



Making sense of and reacting to Organizational change

A descriptive study of how change recipients make sense of and react to an organizational change initiative

Frithjov Angel Nerby

Supervisor: Inger G. Stensaker

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NORWEGIAN SCHOOL OF ECONOMICS

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EXECUTIVE SUMMARY

The purpose of this study was to gain insight in how employees in an international energy company made sense of and reacted to an organizational change initiative. Furthermore how such responses to change might affect the implementation of the change initiative.

The studied change concerns the introduction of a new management system platform. Existing literature highlights employees' reacting or responding to change in various ways, and that this in turn will have effect on both the change initiative and the organization. This thesis draws on literature on organizational change, sensemaking and reactions to change, while studying employees' responses and reactions to the new management system platform.

In order to examine the research question guiding this thesis, I have studied and analyzed comments submitted by employees in a user survey concerning the management system. The submitted comments are linked to questions answered in a negative manner, thereby revealing only parts of the whole picture in the organization.

Findings suggest a fragmented sensemaking scenario, identifying several different accounts comprehending the management system as *unclear*, *difficult* to use or even *irrelevant* to established working procedures. Furthermore, both *negative* and *ambivalent* reactions are identified. In addition, the findings suggest there is a need for sensegiving present within the organization, as well as the possible occurrence of interrecipient sensemaking in order to comprehend the management system.

Drawing on existing literature, the findings are linked to possible organizational responses to change. This suggests implications for the managers who are to carry out the further implementation of the management system.

PREFACE

This thesis is written as part of the Master of Science in Economics & Business

Administration at the Norwegian School of Economics. It concludes a degree with

specialization in Strategy & Management, with a special emphasis on organizational

change.

The thesis furthermore is written as part of the business-oriented research program,

FOCUS, at the Norwegian School of Economics. Participating in the FOCUS program has

been a privilege. I have been given the opportunity to study my preferred field of

research, organizational change, in an actual business setting. The findings from this

study will hopefully contribute to further developing, even if just the slightest, one of

Norway's biggest corporations. For this, I am both proud and grateful.

I would like to thank my supervisor, Inger G. Stensaker, for her great guidance, valuable

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Bergen, February 2014

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3

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
PREFACE	3
1. INTRODUCTION	6
1.1 DISPOSITION	7
2. THEORY	8
2.1 ORGANIZATIONAL CHANGE	8
2.1.1 Organizational responses to change	8
2.1.2 The roles in change	9
2.1.3 REACTIONS TO CHANGE	10
2.2 SENSEMAKING	11
2.2.1 DEFINITION AND CONCEPT	11
2.2.2 SENSEMAKING IN RELEVANCE TO CHANGE MANAGEMENT	12
2.2.3 SENSEMAKING AS A COGNITIVE PROCESS	13
2.2.4 SENSEMAKING AS A SOCIAL PROCESS	14
2.2.5 THE CONCEPT OF SENSEGIVING	15
2.2.6 THE INTERACTION BETWEEN SENSEMAKING AND SENSEGIVING	16
2.2.7 THE CONCEPT OF SENSEBREAKING	16
2.2.8 THE RELATIONSHIP BETWEEN INDIVIDUAL AND ORGANIZATIONAL RESPONSES	
2.3 SUMMARY	17
3. RESEARCH SETTING	19
3.1 STATOIL ASA	19
3.2 THE MANAGEMENT SYSTEM	20
3.2.1 NEW MANAGEMENT SYSTEM PLATFORM	20
3.2.2 THE MANAGEMENT SYSTEM USER SURVEY	20
3.3 CORPORATE CHANGE INITIATIVE	21
4. METHODOLOGY	22
4.1 RESEARCH DESIGN	22
4.2 DATA COLLECTION	22
4.2.1 Data Sources	23
4.2.2 Sample	24
4.3 Data Analysis	24
4.3.1 Preparation of the data	24
4.3.2 INITIAL ANALYSIS OF THE DATA	25
4.3.3 Comprehensive analysis of the data	26
4.3.4 Illustrations on the relationship between concepts, categories and	CODES 30
4.4 RESEARCH QUALITY	33
4.4.1 VALIDITY	33
4.4.2 Reliability	35
4.5 RESEARCH ETHICS	35
5. ANALYSIS	37
5.1 Sensemaking outcomes	37
5.1.1 USABILITY	37
5.1.1 OSABILITY 5.1.2 CLARITY	47

5.1.3 Relevance	47
5.1