis is based on interviews with a few of the Accenture Stavanger employees, and I will therefore take this opportunity to express my gratitude to the people who provided me with valuable information.

I also want to thank my supervisor, professor Rune Lines, who has given constructive and good feedback throughout the process.

Norwegian School of Economics

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1. Introduction

1.1 Motivation

I have chosen to study work design theory, and how it can explain an employee's reactions to change. The focus on work design has increased during the last years, and several new studies on the topic have been published. However, few publications focus on how work design can explain reactions to change. During the time I've studied at NHH there has been a great focus on change and change management. In today's business environment change seems to be the norm, and there are often several change initiatives in place at the same time. The focus on change, and the possibility to write about a topic which hasn't seen much previous research, has made me very interested in studying this area.

Accenture is a global management consulting, technology services and outsourcing company helping clients become high-performing businesses. The Accenture Stavanger division has since fourth quarter of 2011 been in the process of implementing Operational excellence in all its service delivery operations. This change has already been implemented, or is in the process of being implemented, globally, and is seen as very important for the way Accenture's Service Delivery business will operate in the future. As a result of this Accenture Stavanger has expressed a desire to have the topic studied. Thus the implementation of operational excellence in Accenture Stavanger will be the case of this master thesis.

I've been working for Accenture Stavanger during most holidays since 2008, and my knowledge of both the organisation and the employees will therefore be helpful in order to facilitate the data collection. Accenture Stavanger's main business idea is to provide oil companies with financial services, and this might give additional value to the thesis as one can use the information in comparison to other organisations' working with financial services in general and the financial

department of oil companies specifically. Furthermore Accenture Stavanger has enough employees to provide a sufficient amount of interviewees for the data collection.

1.2 **Objectives, hypothesis and research question**

In this master thesis I want to use work design theory as a tool to understand how the employees' perception of Operational Excellence influence their behaviour. As this is a narrow study the goal is not to develop a general theory. However, similar organisations might be able to benefit from the experiences outlined in this thesis.

The purpose behind most change initiatives is to change the behaviour of the organisation's members. Therefore the focus of the thesis will be on how the perceived change in job characteristics has affected the employees' behaviour. The assumption is that positive changes in terms of job characteristics will lead to higher motivation to implement the change, and this will increase the likelihood of beneficial behavioural changes. If the perceived changes in job characteristics are negative the assumption is that this will reduce motivation, and hence reduce the likelihood of beneficial behavioural changes. In addition I assume that moderating effects can influence the relationship between the "perceived change in job characteristics" and "motivation", and the relationship between "motivation" and "behavioural change". These assumptions are presented in the model below.

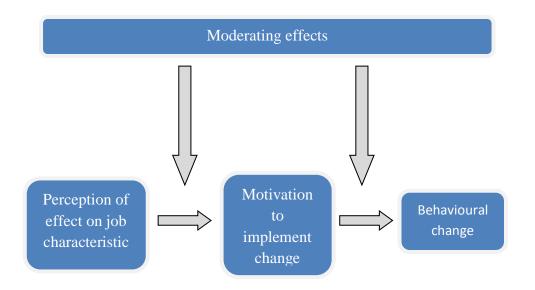


Figure 1: The relationship between a work-related change initiative and behavioural changes

Figure 1 show the assumption that the perception of how a job is affected can be used to anticipate how an employee will change his or her behaviour as a result of a work-related change initiative.

A moderating effect can be defined as a factor that strengthen or weakens the relationship between two other factors. There are several moderating effects that influence the path from the perception of effect on job characteristics to the behavioural changes occur. However, to avoid that the thesis becomes too wide it will be limited to look at the moderating effects assumed to be most important. Facilitating knowledge and skill through education has been shown to be of high importance when a change is implemented (Bartunek, et al., 2006), and this is presumed to be highly relevant in this case as well. Growth need strength is a measure of how strongly a person needs personal accomplishment, learning, and for developing himself from where he is now (Hackman & Oldham, 1980). Strategic change often brings several opportunities for personal accomplishment, learning and development, and such opportunities also seem present in this particular change initiative. In other words the moderating effects assumed to be most influential are the individual's growth need strength and knowledge and skill. The model also assumes that the two moderating effects can have an impact on both the relationship between "Perception of effect on job characteristics" and "Motivation to implement the change" and between "Motivation to implement the change" and "Behavioural changes". The next two sections will give an explanation of how the moderating effects are presumed to have an impact on the two relationships. Note that the explanation given below is by no means meant to be exhaustive, but is rather a demonstration of different ways that growth need strength and knowledge and skill may moderate the two relationships.

An individual with high growth need strength is assumed to be eager to learn new things and develop himself from where he is now. As previously mentioned most change initiatives involve opportunity for learning and development, and hence an individual's level of growth need strength is presumed to moderate the relationship between "Perception of effect on job characteristics" and "Motivation to implement the change". Knowledge and skill is also presumed to have an effect on this relationship. If an individual has negative experience with change initiatives, e.g. downsizing, the model assumes that this will weaken the relationship between "Perception of effect on job characteristics" and "Motivation to implement the change".

In the case of the relationship between "Motivation to implement the change" and "Behavioural changes" relevant knowledge and skill is presumed to reduce the threshold to take part in the implementation process. The second relationship in Figure 1 will also be impacted by growth need strength as an individual with high growth need strength is assumed to be more eager to accomplish or implement his part of the change initiative.

Resistance to change is assumed to be the most important type of behavioural change for the purpose of this thesis, and in an attempt to limit the thesis only this form of behavioural change will be examined.

The background for the study is the assumption that work design theories can be used to explain employee behavioural reactions to a change. With that in mind the thesis seeks to answer the research question: *will an employee's perception of how his or her job will be affected by a change initiative lead to a change in behaviour?*

1.3 Choice of theory

The master thesis is based on theory about the job characteristics model presented by Hackman and Oldham in 1976. In addition extensions to the job characteristics model presented in the elaborated model of work design presented by Parker et al. in 2001 will be used. These theories form the foundation for the thesis and will be used to gain an understanding of how work design can explain reactions to change. This understanding can then be used to identify the key elements in the change process.

I will also present what the empirical evidence say about the usefulness of the job characteristics model. Since the thesis will examine work design and how it can be used to explain behavioural reactions to change a part of the theory section will look at change literature in relation to job characteristics. Finally the concept of Operational Excellence will be presented to give the reader an idea of how the introduction of Operational Excellence can affect the employees of Accenture Stavanger.

2. Theoretical basis

During the last decades organisations have had to face several new challenges and changes such as greater global competition and rapid changes in information technology. As a result of this organisations are often in a state of constant change to meet the global competition. This means that the organisations are increasingly dependent on being able to efficiently implement new change initiatives. It is therefore interesting to study how an employee's perception of how his or her job characteristics will be modified as a result of the change initiative affect the organisation's ability to implement organisational changes.

Work design theory will be the theoretical framework used in this thesis. Grant & Parker (2009) explain the concept of work design as something that describes how the job, tasks, and roles are structured, enacted, modified as well as the impact of these structures, enactments and modifications on individual, group and organisational outcomes.

Together with sociotechnical systems (STS) the job characteristics model put forward by Hackman and Oldham in 1976 is the most dominant approach to work design theory research today (Parker, et al., 2001). The job characteristics model inspired several studies within the work design area. However until recently the focus on work design has diminished significantly (Grant & Parker, 2009). This has happened despite a significant change in work environments where we have moved from a mainly manufacturing economy to a service economy (Grant & Parker, 2009). As a result of this change Grant & Parker argues in "Redesigning work design" from 2009 that new studies are required in order to better understand how work design can enable organisations to meet the needs of both customers and employees.

In the next section the job characteristics model will be presented.

2.1 Job characteristics model

Until the end of the 1970s the most influential work design theory was Herzberg's two factor theory of satisfaction and motivation. Despite its influence there were several issues with the theory. For example several researchers were unable to find empirical support for the theory's major principle, and the theory did not account for differences between employees (Hackman & Oldham, 1976).

In 1976 Hackman and Oldham proposed a model that attempts to answer these concerns as well as other issues with the work design theories of the time. The model assumes that the characteristics of a job and the characteristics of the employee performing the job interact to determine if a job will lead to beneficial outcomes or not. According to the model there are five core job characteristics that lead to three psychological states that again may result in several beneficial personal and work outcomes. In addition the model proposes that the links between the job characteristics, the psychological states and the beneficial outcomes are moderated by the individual's growth need strength (Hackman & Oldham, 1976). The job characteristics model has proved to be the most enduring of the work design models (Grant & Parker, 2009).

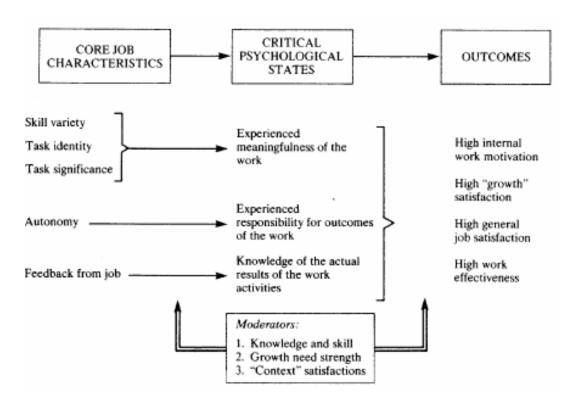


Figure 2: The job characteristics model of work motivation (Hackman & Oldham, 1980)

In the following paragraphs the different components of the job characteristics model as first presented by Hackman and Oldham in 1976 and further elaborated in their book *Work redesign* (1980), will be studied. Thereafter extensions to the model that have been suggested since the theory was first put forward will be described.

2.1.1 Three critical psychological states

The job characteristics model assumes that certain key job characteristics can lead to three critical psychological states:

- Experienced meaningfulness
- Experienced responsibilities for outcome
- Knowledge of actual results

These states are defined as follows:

Experienced meaningfulness of the work is the degree to which the individual experience the job as generally meaningful, valuable, and worthwhile. Experienced responsibility for the outcome of work is the degree to which the individual feels personally accountable and responsible for the results of the work he does. Knowledge of results is defined as the degree to which the individual knows and understands, on a continuous basis, how effectively he is performing the job (Hackman & Oldham, 1976).

2.1.2 Core job characteristics

Hackman and Oldham (1980) propose that each of these states can be prompted by five different core job characteristics, and these are:

- Skill variety
- Task identity
- Task significance
- Autonomy
- Feedback

As can be seen from figure 2 skill variety, task identity and task significance affect the experienced meaningfulness of the work. The skill variety refers to the degree of different activities the individual need to do to carry out the work, and the number of different skills and talents needed to perform these activities. Task identity is the degree to which the job requires completion of a whole and identifiable piece of work. Task significance is the degree to which the job has a substantial impact on the lives of other people (Hackman & Oldham, 1976). It's important to note that since all these three characteristics contributes to the experienced meaningfulness of work a job can be experienced as meaningful even if one or two of the characteristics are missing (Hackman & Oldham, 1980).

The psychological state of experienced responsibility for outcome of the work is presumed to be affected by the core job characteristic autonomy. Hackman and Oldham (1980) define autonomy as the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

The last major job characteristic identified is feedback. The model proposes that this characteristic affects the psychological state called <u>knowledge of results</u>. Feedback is defined as the degree to which carrying out the work activities results in the individual obtaining direct and clear information about the effectiveness of his performance (Hackman & Oldham, 1980).

In other words the model assumes that if an individual learns that he personally has performed well on a task he cares about, this will lead to several positive personal and work-related outcomes. These positive outcomes will have a reinforcing effect, and will give the individual an incentive to continue to perform well in the future (Hackman & Oldham, 1976). The outcomes of enriched work will be presented after a brief explanation of the motivating potential score formula.

2.1.3 Motivating potential score

The degree to which the features identified by the job characteristics model can be measured by the motivating potential score (MPS) formula.

$$MPS = \left[\frac{\begin{array}{c} Skill \\ variety \\ + \end{array} \begin{array}{c} Task \\ identity \\ + \end{array} \begin{array}{c} Task \\ Significance \\ 3 \end{array}\right] \times Autonomy \\ \times Feedback$$

The formula shows that autonomy and feedback are considered more important for creating internal work motivation than the characteristics that lead to experienced meaningfulness.

2.1.4 Outcomes of enriched work

The job characteristics model proposes that if jobs with a high motivating potential score are employed by the right people, the job will lead to outcomes beneficial to both the employee and the organisation. In this section the outcomes of enriched work that are identified by the job characteristics model will be presented.

The model specifies that positive personal outcomes such as internal motivation, growth satisfaction and general satisfaction are likely to increase as the motivating potential of a job increases. It is also expected that the quality of the work will be high in an enriched job, and in addition an enriched job may also lead to production of higher quantities. This is shown as work effectiveness in fFigure 22. Furthermore lower turnover is proposed as a positive outcome of enriched work (Hackman & Oldham, 1976). Another potential positive outcome is reduction of absenteeism. However, this is dependent upon the employee has the correct knowledge and skill to do the enriched job. If the employee does not possess the right skill absenteeism might increase because the employee isn't able to accomplish the tasks he's given, and hence might associate the job with failure (Hackman & Oldham, 1980).

2.1.5 Moderating effects

Hackman and Oldham (1976) also acknowledge that differences between people and context affect how different people may react to a job. This individual effect is called <u>individual growth</u> <u>need strength</u> (Hackman & Oldham, 1976). As previously explained growth need strength is a measure of how strongly a person needs personal accomplishment, learning, and for developing herself from where she is now. In their book *Work redesign* (1980) they also include <u>knowledge</u> <u>and skill</u> as well as <u>"context" satisfaction</u> as moderating effects that influence how different individuals experience a job. If a person has a job with a high motivational potential it is unlikely that the job will lead to the desired outcomes if the individual doesn't have sufficient knowledge and skill to perform the required tasks.

The context satisfaction refers to factors such as pay, co-workers and job security. If a person is dissatisfied with the context it is likely that a person's energy is used on coping with the negative factors. Furthermore an enriched job would probably not give the desired effect as the person doesn't have enough energy to appreciate the enriched work (Hackman & Oldham, 1980). Instead the person might become even more dissatisfied as he feels that he isn't able to handle e.g. the extra responsibility, task variety etc.

The model predict that people who have a high need for personal accomplishment, growth and development will respond more positively to a job high in motivating potential than people with low growth need strength given that they have the appropriate knowledge and skill, and that they are satisfied with the context of work (Hackman & Oldham, 1980). A worker with high growth need strength is predicted by the original model to either experience the psychological states more strongly when their job is high in MPS or respond more positively to the psychological states (Hackman & Oldham, 1980).

2.2 Empirical evidence

Following Hackman and Oldham's article in 1976 several studies have tested the job characteristics model (Parker, et al., 2001), and in this part of the theoretical review the major empirical findings will be presented.

The empirical studies have led to two main conclusions. The empirical studies support the model's proposed effect on the affective responses motivation and satisfaction; however the empirical data on the behaviour responses such as absenteeism, turnover and work performance are inconclusive. The second conclusion is that the more specific features of the job

characteristics model have not been proven (Parker, et al., 2001). An example of such features is the proposed link between the job characteristics and the critical psychological states.

The job characteristics model has also been challenged. One approach suggested that social factors are just as important as objective work characteristics in creating employee's perceptions of work (Salancik & Pfeffer, 1978). Empirical evidence suggests that job characteristics can lead to psychological empowerment, which in turn leads to positive outcomes such as satisfaction with work (Liden, et al., 2000).

One should also be aware that the model has largely been tested using empirical data from largescale manufacturing plants in the mid-20th century, and both the work context and the workforce composition has changed dramatically since these empirical data were collected (Parker, et al., 2001). As a result of this Parker et al., (2001) suggests ways to extend the current theory to overcome these limitations.

2.3 Extensions to the job characteristics model

Since the job characteristics theory was first presented it has been extended in several directions (Lines, et al., 2012). One major driving force behind these extensions is the significant shift in the work context as well as in the composition of the workforce since the model was first presented (Parker, et al., 2001). According to Parker et al., (2001) these changes has led to two key issues that need to be addressed in order to increase the job characteristics model's relevance in the modern work environments. These two issues are 1) that the focus of the original model is on a more or less outdated work context, and 2) that it does not include antecedents, additional work characteristics or outcomes that can be of growing importance. The job characteristics model has also been extended to take into account routes to psychological ownership (Pierce, et al., 2009).

Parker et al., (2001) has proposed an elaborated model of work design to gather these additions into one model. This model presents several new elements that are proposed to be a better fit with today's organisational landscape. In the following paragraphs the elaborated model of work design will be briefly presented.

The elaborated model introduces the element antecedents, which is factors that constrain or influence the choice of work design. These can be external such as laws and regulations, and internal such as management. It is important to be aware that antecedents might affect an employee's willingness or ability to give effect to key job characteristics (Parker, et al., 2001).

In terms of work characteristics Parker et al., (2001) emphasise the importance of being aware that different work characteristics are likely to be central in different jobs. Therefore one should make a thorough diagnosis of the situation before determining what work characteristics are likely to be important in a particular job. The elaborated model includes the work characteristics proposed by Hackman and Oldham. However it acknowledge that in addition to variation in task characteristics, variation in the knowledge characteristics such as problem-solving and job complexity should also be seen as significant.

It also accentuates the importance of job load, which consists of both emotional load and work load. A study on nurses and the implementation of a shared governance initiative showed that a perceived increase in work load was more crucial to experienced gains and losses caused by the change than any other meaning (Bartunek, et al., 2006). Another important set of characteristics that has been recognised as important after the original model was proposed is physical characteristic such as ergonomics and work conditions (Grant & Parker, 2009). The job characteristics model is originally built to focus on jobs that are performed more or less independently (Hackman & Oldham, 1980). This is clearly problematic as an increasing amount of jobs involve team-work. As a result of this changing organisational context work design should also be seen in the light of group-level work characteristics where this is applicable. (Parker, et al., 2001).

The original outcomes are also seen as being too limited. In the same way as with work characteristics Parker et al., (2001) therefore suggests that the relevant outcomes of work design should be selected after careful consideration of theory, purpose and the context of the job in question.

The elaborated model introduces several new mechanisms that connect work characteristics with outcomes. However, Parker et al., (2001) emphasize that although we can be fairly certain that work design can affect behaviour, we do not know much about why. Thus, the mechanisms presented in the elaborated model should not be seen as complete.

The final major addition to the original model is contingencies affecting the link between work characteristics and outcomes. In the original model these were limited to growth need strength, knowledge and skill, and "context" satisfaction. The elaborated model suggests that one should choose important contingencies based on a diagnosis of the situation, and makes several examples of possible relevant contingencies on individual, group, and organisational level. One such contingency is operational uncertainty, and the argument is that the greater the operational uncertainty faced in a job the more autonomy must be given to the employee doing that job. This is to ensure that the employee is able to make timely and appropriate decisions as the job context changes.

2.4 The job characteristics model and motivation to change

In this section we will connect the job characteristics model with motivation to change. The question whether organizational change can have an impact on job characteristics or if people affected by the change may perceive the change as something that will affect their job characteristics will be based on a research-based discussion.

The change recipients reaction to an organisational change is the most decisive factor for whether the change can succeed or not (Oreg, et al., 2011). This means that it's of great value to understand how the employees or the change receipients react to a change. Bartunek et al., (2006) showed that the perceived personal impact of the change has more impact on perceived gains and losses than other perceived effects. In addition research has shown that a limited number of job characteristics are highly important to employees, and that changes to these job characteristics result in significant alteration of important job factors such as intentions to stay, job performance and satisfaction (Wall & Jackson, 1995). These factors are also identified by the job characteristics model, and hence indicate a link between motivation to change and work design theory.

Lines, et al., (2012) found that change recipients' thoughts about future, post change job characteristics where related to emotions felt during the change process. This study also found that emotions to a degree mediated the relationship between predicted job characteristics and resistance during the change process. Other studies has shown that a change that lead to an increase in skill variety, task identity, task significance, autonomy, and feedback of one's job were linked with higher general satisfaction, growth satisfaction, internal work motivation, increased meaningfulness and responsibility (Bhagat & Chassie (1980) cited in Oreg, et al., 2011), and increased readiness for change (Weber & Weber (2001) cited in Oreg, , et al., 2011).

Together these studies support the assumption that strategic change processes have an effect on job characteristics and that this effect is important to understand how employees react to a change.

2.5 Operational Excellence in Accenture



In Accenture Operational Excellence is seen as a collection of methods to match a client's requirements with Accenture's process capabilities. To become Operationally Excellent it is necessary for Accenture to change the mind-set of the employees. This basically means that the employees need to understand the entire process they are involved in. In addition the employees need to have a continuous focus on improvement. Accenture has developed a global set of tools and standards that aim to aid the employees in achieving this understanding and mind-set.

These tools are based on well-known concepts such as Six Sigma, Lean theory, and process management. Within Operational Excellence (OE) a maturity framework has been developed to define the fundamental methods and practices that should be followed in a mature operation. This framework consists of six maturity categories, and is shown in Figure 3. Within each of these categories there are three levels that define how far a team has come with the implementation process.

Figure 3: OE Maturity categories

One of the elements in Operational Excellence is standardisation of work processes in order to achieve a more stable level of quality as well as lower

costs. For some people this might lead to less autonomy as there is an increased focused on following the same procedure each time a task is done. On the other hand Operational Excellence also advocates increased measuring, and hence it is easier for the employee's to receive feedback

from their work. The measures also aim to increase the employees' understanding of the processes they perform, and this might enable the employees to plan their work in order to reduce the overall job load.

In order to implement Operational Excellence Accenture Stavanger has selected one person in each team to be an Operational Excellence Focal. The OE focals are responsible for moving the implementation process ahead in their team, and have therefore received extra training and education in Operational Excellence.

3. Method

A method can be seen as a tool or way to proceed to solve a problem (Grønhaug & Pervez, 2010). The choice of method is of high importance in ensuring that the "correct" answer is found (Grønhaug & Pervez, 2010). In this section the tools used to try to answer the research question will be presented. The first part of this section will describe why the method of grounded theory was selected, and in addition the key points of how to develop a grounded theory will be described. This is followed by an explanation of the methods used to collect the data material. The fourth major part in this section is a description of the process followed during the conduction of the interviews. I will also show the steps taken to ensure that the collected and presented data hold a high level of quality. Finally a discussion of ethical issues and potential ethical issues arising in the course of writing this thesis will be presented.

3.1 Choice of method – Grounded Theory

Grounded theory might be the most widely used interpretative strategy in the social sciences today (Charmaz, 2011). In effect grounded theory consists of several methods that again consist of flexible strategies for focusing and expediting qualitative data collection and analysis (Charmaz, 2003). The term grounded theory can be explained as theory that is derived from data, and that data is systematically gathered and analysed through the research process (Strauss & Corbin, 1998). In other words the aim of grounded theory is not to test an existing theory, but rather develop a theory inductively (Kvale & Brinkmann, 2010). Due to this approach a grounded theory is likely to give insight, better understanding and a meaningful path to action (Strauss & Corbin, 1998). One important criticism against grounded theory is that it is unlikely to have theory-neutral observations (Grønhaug & Pervez, 2010). In addition what is noticed during research is influenced by several factors, and this includes knowledge of the social world being studied (Grønhaug & Pervez, 2010). Hence it is a potential danger that the findings will bias in the direction of the researcher's pre-research assumptions.

As there is not much research on work design as a predictor of employees' reaction to change, grounded theory appears to be a suitable method for discovering information about the topic, as well as researching how different mechanisms affect the topic. In addition grounded theory is said to expedite the research process (Charmaz, 2011), and considering the limited time available for the thesis this is an advantage.

In this method the researcher codes the data, and the codes should be immediate, short and defining for the described experience or action (Charmaz, 2011). The coding should lay the grounds for developing categories that fully explain the experiences and actions researched. During the data analysis one should constantly examine resembling statements to find similarities and differences between them. In addition to normal comparisons, Strauss and Corbin (1998) also recommend that incidents go through a theoretical comparison. A theoretical comparison can be seen as taking the properties of an object and comparing these to the properties of another object, and should be used when the properties of an object isn't obvious. It also provides us with a tool to look at something a bit more objectively (Strauss & Corbin, 1998).

The two forms of comparisons leads to a selection of new data and formulation of theoretical memoranda. Then a more focused coding is performed, and this iterative process will slowly move the analysis from a descriptive to a theoretical level. This systematic analysis increases the analytical precision (Charmaz, 2011). In the end of the coding process we will get to a point where little or no additional knowledge is discovered (Kvale & Brinkmann, 2010).

3.2 Data collection

Qualitative research can be defined as any type of research that produce findings not arrived at by statistical procedures or other means of quantification (Strauss & Corbin, 1998). The decision of whether to focus on qualitative or quantitative methods should be based on the study's purpose. In this case the purpose is to attempt to answer the research question: *will an employee's perception of how his or her job will be affected by a change influence the employee's motivation to implement the change?* This means that the focus of the study is on individuals and their perception of a change, and also their behaviour as a result of the change. Another aspect of the research question is that few studies have focused on this particular area previously, and hence little is known. Qualitative research methods are often advocated when the focus is on a person's experience or behaviour, and little is known about the subject (Ghauri, 2004).

An additional advantage with qualitative research methods is that a low number of respondents can be justified. Given a normal response rate on surveys the population of Accenture Stavanger employees affected by Operational Excellence would most likely not be large enough to enable conclusions based on the survey data. Thus a qualitative research method is selected for this particular study.

In a qualitative research interview the researcher attempts to get an understanding of how the interviewee perceives the world (Kvale & Brinkmann, 2010). An advantage of in-depth interviews is the possibility for gaining a better understanding of the respondent's position or behaviour (Grønhaug & Pervez, 2010). On the other hand a potential issue with in-depth interviews is that they demand a skilled and cautious interviewer. This research method should therefore be a suitable tool in order to understand how an employee's perception of how a change will alter his job affects his motivation to help implement the change.

Growth need strength is one of the presumed important moderating effects presented in Figure 1: The relationship between a work-related change initiative and behavioural changes. Although most researchers focus on either quantitative or qualitative methods both can be used in the same study (Grønhaug & Pervez, 2010).

The job diagnostic survey is a survey created by Hackman and Oldham, and presented in the book *Work redesign* (1980). One of the features that this survey measures is the respondent's growth need strength. As stated in section 3.1 Kvale & Brinkmann (2010) explain that the aim of grounded theory is to develop a theory inductively, and not test existing theory. However, the questions in the job diagnostic survey focus on the meaning of the concepts, and this isn't the main focus in this master thesis. Hence, the decision to base the questions regarding the knowledge growth strength on an established survey can be justified. This will also enable comparison of the respondents' growth need strength with the respondents' of other surveys using the job diagnostic survey. To ease the data analysis and to make the data collection more efficient I also used the questionnaire to collect the respondents' demographic data.

3.2.1 Research interview

Theory usually separate between three different types of interview techniques (Fisher, 2010). These three are the <u>structured</u>, the <u>semi-structured</u> and the <u>unstructured</u> interview. The main advantage of the structured interview is that the post interview analysis will be less time consuming, however, there is no room for the respondents to give their own views in a real sense (Grønhaug & Pervez, 2010). Hence, the structured interview is not seen as suited considering the purpose of this study. The unstructured interview on the other hand allows the respondents to give their view in the way they like; however, the post-interview analysis is much more tedious. The semi-structured interview is normally used when the topic must be understood from the interviewee's own perspective, and is particularly concerned with understanding the meaning behind the phenomena described (Kvale & Brinkmann, 2010). This form of interview allows the respondents to use their own words, but still within a certain structure to ease later analysis. Hence, the semi-structured interview is seen as the form best suited for data collection in this particular study.

3.2.2 Interview guide

An interview guide can be described as a more or less rigid manuscript of the interview sequence (Kvale & Brinkmann, 2010). In a semi-structured interview the guide usually contains an overview of the topics that should be covered during the interview as well as some suggested questions (Kvale & Brinkmann, 2010). I believe that risk of influencing the respondents' questions did not outweigh the ethical guidelines for informed consent, and hence informed the interviewee of the purpose of the interview before the interview started. This assessment is accounted for in more detail in section 3.6 "Research ethics".

An open and flexible interview guide increases the likelihood of getting spontaneous, vivid and unexpected answers. On the other hand a more structured guide will make the coding and analysing after the interview less demanding (Kvale & Brinkmann, 2010). The earlier decision of using the semi-structured interview to gather data is reflected in the interview guide by being flexible yet containing some standard topics and interview questions. This is done in an attempt to get some of the advantages of the flexible guide as well as taking into consideration the following analysis of the interviews.

A challenge that had to be taken into consideration when creating the interview guide was that the implementation process had been started several months earlier and all the teams from which the sample was taken had reached the first implementation milestone. This meant that an investigation of the interviewees' perception of the change before the implementation process started could not be performed.

As was mentioned in the first part of section 3.2 one potential issue with in-depth interviews is that the interviewer needs to be cautious and skilled. This was taken into account by conducting a pilot interview to prepare and improve both the interview guide and the interviewer prior to the actual interviews. The pilot interview offered valuable feedback of what elements in the

interview guide and questionnaire was formulated in an ambiguous manner, and thus needed to be changed.

The pilot interview also helped to raise the interviewer's level of comfort with the interview situation. The higher level of comfort meant that the interviewer could focus more on the content of the information shared by the interviewees instead of technicalities such as the tape recorder or own performance in the role as interviewer.

The interview guide can be found in section 8 "Attachments".

3.2.3 Questionnaire

In the start of the interview the interviewees were asked to fill out a questionnaire to facilitate efficient data collection of two types of data. These were demographic data and data about the respondents' growth need strength. Both the first and the second part of the questionnaire mainly followed the form of a pre-coded questionnaire. A pre-coded questionnaire is a questionnaire with boxes that should be ticked, and the respondent is not expected to use his or her own words (Fisher, 2010). Both the Norwegian and the English questionnaire can be found in section 8 "Attachments".

3.2.4 Sample and sample size

The research purpose decides the necessary sample size (Kvale & Brinkmann, 2010). In this particular situation it seems appropriate to continue the interviews until no new knowledge is gained by interviewing one additional person. During the interviews this ideal had to be adapted to fit the interviewees' busy schedule, and in some teams the point where no new knowledge is generated was not reached. However, for the sample as a whole it is believed that the point where additional interviews don't give additional knowledge was reached.

In order to select the interviewees, the people responsible for the implementation process were asked if they had suggestions as to which teams could be selected. The contact person suggested four different teams, and asked that the team leads of these teams were contacted to set up interviews with the team lead, Operational Excellence focal and two random team members.

The sample used consisted of 13 people from five different teams. Table 1 below shows the overview of the position of the people included in the sample. Note that the person from the fifth team has been recorded as part of one of the other four teams in order keep the person anonymous.

Team	Team lead	OE Focal	Employee	Total
Team 1	1	1	2	4
Team 2	0	1	2	3
Team 3	1	1	2	4
Team 4	1	1	0	2
Total	3	4	6	13

Table 1: Sample

The reason why both the OE focal and the team lead on each team was interviewed was because of a preconception that both of them could be important change agents, and thus their attitude towards the change could have an important effect on the change recipients' perception of how their jobs would be affected by the change. It was also presumed that the variables gender, age, education, and length of time in the job might influence the employee's attitude towards the change and hence these variables were recorded.

The sample consisted of nine women and five men. The age of the respondents differed from around 25 to 60+, however 11 out of the interviewees where less than forty years old. The four selected teams had a high degree of members who were below forty years old, and hence this might suggest that the sample was unbiased. On the other hand if we look at all employees in

Accenture Stavanger the average age is 40.2 years old, and this might indicate a slight bias in the sample. Nine of the respondents have finished higher education of more than three years.

Ten of the interviewees have worked two years or more with more or less the same tasks and responsibilities that they had at the time of the interview. The remaining three people have been in the job for approximately one year.

3.2.5 The interview situation

The contact person in Accenture Stavanger helped arranging the interviews by suggesting four teams from which the interviewees could be selected. Then the respective team leads were contacted, and asked for suggestions of whom to interview. The team members who were suggested were then individually contacted, and asked if they were willing to be interviewed. All the people contacted accepted, and were able to set up a date and time for the interview. The interviews were recorded using the sound recording feature of an Accenture Stavanger computer. The interviews lasted between 20 and 45 minutes, and the average interview had a duration of about 30 minutes.

3.3 The interview process

The interview was started by a brief introduction of the purpose of the interview as well as a presentation of the interviewer. The interviewee was informed that everything that was said during the interview would be kept anonymous and confidential, and asked if she accepted that a sound recording was made of the interview. Finally, the person was asked if she had any questions before the interview was started.

The interview began by asking the interviewee to fill in the questionnaire containing questions about demographics and questions to determine the interviewee's growth need strength.

When the questionnaire had been filled in the actual interview started. In order to examine whether a perceived change in job characteristics had influenced the interviewee's attitude towards the change the interview was started by asking introduction questions such as "can you tell me how you were first informed about the planned change?". The interviewee's answer was usually followed up by asking the interviewee to elaborate or by specifying questions such as "how did you perceive the change at that time?" This was done in order to get an understanding of the respondent's attitude toward the change. To validate the interviewee's response these questions were often followed up with direct questions such as "how motivated did you feel for implementing the change?", indirect questions such as "how motivated do you think that the other team members were for this change?" and in addition the interviewee was asked if she had examples of what she had done to move the implementation process ahead.

As the interview progressed the interviewee was motivated to elaborate by using specifying questions if there was anything particular about the change which made her feel the way she did, or if she had an idea about why the other team members seemed to feel the way they did about the change. At this point interpretive questions such as "in other words you believe that...?" were used in order to put the answers into categories that would ease later analysis.

The interview was finished off by asking the interviewee if she had anything else to add about the topic. It's important to underline that the outline above is a description of the main path used during the interviews. If the interviewee brought up interesting points the path was often left to follow up on this information given that it was within the framework of the research.

3.4 **Procedure**

In this section the procedure used to arrive at the results will be described in more detail. This is done in line with Grimen (2000) who advocate that qualitative research should seek to gain reliability by presenting leads and clues that other researchers can follow up later.

3.4.1 Data collection

3.4.1.1 Team 1

The interviews were started in Team 1, and scheduled meetings with four team members, including the team lead. As one member had recently started in her position I believed that she could not bring much information to the survey. In addition she had started in the job after it had been altered as a result of the implementation of Operation Excellence. Instead I scheduled an interview with a person from another team who worked closely with Team 1. Unfortunately the team lead called in sick the day of the interview, and we were unable to find a new date that worked for both parties.

Despite the pilot interview I was not completely confident with the interview situation, and as a result the first interview was a bit short, and in hindsight I see that I did not follow up on what might have been important pieces of information. The analysis revealed that some statements could be interpreted in two different ways. This could have been avoided if I during the interview had asked a clarifying question. An example of this is that some statements can be interpreted to mean that more Operational Excellence knowledge and skill lead to higher motivation, or alternatively that more knowledge about OE results in a more positive perception of the change initiative, or both. However, as the interviews progressed I grew more comfortable with the situation, and the remaining interviews went quite well.

As I had to adapt to the interviewees' schedule there was only a 15 minute break between the first two interviews. The short time span didn't leave time for careful analysis; however, I was able to add a few questions to the interview guide that followed up on points made by the first interviewee. An example of this is that the first interview revealed the need to include indirect questions about the employee's level of motivation in the interview guide. The final interview at the first team was held a few hours later, and hence I was able to make a more thorough review of the interview guide. After the final interview had officially finished the interviewee brought up several new, interesting and relevant points. The interviewee was therefore asked for permission and accepted that I used this information in the thesis,

After the three team members had been interviewed there was a break of three days before starting interviewing Team 2. During this period the interview guide was reviewed as I saw that new questions were needed to follow up interesting points made in the first team. There was not time to analyse the interviews immediately after they were done. I believe that this was a slight disadvantage because this would probably have led to a more focused interview guide. On the other hand a more focused interview guide could potentially also have reduced the chance of obtaining new information in the other teams.

The process of making small adjustments to the interview guide in-between interviews, and larger reviews after all the interviewees from a team had been interviewed was followed for all the four teams. However, the need for changes and additions diminished after each interview. The systematic analysis of the data started when the selected interviewees from all the teams had been interviewed.

3.4.1.2 Team 2 – 4

The interviews in the remaining teams went more or less as scheduled, and the only issue faced was a question in the questionnaire that was formulated in such a way that few understood what

was asked of them. As I did not have time to print out a corrected questionnaire this issue was dealt with simply by informing the interviewee about what the question sought answer to.

Apart from a few interviews that needed to be rescheduled all interviews with interviewees from a given team were carried out in one day, and with about three days between each interview day. Although the interviewees' answers weren't always coinciding the discrepancies weren't larger than what could be expected both within the teams and between them. As a result of this I believe that the point where no additional knowledge is generated where reached for Team 2 and 3.

Due to team 4's size and some members being on holiday only two members of the team were interviewed; the OE focal and the team lead. This was the last team to be interviewed, and there were no indication that they saw the change initiative in a significantly different way than Team 1-3. As a result of this I did not find it necessary to schedule an interview with the team members coming back from holiday.

3.4.2 Analytical procedures

One of the most important purposes of analysis is to understand and gain insight from the collected data (Grønhaug & Pervez, 2010), and in the following paragraphs the analytical procedure will be described.

The first step of the analysis is to use open coding. Open coding can be described as the process of breaking down, examining, comparing, conceptualising, and categorising data (Strauss & Corbin, 1998). The open coding was carried out by going through the interviews analysing every sentence, and giving a separate code to each phenomena that became evident during the analysis. The phenomenon was also compared to phenomena already described. An existing code was

given if the phenomenon was so similar to an already coded phenomenon that giving them the same code would not cause loss of information. When the open coding was completed 110 different codes were identified in the data material.

The next step was to organise the 110 codes into subcategories. For example codes that contained information about a job characteristic was categorised either in the subcategory *content* or in the sub category *job load*. The subcategories were then combined into categories on a bit more abstract level. For example *content* and *job load* were combined in the category *job characteristics*. The codes were then viewed in the light of context, consequences and causes. This is called axial coding, which can be defined as "the process of breaking down, examining, comparing, conceptualising and categorising the data" (Strauss & Corbin, 1998). Selective coding is "the procedure of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further development" (Strauss & Corbin, 1998). This was the final step in the analytical procedure.

The findings produced by the selective and axial coding are presented in section 5. Analysis.

3.5 Data quality

The quality of the interview is vital for the quality of the analysis, verification and reporting of the interview. In order to ensure a high quality of the interview it is therefore important that the interpretation, verification and communication of the interview are done before the interview is over (Kvale & Brinkmann, 2010). This means that the researcher should aim to interpret the answers, and get the interviewee to verify the interpretation during the interview. Key concepts with respect to the quality of data are reliability and validity. In the following paragraphs the measures taken to ensure that the gathered data held a high degree of reliability and validity will be described.

3.5.1 Reliability

Reliability can be defined as the degree to which the results in a research can be trusted (Grennes, 2004). In other words reliability can be seen as the consistency and credibility of data (Kvale & Brinkmann, 2010). In qualitative research the study is often not directly repeatable, and this type of research should therefore aim to gain reliability by presenting leads or clues that other researchers can investigate further (Grimen, 2000). The researcher should also make sure that the research has been carried out in a thought-out and systematic manner, and in addition be able to convince others that the research actually was done in this way (Grennes, 2004). The reliability of this thesis is in other words mainly based on the procedure presented in section 3.4.

3.5.2 Validity

Validity can be defined as the degree to which our observation actually reflects the phenomena or variables that we want to know something about (Grennes, 2004). Grønhaug et al. (2010) emphasize four different forms of validity as important in qualitative research. These are:

- 1. Descriptive
- 2. Interpretative
- 3. Theoretical
- 4. Generalizable

The first form of validity refers to the degree to which the actual description holds true. Interpretative validity deals with how well the interpretation fit. In other words the question is if the interpretation is correct. The major findings and points in the analysis have been exemplified using quotes to convince the reader that the research is valid in terms of the two first forms of validity. The third form of validity, theoretical validity, concerns how adequate the suggested theory on explanation is. Generalizable validity refers to the extent the study's findings can be used in other settings (Grønhaug & Pervez, 2010). Grønhaug et al. (2010) also emphasize the importance of demonstrating validity. It is therefore important to consider how to answer the reader's question: "How can I trust you" throughout the thesis.

Studies that focus on one organisation are problematic as this causes difficulties in establishing an external validity of the findings (Lines, et al., 2012). On the other hand such studies exclude potential confounding and unmeasured variances between organisations (Lines, et al., 2012). As this is a fairly new area of research it is of interest to be able to eliminate confounding and unmeasured variances between organisations, and hence this will be a study of one organisation.

3.6 Research ethics

Ethics can be described as moral principles and values that influence the way a researcher or group of researchers conduct their research (Grønhaug & Pervez, 2010). Traditionally there are four typical ethical guidelines. These are <u>informed consent</u>, <u>confidentiality</u>, <u>the role of the researcher</u> and <u>consequences</u> (Kvale & Brinkmann, 2010). The following paragraphs will examine how each of these areas was treated during the work with the thesis.

Informed consent means that the respondents are informed of the purpose of the interview as well as potential negative and positive sides of taking part in the research (Kvale & Brinkmann, 2010). As explained in section 3.2.5 "The interview situation" the Change Management Steering Committee was asked to suggest teams that could be interviewed, and then the selected team leads were asked to suggest team members that could be interviewed. Finally the individual team members were contacted and asked if they were willing to be interviewed. By organising the interview process in this top-down manner the team lead might have felt pressured by the Change Management Steering Committee to participate in the interview, and at the same time the team members might have felt pressured by their team lead (Kvale & Brinkmann, 2010).

However, by contacting the different team members individually the potential pressure is believed to have been reduced to an acceptable level.

As mentioned earlier the risk of forming the interviewees' answers was assumed to be less than the possible ethical concerns of not informing the participants of the purpose of the interview. Therefore the interviewees were informed of the purpose of the interview, and hence the risk of misleading the respondents was reduced significantly (Kvale & Brinkmann, 2010).

In a few interviews the interviewee brought up new information after the interview had been formally finished. Information brought up after the interviews have only been included in the thesis if the interviewee explicitly agreed to this.

Confidentiality means that private data that can reveal the identity of the participants isn't disclosed (Kvale & Brinkmann, 2010). Several steps have been taken to keep the data confidential, and in the following these are presented. Statements that easily can be attached to a specific individual have not been used as quotes in the thesis. The different teams are also referred to as team number "X", and this is another method used to ensure the individual participants anonymity. In addition since there was a majority of female participants a decision was taken to strictly use the gender-specific pronouns "she" and "her" regardless of the gender of the participant in question.

Another consequence of the confidentiality concern is that if statement made during an interview has been translated from Norwegian into English this will not be indicated in the thesis as this in some cases will make it easy to identify the person making the statement. This can be seen as a reduction in the reliability, as other researchers will be unable to identify where there is a potential for something being lost in translation. Regardless, the consideration of the interviewee confidentiality outweighs the reduction in data reliability. The main ethical concern in the researcher's role is that the interviewer has been working parttime for Accenture Stavanger, and has also been given a full-time position when the master thesis is finished. Thus there already exists a relationship between the researcher and some of the respondents. The relationship of trust might lead the interviewee to share information that she will later regret (Kvale & Brinkmann, 2010). This, however, should not pose a very large risk as both the confidentiality and informed consent guidelines have been followed.

Another potential consequence of the relationship between the organisation and the researcher is that the researcher might be reluctant to include statements that are critical or negative towards the Management or other people in the organisation that the interviewer has a professional relationship with. Still, the analysis is based on the statements of others and the researcher attempts to stay as neutral as possible to the organisation, and believe that following analysis will be conducted as objectively as possible.

With regards to the possible consequences of a qualitative research one should try to consider both the positive and the negative impact that research might have on the interviewees. The interviews did not cover topics of a particularly personal nature, and as such it is believed that the potential negative personal consequences are small. One potential risk could be if a respondent criticised a team lead or other parts of management, and the individual's identity was revealed the respondent might fear reprimands. However, due to the steps taken to keep the collected data confidential this risk should be minimal.

4. **Results**

In this section the findings from the interviews and the open coding will be presented.

Part 4. Results will be organised in such a way that the findings related to each element in the proposed model shown in figure 1: "The relationship between a work-related change initiative and behavioural changes" will be presented individually. The four elements will then be brought together and analysed in section 5. Analysis.

4.1 **Perception of effect on job characteristics**

In this section the findings related to the perceived effect on job characteristics will be presented. The perceived effect on job characteristics can vary from positive via neutral to negative. The interviews revealed some clear trends in how employees perceived their job characteristics to change as a result of Operational Excellence. Table 2: "Effect on characteristics" presents the characteristics and the effect on the job characteristics identified by a majority of the interviewees.

Effect	Characteristics	Number of interviewees	
Negative	Increased emotional load	12/13	
Negative	Increased work load	12/13	
Positive	Better feedback	10/13	
Positive	Bring structure	10/13	
Positive	Higher personal accountability	8/13	
Positive	Higher task identity	7/13	

Table 2: Effect on characteristics

The interviews show that the two characteristics that are reported by most of the respondents are characteristics assumed to have a negative effect on the motivation to implement Operational Excellence. Both of these are forms of job load, work load and emotional load. In this case the increased emotional load has two main sources. The first of these is a concern that the increased work load due to Operational Excellence will have a negative impact on regular tasks. This concern is shared by 12/13 of the interviewees. The second source of emotional load is mentioned by 7/12 of the interviewees and is the high pressure both from within Accenture Stavanger and from Accenture globally to complete the implementation stages on schedule.

Table 2 show that 12/13 of the interviewees also believe that implementation of Operational Excellence has led to a higher work load. It is important to note that this is an effect of the extra work demanded by the implementation process. Respondent 11 light-heartedly described the extra work load like this: "The OE lead says that when OE is up and running we can't live without it. Well, we have to survive the implementation first."

The employees are less in tune when it comes to the period after the implementation. Here 6/13 hopes that Operational Excellence will lead to a reduced work load in the future when the implementation phase is over. On the other hand 7/13 do not believe in a reduced work load, but believe that it will stay the same or higher than before the implementation.

Another trend in the data is that many of the interviewees had not considered how Operational Excellence would affect their job after it had been implemented. This is illustrated by interviewee 8 when she was asked if OE would have an impact on feedback: "I don't know, I haven't thought about it. Perhaps?".

4.2 Motivation to implement the change

It is quite hard to say anything specific about the differences in motivation to implement Operational Excellence. Although almost all the interviewees claim to be motivated, most of the interviewees also state that other teams and/or team members don't seem to be motivated. In addition some of the interviewees' behaviour indicated that they were not as motivated as they claimed to be. As a result of this discrepancy I decided to mainly look at the findings from the indirect question "Do you believe that the other team members are motivated for the change?" The responses are presented in table 3: "Level of motivation" below.

Level of motivation	Statement	Number of interviewees
Low	Motivation in the team is low	6/13
High	Motivation in the team is high	6/13

Table 3: Level of motivation

The findings show that Accenture Stavanger's employees as a whole are evenly divided in their view on motivation in their team. If the data is broken down to team level the data show that members of one team is mainly considering themselves to be motivated while the members of another team mainly consider themselves not to be motivated for the change. In the two other teams there is no clear trend in the team members' level of motivation. One of the interviewees didn't want to speculate about the other members' level of motivation.

The interviewees were also asked if the motivation had changed since the start of the implementation of Operational Excellence. In contrast to the current level of motivation this produced a clearer trend as shown below in table 4: "Change in motivation".

Change in motivation	Statement	Number of interviewees
Negative	Motivation in the team has decreased	10/13
Neutral	Motivation in the team has moved in waves	1/13
Positive	Motivation in the team has increased	2/13

Table 4: Change in motivation

The interviews show that a significant share of the employees feel that the motivation have decreased since the start of the implementation process.

4.3 Behavioural change

In this section the findings relating to behavioural change will be presented. No one claimed that they themselves or any of the other team members worked actively against the change initiative, and thus the findings suggest that the employees' behavioural changes ranged from passive to active. For this purpose an active, semi-active and passive form of behaviour can be defined as follows:

- Passive: the employee will only use the OE tools if she is told how and when to use them.
- Semi-active: the employee will fulfil the active requirements as long as she doesn't face major challenges that need to be solved before the OE implementation process can move ahead.
- Active: the employee uses the OE tools, and makes an effort in facilitating own and/or other employees' understanding and utilisation of the tools.

The differences in behaviour are exemplified with two quotes each in table 5: "Type of behaviour" below.

Behaviour	Quote	Interviewee
Active	"We have arranged weekly meetings, and each employee is given a set of tasks that has to be done by the next meeting"	6
Active	"We divided the team into two parts as this made it easier to apply the OE framework"	4
Semi-active	"I started doing some work with OE tools when I had some time on my hands, but then I had to leave it as I had to solve an issue that took three days."	13
Semi-active	"When the chosen measures turn out not to measure the right thing motivation drops significantly."	3
Passive	"This rests on the Management. They are the ones that started this"	8
Passive	"()give me what needs to be filled in, and I'll fill it in"	12

Table 5: Type of behaviour

The passive employees' attitude often appears to be a form of BOHICA (Bend Over Here It Comes Again), and the quotes in table 5 illustrate this. In addition interviewee 8 also state "we have previously seen change initiatives launched as something fantastic and then 6 months later they are no longer in use".

Table 6: "Frequency table of type of behaviour" presented below show my opinion of how the three types of behaviour are distributed among the employees. In my view the different types of behaviours are spread out quite evenly in the sample.

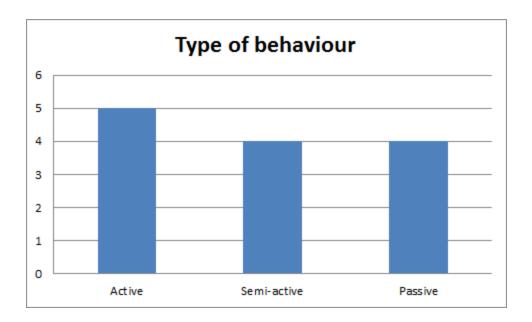


Table 6: Frequency table of type of behaviour

4.4 Moderating effects

The thesis has been limited to look at the two moderating effects presumed to be most important: "knowledge and skill" and "growth need strength". In this part the findings related to the two will be presented.

4.4.1 Knowledge and skill

Knowledge and skill is assumed to be an important moderator in the proposed model in this thesis. For the purpose of this survey it is mainly of interest to look at whether or not the interviewees' had the needed knowledge and skill to implement and use Operational Excellence. The interviews revealed that there is a significant difference in the employees' knowledge about what Operational Excellence is, and how it will influence their job. The employees' level of knowledge can be categorised from low to high. Knowledge of Operational Excellence (OE) can be defined as follows:

- Low: Employee knows about OE, but has little or no understanding of how it will impact her job.
- Medium: Employee has an understanding of how OE can impact her job, but doesn't understand how it can be applied to her job.
- High: Employee understands both how OE can impact her job and how to apply it.

This is demonstrated in the quotes below:

Level of knowledge	Quote	Interviewee
High	"I saw OE as an opportunity to do things better. Better processes, more efficiency, more orderly routines and tasks"	4
Medium	"You can use it to find weaknesses in routines" "I have trouble seeing how to apply the framework to what we do."	12
Low	"When OE comes, it will just have to come, () they will just have to show what I have to do with it."	9

Table 7: Level of knowledge

The assumption that there was a significant difference in the level of knowledge was also supported by some of the interviewees. For instance interviewee number 7 states that "it is definitely a challenge to get the other team members to understand what OE is all about", while interviewee number 4 states "sometimes I feel like a school teacher, the others haven't involved themselves as much in the implementation [of OE] as they should".

The frequency table below present my view of the employees' level of knowledge of Operational Excellence.

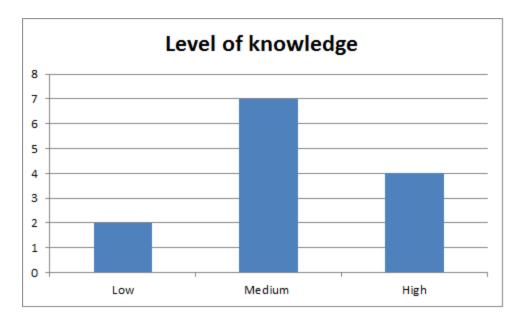


Table 8: Frequency table over employees' knowledge of OE

In my opinion four interviewees can be classified as having a high level of knowledge, seven as having a medium level of knowledge and two as having a low level of knowledge. The interviews showed that most of the employee had an understanding of what changes Operation Excellence could bring, but struggled to understand how it could be applied in their particular job. The people in the category of high knowledge are mainly OE focals or team leads.

4.4.2 Growth need strength

The employees' growth need strength was mainly measured by use of the job diagnostic survey. However, the interviews also gave an indication of the individuals' growth need strength. In the following paragraphs the data produced by the survey, supplemented by findings from the interviews, will be presented.

On a scale from 1 to 7 the interviewees' growth need strength ranged from 4.1 to 5.5. To ease the analysis the 13 interviewees have been placed in three groups according to their growth need

GNS	Average group GNS	Interviewee
High	5.4	1,2,9
Medium	4.7	4,5,6,10,11
Low	4.2	3,7,8,12,13

strength (GNS). The three groups are labelled high, medium and low, and are presented in table 9: "Growth need strength" below.

Table 9: Growth need strength

The table show that three of the interviewees have a high growth need strength compared to the other interviewees. Five of them have a medium growth need strength, and the remaining five have a low growth need strength.

To a certain degree these data are supported by findings in the interviews. For example interviewee 2 stated that "The implementation part has been interesting, setting up the tools and so on, but I don't think that it will be interesting when the implementation phase is over". This suggests that the interviewee prefers the implementation phase, which often is associated with greater opportunity for learning and personal accomplishment than during the steady phase. The interviewee's GNS score was high and this coincide well with the statement.

On the other hand interviewee 9, who also scored relatively high, stated that "When OE comes, it will just have to come, (...) they will just have to show what I have to do with it". This statement doesn't correspond well with a high GNS, and shows that one need to be careful when analysing the results from the growth need strength survey. The other respondents did not say anything which would indicate a mismatch between their growth need strength score and their actual growth need strength.

5. Analysis

In this part of the thesis the four elements in figure 1: "The relationship between a work-related change initiative and behavioural changes" will be brought together to see if the proposed relationships exist. This can be done by using the results from the open coding to analyse if there exist relationships between the main categories.

The section will be organised by looking at each major category in turn according to the interviewees' behavioural change. As shown in table 6: "Frequency table of type of behaviour" the interviewees can be put in three different categories, passive, semi-active and active. Four of the interviewees appear to be passive, four seems to be semi-active and five seems to be active in relation to the implementation of Operational Excellence.

5.1 **Perception of effect on job characteristics**

5.1.1 Passive behaviour

The perception of the effect on job characteristics does not seem very positive among the employees in the passive category. Six codes relating to job characteristics are shared by either 3/4 or 4/4 of the interviewees. Five of these codes indicated a negative perception of how the job characteristics will be affected. All the interviewees were concerned that the work load would increase, and that this would affect the quality of their regular tasks. In addition the change initiative was perceived to be bureaucratic and cumbersome by 3/4 of the employees in the passive category.

The positive effect was that Operational Excellence will facilitate detection of trends in issues and work load. This was identified by 3/4 of the interviewees. The fact that the passive

employees believe that Operational Excellence will identify tasks that create high work load, but at the same time see increased work load as the key concern is interesting. This may suggest that they don't believe that management will use the information to allocate resources to the tasks that create high work load. Such an interpretation can to a certain degree be supported by respondent 8's statement: "we have previously seen change initiatives launched as something fantastic and then 6 months later they are no longer in use". Alternatively the passive employees may believe that the potential reduction in work load is outweighed by the extra work load caused by the implementation process.

There are also several other effects, both positive and negative, but few of these were identified by more than one of the passive employees. However, in my opinion increased work load is the key concern with regards to the change initiative for all the employees in the passive category. One of the passive employees describes the anticipated extra work load as this: "if you don't have time, everything that takes time is reducing motivation". This indicates that this group of employees perceive the overall effect on their job characteristics to be negative.

5.1.2 Semi-active behaviour

The findings in the open coding suggest that employees in the semi-active category have a slightly more positive perception of Operational Excellence than the people in the passive category. Seven codes related to job characteristics are shared by 3/4 or all of the employees in this category. Out of these seven codes four are presumed to be negative while three are presumed to be positive.

All employees in the category believe that work load is likely to increase as a result of Operational Excellence, and increased work load is related to three out of the seven emphasised codes. It is important to note that the concern about high work load can probably partly be attributed to the extra work demanded during the implementation phase. This is also evident in the findings where two people in the semi-active category state that they believe that work load will be reduced in the long run. Respondent 6 states "In the long run I believe that the processes will be improved, and work load reduced". However, the same people are not certain that this reduction will outweigh the current increase in work load. When respondent 13 was asked if she believed that work load would be reduced when the OE tools where implemented she answered "I guess we just have believe that it will, what's the point in this if it doesn't? If the net result isn't positive why would management start this process?".

75% of the employees in the semi-active category believe that Operational Excellence can lead to better feedback, better structure and higher task identity. These three categories are assumed to have a positive effect on the job characteristics. Both feedback and task identity are well-known characteristics in the job characteristics model (Hackman & Oldham, 1976) and have been presented in the theoretical section. Better structure, on the other hand, has not been described earlier. In the context of Accenture Stavanger better structure means a reduction in uncertainty as the employees get a better view of what needs to be done and when it needs to be done. The interviewees where also asked if they believed that improved structure would come at a cost of less autonomy, but the answers indicated that less autonomy was not an issue here.

The interviews indicated that increased work load was the main perceived consequence of the change initiative. However, employees in the semi-active category appeared to have a slightly different attitude towards work load than the employees in the passive category. In the passive category people were concerned that Operational Excellence would lead to higher work load. 3/4 of the employees in semi-active category did not consider the increased work load as much as a "concern". In fact when interviewee 13 was asked if increased work load was a concern she explicitly stated "eh no, I guess (...) I just wondered how much of a time commitment it would be". Interviewee 5 strengthens this impression by stating "if you don't have time management skills you'll never survive in this business".

Based on the above mentioned information the semi-active employees appear to have a slightly different view on work load and they point out a higher number of positive effects compared to the passive employees. Together this indicates that semi-active employees perceive the overall effect of the change initiative on their job characteristics as more positive than passive employees.

5.1.3 Active behaviour

The findings from the open coding do not show much difference between the group of employees categorised as active and the semi-active employees. Nine different open codes are shared by 4/5 or all the active employees. Seven out of the nine codes are assumed to have a negative effect on job characteristics. This is unexpected compared to the results from the semi-active group where only 4/7 is assumed to be negative.

Like the other two groups of employees the active employees believe that the main negative consequence of the change initiative is increased work load. In fact six of the seven negative codes are related to increased workload. In similarity with semi-active employees the active employees do not seem to be as "concerned" about the increase in work load as the passive employees. This suggests that compared to passive employees the increased work load do not appear to be as overwhelming for the active employees. The active employees' focus on increased work load can be explained by the fact that many of them have taken on the main responsibility of the change initiative in addition to their regular jobs. Respondent 4 states "much of the work has fallen on me, but I believe that it is natural".

The active employees believe that better feedback (5/5) and better structure (4/5) will be the two most positive effects on their job characteristics. These were also identified by the semi-active employees. It should also be noted that there are nine codes shared by 3/5 of the active employees, and six of these codes indicate a positive effect on the job characteristics.

In sum there is no indication that there are any significant differences in the perception of the overall effect on job characteristics between the semi-active and the active employees.

5.1.4 Overall

There seem to be a significant difference between the employees in the passive category and the employees in the two other categories. The findings from the open coding indicate that passive employees perceive the changes to their job characteristics relatively more negative than the other employees. This is coherent with the model proposed in section 1.2. The semi-active and the active employees do not appear to have a different perception of effect on job characteristics.

The analysis also show that the employees' main concern is the extra work load caused by the implementation of Operational Excellence. This suggests that the employees are less concerned with how the implemented change initiative will affect their job. The impact of the implementation process itself appears to be more important. In general the analysis reveals that the employees have a higher focus on the negative consequences of the change initiative in terms of their job characteristics. This is consistent with earlier research that indicate that negative experiences lead to stronger consequences than positive experiences (Lines, et al., 2012).

As noted in 4.1 "Perception of effect on job characteristics" most of the interviewees had not thought much about how their key job characteristics would change after the implementation of the change initiative. One potential explanation for the unanticipated effect can therefore be that the employees don't perceive the change initiative to lead to any noteworthy changes in the key job characteristics.

5.2 Motivation to implement the change

As noted in section 4.2 "Motivation to implement the change" the interviews produced little information regarding the interviewees' personal level of motivation to implement the strategic change. Therefore the following paragraphs will analyse whether or not the employees differs in terms of how they assess the motivation level of the other employees.

5.2.1 Passive behaviour

The open coding reveals that 75% of the passive employees reported that others resisted the change in the beginning of the change initiative. Interviewee 9 states "In the beginning I thought: one more thing that takes time from my regular task; I was negative towards the change". This resistance usually involved boycotting Operational Excellence meetings, and/or not using the tool as requested by change agents. However, this resistance have apparently been overcome, as 75% of the passive employees also believe that the motivation level currently is high. One person, interviewee 12, believed that motivation was low.

5.2.2 Semi-active behaviour

75% of the semi active employees also report that other teams and/or team members resisted the change in the beginning. The employees in this category are divided in their view of the current level of motivation in the team. 50% believe that the motivation is high, and the other 50% believe that motivation is low. Although there is a slight difference compared to the passive interviewees the difference is not large enough to conclude that there are differences in the level of motivation between the two categories of employees.

5.2.3 Active behaviour

All of the active employees reported that other teams and/or team members resisted the change in the beginning. Interviewee 4 states "[laughter] the commitment haven't exactly been overwhelming". Three interviewees reported that motivation on the team was low while one believed that motivation was high. As noted in section 4.2 the remaining person did not want to speculate about the motivation level among the team members. An interesting difference from the other groups was that 4/5 of the active employees believed that the other team members saw the change initiative as a waste of time. This is illustrated by interviewee 4 who states "they don't believe that it can get any better. They don't see the value [of OE]". The active employees believe that this is the main reason why the other team members resist the change, and why the motivation was low. In comparison one of the semi-active interviewees and one of the passive interviewees reported the same.

5.2.4 Overall

It appears to be a minor difference in the level of motivation between the active and the semiactive employees. However, the difference between the two categories is not large enough to conclude that there is a difference. On the other hand the difference in level of motivation between the passive and the active employees appear to be significant.

When the data from 5.2.1 to 5.2.3 is inserted into the chart presented in figure 4: "Trend of motivation level" it appears to be a trend where the active employees view the other employees' level of motivation as low. On the other hand the passive employees view the other employees' level of motivation as high.

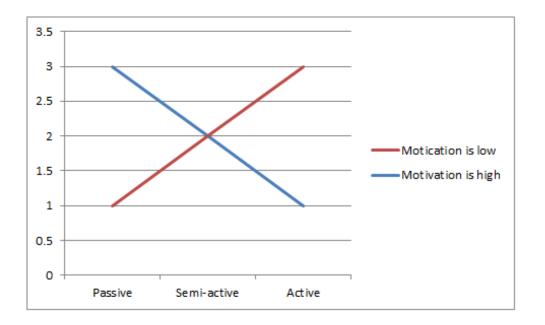


Figure 4: Trend of motivation level

One should be careful not to overemphasise trends in Figure 4 as they would appear completely different if just one person changed opinion. The interesting point, however, is that there is a distinct difference between how the active and passive employees evaluate the level of motivation among the other team members.

A possible explanation of the trend could be that the employees use themselves as a reference point for what "high motivation" is, and evaluate the other employees according to their behaviour. This would explain why the majority of the passive employees consider the motivation on the team to be high while the majority of the active employees view the motivation on the team to be low. An interpretation of this is that the relative level of motivation among the employees is highest among the active employees and lowest among the passive employees. This interpretation coincides with the result predicted by the model in section 1.2.

5.3 Knowledge and skill

5.3.1 **Passive behaviour**

All of the passive employees feel that the amount of tools and information is overwhelming. In addition two of them noted that it is difficult to find tasks that are easy to measure. This might suggest that they do not possess the correct knowledge or skill needed to make use of the information and tools provided by Operational Excellence. According to the model presented in section 1, knowledge and skill is assumed to have an impact on the relationship between "Motivation to implement change" and "Behavioural change" and/or between "Perception of effect on job characteristics" and "Motivation to implement change". As the relevant knowledge and skill among the passive employees seems to be low it is likely that the lack of knowledge and skill has a negative impact on one or both of the relationships, and hence eventually reduce the likelihood of a positive behavioural change.

5.3.2 Semi-active behaviour

All the semi-active employees believe that Operational Excellence is difficult to implement. This is mainly because the examples in the Operational Excellence training material aren't seen as relevant. In addition 3/4 reports that it is difficult to find measurable tasks. Two of the interviewees in this category found the amount of tools and information to be overwhelming. The findings from the open coding suggest that the semi-active employees are quite similar to the passive employees in terms of skill and knowledge. However, by referring to the examples from the training material the semi-active employees demonstrate that they have some experience with the actual implementation work.

50% of the semi-active employees stated that they became more positive towards Operational Excellence when they learned more about it. This suggests that the correct knowledge and skill is important, and give support to the assumption that knowledge and skill is one of the more

important moderating effects in this case. Alternatively this may suggest that increased knowledge about Operational Excellence made the interviewees perceive the change to their main job characteristics more positively. The other half did not state whether or not their attitude changed as they learned more.

In total the semi-active employees appear to have a slightly higher level of knowledge and skill with regards to Operational excellence than the passive employees.

5.3.3 Active behaviour

80% of the active employees find the amount of tools and information overwhelming, and they also find it difficult to implement the change initiative as the examples are based on tasks that aren't applicable to what they do. This is in line with the results from the semi-active employees, and show that the active employees have worked with the implementation process.

In the section about the level of motivation, 5.2.3 "Active behaviour", it was noted that the active employees believe that the other employees do not see the value in Operational Excellence. A statement by interviewee 1 illustrates this: "Some of the team members felt that OE was a waste of time, but they don't realise that OE will help them reduce the waste of time in their current tasks". Most of the active employees state that this is the main reason why the other employees don't seem to be motivated for the change. This suggests that a majority of the active employees believe that more knowledge and skill relevant to Operational Excellence will increase motivation to implement the change initiative.

An alternative interpretation is that the active employees believe that the semi-active and passive employees would perceive the change to their job characteristics more positively if they knew

more about the change initiative. Both of these interpretations show that relevant knowledge and skill is likely to play an important role when implementing a change initiative.

The data do not indicate that there are differences in the level of knowledge and skill between the active and semi-active employees.

5.3.4 Overall

In total the knowledge and skill relevant to Operational Excellence seems to differ between the passive employees and the two other groups of employees. However, the findings do not reveal any particular differences between the active and the semi-active employees.

The findings in the analysis suggest that it is necessary to distinguish between knowledge about the change initiative and "knowledge and skill" that enables the employee to implement her part of the change initiative. The assumption in figure 1: "The relationship between a work-related change initiative and behavioural changes" is that knowledge and skill moderates the relationships between the three other factors in the model. The analysis suggests that knowledge and skill that enables the employee to implement her part of the change initiative is of particular importance.

The data also suggest that knowledge and skill may influence how the change is perceived. Increased knowledge about the change initiative appears to lead to a more positive view of Operational Excellence, and this may indicate that knowledge is having more than a moderating effect on the relationships between the three other factors.

5.4 Growth need strength

The average growth need strength score of the three categories of employees is presented in table 10: "Average growth need strength score" below.

	Active	Semi-active	Passive
Average GNS score	4.9	4.5	4.6

Table 10: Average growth need strength score

The average growth need strength score among the passive employees is 4.6. However, the average includes the score of interviewee 9 whose interview suggested that she had a low growth need strength¹. If this person's score is removed the average of the remaining interviewees is 4.3. The average growth need strength score of the semi active employees is 4.5, and the average growth need strength score of the active employees is 4.9.

Given the adjusted growth need strength score average of the passive employees there seems to be a correlation between the growth need strength score and the behavioural change. This might indicate that the growth need strength score have a moderating effect on the relationship between "motivation to implement the change" and "behavioural change" and between "perception of effect on job characteristics" and "motivation to implement the change". It can also be used to explain why the semi-active and the active employees appear to have more or less the same perception of the overall effect of Operational Excellence on their jobs, but a slight difference in the level of motivation and a distinct difference in behaviour.

¹ See section 4.4.2 Growth need strength.

5.5 **Development of a theory**

In this section a model based on the analysis of the empirical data will be developed and presented. The analysis shows that employees' "perception of the effect on the job characteristics" appear to have an effect on "motivation to implement the change". In addition "motivation to implement the change" seems to have an effect on the employee's "behavioural change". Growth need strength also appear to moderate the relationships between the three factors. The data analysis suggests that knowledge about the change initiative have a direct effect on "Perception of effect on job characteristics". In addition knowledge and skill have a moderating effect on the relationships between the three factors. Hence these six factors will form the model. In the following paragraphs the relationships between the factors will be discussed.

In the analysis above it was shown that the employees perceive the effect on their job characteristics differently. These differences appear to be related to the employees' motivation to implement the change initiative. It is important to note that the data show that the employees are not only concerned by what effects the implemented change has on their job characteristics, but also the effect the implementation process itself have on the job characteristics. Here the employees with a comparatively more positive perception of the change appear to be more motivated to implement the change than the employees with a more negative perception.

These differences in motivation also relate to different behavioural changes. The analysis has shown a clear connection between the level of motivation and the behavioural change of the employee. The employees with a comparatively low level of motivation are usually taking on a passive type of behaviour with regards to the change initiative. The employees with a comparatively high motivation do, however, seem to take a more active approach, and make an effort to get Operational Excellence implemented. Knowledge and skill appear to have a moderating effect on the relationship between "Perception of effect on job characteristics" and "Motivation to implement the change", and the relationship between "Motivation to implement the change" and "behavioural change". The main focus with regard to these relationships is knowledge and skill that enables the employee to implement her part of the change initiative.

The analysis also reveals that knowledge about the change initiative should be included as a distinct factor in the model. Statements from several of the semi-active and the active employees indicate that a higher level of knowledge have a positive effect on the employee's perception of the change initiative's effect on her job characteristics. The developed model is supposed to have some general value. Therefore it is important to emphasise that the data do not exclude the possibility that a higher level of knowledge can potentially have a neutral or negative effect on the perceived effect of the change initiative.

The analysis also shows that the employee's growth need strength appear to have a moderating effect on the relationship between the three other factors. The difference in growth need strength score can be used to explain why there are differences between the active and semi-active employees. This means that growth need strength can be used to explain why two individuals who perceive the effect of a change initiative on their jobs in the same way have a different level of motivation to implement the change.

The theory developed from data analysis is presented visually in the model below.

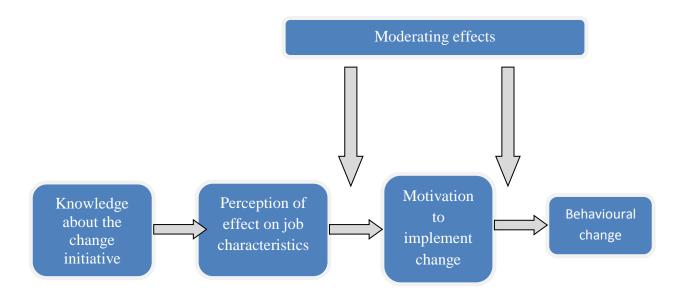


Figure 5: Perception of effect on job characteristic and behavioural change

The model show how an employee perception of the effect on his or her job characteristics can be used to explain the employee's behavioural change. According to the model an employee's knowledge about a change initiative lead to how the effect on job characteristics is perceived by the employee. This also means that if the person learns more about the change the perceptions may change according to the new knowledge. The employee's perception of the effect on her job characteristics can explain the employee's motivation to implement the change. This may lead to a behavioural change. In addition the "growth need strength" and "knowledge and skill" moderate the relationships between "Perception of effect on job characteristics" and "Motivation to implement the change", and the relationship between "Motivation to implement the change" and "behavioural change" as previously described.

5.6 Connection to existing theories

In this section the model developed in this thesis will be compared to the result of prior research.

The model presented in figure 5: "Perception of effect on job characteristics and behavioural change" supports Lines et al. (2012) findings that employees make sense of and react to strategic

change in terms of the consequences of the change initiative to the job characteristics the employees view as most important.

The model emphasise the importance of facilitating the change recipients' "knowledge about the change initiative". This is in line with Meyer & Stensaker (2005) who state that employees' can develop their change capacity by staying informed and thereby acquire more knowledge about the change. It is also coherent with Lines et al. (2012) who advocate that leaders prepare communication programs in advance that focus explicitly on how the change recepients' job characteristics are likely to be affected.

Haukedal (2008) suggest six different strategies to overcome resistance against change. One of these are to facilitate and support the employees to remove the change recepients' fear that they do not have the skills necessary to master the new tasks. This is supported by the developed model as "knowledge and skill" that enable a person to implement the change will increase the likelihood of a postive behavioural effect by strengthening the relationship between "motivation to implement the change" and "behavioural change".

If the organisation has a high level of change experience, the management can develop the change capacity by protecting the employees so that the change impementation doesn't take over (Meyer & Stensaker, 2005). This suggest that an important factor for successful implementation of a change is to keep the overall job load at an acceptable level. The model developed in section 5.5 reflect this by emphasising that one should consider the employees' perception of the implementation process itself when implementing a change initiative.

6. Conclusion

The thesis has attempted to shed light on the research question "will an employee's perception of how his or her job will be affected by a change initiative lead to a change in behaviour?"

The findings suggests that there are a connection between "perception of effect on job characteristics" and "motivation to implement the change" and between "motivation to implement the change" and "behavioural change". The different behavioural changes were categorised as passive, semi-active and active. By looking at the "perception of effect on job characteristics", "motivation to implement the change" and the moderating effects in light of the employee's behavioural change it became evident that there were differences between the employees in the different behavioural categories.

The analysis showed that the active and semi-active employees had a comparatively more positive perception of the effect of Operational Excellence on their job characteristics than the passive employees. The findings in relation to "Motivation to implement the change" was not as distinct, however the data did indicate a variance between the employees in the different behaviour categories. Although small, the difference supported the assumption that motivation is higher among active employees compared to passive employees.

The analysis suggested that one should distinguish between "knowledge and skill" that enable an employee to implement her part of a change initiative and "knowledge about the change initiative". The moderating effect of knowledge and skill were found to be different between the passive employees and the two other groups. The findings suggest that knowledge and skill moderate the relationship between the three other factors in the suggested model. In addition knowledge about the change initiative indicates how the employee will perceive the effect on her job characteristics.

The analysis also found support for the assumption that growth need strength has a moderating effect on the relationship between the three other factors in the model.

6.1 Managerial implications

In this section the most important managerial implication of the empirically developed theory will be presented. One implication of the model is that management should recognise the importance of knowledge about the change initiative. Management should inform the employees about the positive effects of the change initiative. According to the model this increases the likelihood of a beneficial behavioural change among the employees.

Another implication of the model is that management should identify the job characteristics most important to the employees. They should then investigate how the key content and job load characteristics are likely to be affected by both the change initiative and the implementation process. Management can then increase the likelihood of a positive behavioural change in two ways: a) emphasise the positive changes, and b) reduce the impact of the negative changes.

6.2 Suggestions for future research

Due to the limited time available for this study it was only possible to interview each interviewee once. This means that it was not possible to study if a new change in the perception of the change initiative's effect on job characteristics led to new change in behaviour. As the implementation is not yet finished it would be interesting if a future study could follow the remaining implementation process based on this dissertation. In addition future research could seek to study if other moderating effects should be introduced to the developed model. One such moderating effect could be the employees' change capacity. Alternatively, in a cross-organisational study,

the moderating effect studied could be the organisations' degree of change capability/change fatigue.

Work load is perceived as the main negative effect on the job characteristics. A study where two of the teams are allocated extra resources to reduce the total work load during the implementation process would be very interesting. By removing the main negative effect one can study the effect this have on the employees' behaviour.

Finally, a cross-organisational study to test to what extent the findings can be generalised would be beneficial.

6.3 Sources of error

In the final part of the thesis potential sources of error in the data collection, results and analysis will be presented. The starting point will be potential sample bias.

6.3.1 Sample bias

In order to interview the team members I contacted a selection of teams recommended by the people in charge of the change initiative. It is possible that the teams they recommended aren't representative of the population, and hence might create a sample bias. Another potential source of error is that the team lead was needed to get suggestions of who I should interview on each team in addition to the OE focal. The team lead might have chosen team members who have a more positive or negative attitude towards the change than the average team member. However, as most of the teams in Accenture Stavanger consists of less than 8 people including the OE focal and team lead I believe that the risk of this potential sample bias is smaller than the potential bias in selection of teams.

6.3.2 The interview and the interviewees

It is well-known that thoughts about the past are influenced by current thoughts. More precisely memory is said to be biased in an attitude consistent way (Lines, et al., 2012). This means that if a person is very positive about the change today she is likely to remember her initial thoughts and feelings in a more positive way than if she was neutral or negative towards the change. This effect may very well have influenced the interviewees' answers.

As mentioned in section 3.4.1.1 the interviewees' answers were not always interpreted and verified by the end of the interview. Therefore it is possible that my interpretation of the answers may be incorrect, and thus a potential source of error.

Some of the interviewees did not speak Norwegian, and thus these interviews were held in English. This may have caused at least two potential sources of error:

- a) The interviewee may misinterpret the question
- b) The interviewer may misinterpret the answer

In addition these interviewees have a different cultural background than the interviewer, and this increases the potential for misunderstandings between the interviewer and the interviewee.

Another potential error is the timing of the interviews. The interviews were held shortly after the four teams had reached a major milestone in the implementation process, and several teams had to put in extra effort to reach this milestone before the deadline. In addition three teams were in the middle of the monthly closing during the interviews. This means that most of the interviewees were in the middle of a period were the work load was particularly heavy, and this

might explain the trend that most of the interviewees believe that motivation has been reduced². The findings indicate that the main perception of the effect of the change initiative is extra work load. It is a possibility that the findings would have been different if the interviews had been held at an earlier or later period of time.

6.3.3 Developing the model

As was mentioned in section 3.1 "Choice of method – Grounded Theory" it is very unlikely to have "theory-neutral" observations. It is perhaps even more unlikely for a researcher with little research experience. Therefore it is a significant possibility that both during the interviews and the following analysis observations which where "theory-positive" had a greater chance of being detected. This means that the data material might have been seen to be more supportive of the presented theory than it actually was.

6.3.4 The model's relationships

The direction of the causalities between different factors is usually always a potential source of error. In this case an example of one such potential source of error is in the relationship between the level of motivation and knowledge and skill. In the thesis this has been presented in such a way that higher knowledge and skill can lead to higher motivation. However, it is equally possible that it is higher motivation that can lead to higher knowledge and skill as the employee would want to obtain the necessary knowledge and skill.

² Table 4: "Change in motivation" p. 38

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8. Attachments

8.1 Attachment 1: Interview guide

How were you first informed about OE?

- Did you think about how this would affect your job?

What do you think about the change caused by OE?

How did the other team members react towards the change? What have been done to implement the change? Examples?

What have you done with regards to OE? Examples?

Do you think that your job will change when OE has been implemented? In what way?

- How do you think work load will be affected?
- What about uncertainty?
- Home/work conflict?
- Meaningful job?
- Personally accountable?
- Task identity?
- Importance?
- Feedback?
- Autonomy?

What do you think about the team's motivation to get OE implemented? Examples that demonstrate this?

What about yourself? Examples?

8.2 Attachment 2: English questionnaire

Demographic data

Please indicate the relevant category with X.

Age:

20 – 29	30 - 39	40 - 49	50 - 59	60+

Gender:

Female	Male

Education (Mark your highest finished education):

Elementary	High school	Higher education	Higher education	Higher education
school		(1 year)	(3 years)	(5 years+)

How long have you been in your current job:

Type of job:

Level in the hierarchy:

Use the following scale; please indicate the *degree* to which you *would like* to have each characteristic present in your job:

4	5	6	7	8	9	10
Would like having			Would like			Would like
this only a			having this			having this
moderate			very much			extremely
amount (or less)						much

6.2: _____ Stimulating and challenging work.

- 6.3: _____ Chances to exercise independent thought and action in my job
- 6.6: _____ Opportunities to learn new things from my work
- 6.8: _____ Opportunities to be creative and imaginative in my work
- 6.10: _____ Opportunities for growth and development in my job
- 6.11: _____ A sense of worthwhile accomplishment in my work

The questions in this section allow you to say just what it is about a job that is most important to you.

For each question, two different kinds of jobs are briefly described. You are to indicate which of the jobs you personally would prefer – if you had to make a choice between them.

In answering each question, assume that everything else about the jobs is the same. Pay attention to only the characteristics actually listed.

7		1
1		
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Job A			Jol	b B
A job where the pay is good			A job where there opportunity to be innovative	
1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

7.2

Job A			Jo	b B
A job where you are often required to make important decisions			A job with many p work with	leasant people to
1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			Jo	b B
A job in which greater responsibility is given to those who do the best work.			A job in which grea is given to loyal en have the most sen	nployees who
1 2		3	4 5	
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			lol	b B
A job in an organization which is in financial trouble – and might have to close down within a year.			A job in which you to have any say wh your work is sched procedures to be u out.	natever in how luled, or in the
1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			ol	b B
A very routine job.	very routine job.		A job where your over the second s	co-workers are not
1	2	3	4	5
Strongly prefer A Slightly prefer A		Neutral	Slightly prefer B	Strongly prefer B

7.6

Job A		Job B		
A job with a supervisor who is often very critical of you and your work in front of other people.			A job which prever a number of skills hard to develop.	
1	2	3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			Jol	b B
A job with a supervisor who respects you and treats you fairly.			A job which provid opportunities for y and interesting thi	ou to learn new
1 2		3	4 5	
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			Jol	b B
A job where there is a real chance you could be laid off.			A job with very litt challenging work.	le chance to do
1 2		3	4	5
Strongly prefer A	Strongly prefer A Slightly prefer A		Slightly prefer B	Strongly prefer B

Job A			Jol	b B
A job in which there is a real chance for you to develop new skills and advance in the organization.			A job which provid time and an excell package.	
1 2		3	4	5
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

7.10

Job A			Jol	b B
A job with little freedom and independence to do your work in the way you think best.			A job where worki poor.	ng conditions are
1	2	3	4 5	
Strongly prefer A	Slightly prefer A	Neutral	Slightly prefer B	Strongly prefer B

Job A			Jo	b B
A job with satisfying team-work.			A job which allows skills and abilities textent.	
1 2		3	4 5	
Strongly prefer A	Slightly prefer A Neutral Slightly prefer B Strongly			Strongly prefer B

8.3 Attachment 3: Norwegian questionnaire

Demografiske data

Sett et kryss i den relevante kategorien

Alder:

20 – 29	30 - 39	40 - 49	50 - 59	60+

Kjønn:

Kvinne	Mann

Utdanning (Kryss av for høyeste fullførte utdanning):

Grunnskole	Videregående	Høyere utdanning (årsstudium)	Høyere utdanning (3 årig)	Høyere utdanning (5 år eller lengre)
		(al sstudium)	(Sang)	

Hvor lenge har du jobbet i din nåværende stilling:

Type jobb:

Plassering i organisasjonen:

Bruk skalaen under til å karaktersette betydningen av følgende karakteristikker i jobben din.

4	5	6	7	8	9	10
Vil ha dette kun i			Vil ha dette			Vil ha dette
moderate			svært mye.			ekstremt
mengder (eller						mye.
mindre).						

- 6.2: _____ Stimulerende og utfordrende arbeid.
- 6.3: _____ Muligheter til å gi uttrykk for selvstendige tanker og handlinger i jobben min.
- 6.6: _____ Muligheter til å lære nye ting av arbeidet mitt.
- 6.8: _____ Muligheter til å være kreativ og oppfinnsom i arbeidet mitt.
- 6.10: _____ Muligheter for vekst og utvikling i jobben min.
- 6.11: _____En følelse av at arbeidet mitt har en betydning og er verdt noe.

Spørsmålene i denne seksjonen gir deg mulighet til å angi konkret det som betyr mest for deg ved en jobb.

For hvert spørsmål er det gitt en kort beskrivelse av to ulike jobber. Du skal angi hvilken av disse to du personlig ville foretrukket, hvis du skulle velge mellom dem.

Når du svarer på spørsmålene skal du anta at de øvrige omstendighetene ved jobbene er like. Konsentrer deg kun om de karakteristikkene som er konkret angitt.

7		1
1	•	т

Jobb A			dol	b B
En jobb som betaler godt			En jobb hvor det e for å være kreativ	-
1 2		3	4	5
Foretrekker sterkt A	Foretrekker såvidt A	Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

Jobb A			dol	b B
En jobb hvor det forventes at du ofte må treffe viktige beslutninger.			En jobb med mang mennesker å arbei	
1 2		3	4	5
Foretrekker sterkt A	Foretrekker såvidt A	Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

Jobb A			dol	b B
En jobb hvor dem som arbeider best får størst ansvar.			En jobb hvor lojale med lengst ansien ansvar.	
1 2		3	4	5
Foretrekker Foretrekker		Nøytral	Foretrekker	Foretrekker
sterkt A	såvidt A		såvidt B	sterkt B

Jobb A			Job	b B
En jobb som tilhører en organisasjon med økonomiske problemer, og som kanskje må legges ned innen ett år.			En jobb hvor du iki skulle ha sagt verk planleggingen av a på prosessene/me benyttes i arbeide	en på rbeidet ditt eller todene som skal
1 2		3	4	5
Foretrekker	Foretrekker	Nøytral	Foretrekker	Foretrekker
sterkt A	såvidt A		såvidt B	sterkt B

Jobb A			Job	b B
En veldig rutinepreget jobb.			En jobb hvor meda ikke er særlig venn	
1 2		3	4	5
Foretrekker	Foretrekker	Nøytral	Foretrekker	Foretrekker
sterkt A	såvidt A		såvidt B	sterkt B

Jobb A			Job	b B
En jobb hvor sjefen din ofte er veldig kritisk til deg og ditt arbeid foran andre mennesker.			En jobb som hindr en rekke ferdighet hardt for å oppnå.	er du arbeidet
1 2		3	4	5
Foretrekker Foretrekker sterkt A såvidt A		Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

7.7

Jobb A			Job	b B
En jobb hvor sjefen din respekterer deg og behandler deg rettferdig.			En jobb som konst muligheter for å læ interessante ting.	
1 2		3	4	5
Foretrekker Foretrekker sterkt A såvidt A		Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

Jobb A			dol	b B
En jobb hvor det er en reell fare for at du kan bli sagt opp			En jobb med få mu utfordrende arbeid	-
1 2		3	4	5
Foretrekker sterkt A	Foretrekker såvidt A	Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

A ddoL			Job	b B
En jobb hvor det er en reell mulighet for å utvikle nye ferdigheter og til å stige i organisasjonen.			En jobb som gir m svært gode frynse	_
1 2		3	4	5
Foretrekker Foretrekker sterkt A såvidt A		Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

Jobb A			Jot	b B
En jobb med lite frihet og selvstendighet til å gjøre arbeidet på den måten du mener er best.			En jobb hvor arbei dårlige.	dsforholdene er
1 2		3	4	5
Foretrekker sterkt A	Foretrekker såvidt A	Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

7.11

Jobb A			Job	b B
En jobb med godt og tilfredsstillende "team-work".			En jobb som i høye mulighet til å bruk ferdigheter.	
1 2		3	4	5
Foretrekker sterkt A	Foretrekker såvidt A	Nøytral	Foretrekker såvidt B	Foretrekker sterkt B

A ddoL			Job	b B
En jobb som tilbyr få eller ingen utfordringer.			En jobb som kreve isolert fra dine me	
1	2	3	4	5
Foretrekker	Foretrekker	Nøytral	Foretrekker	Foretrekker
sterkt A såvidt A			såvidt B	sterkt B

8.4 Calculation of growth need strength score

Part 1:

Question 6.2 to 6.11are converted to a 7 point by subtracting 3 points from each answer. Then we find the average result from section 6 by adding the modified scores together and divide by 6.

Part 2:

To convert section 7 to a seven point scale the following procedure must be followed:

Question 7.2, 7.3, 7.4, 7.6, 7.8, 7.9, 7.12 add 6 to each score. Then calculate the total and add to the total of Question 7.1, 7.5, 7.7, 7.10, 7.11. Divide the combined total with 12, and multiply this figure with 1.5. The last step is then to subtract 0.5 from the figure.

Part 3:

The growth need strength score can then be calculated by adding the figure from part 1 to the figure from part 2 and divide by 2.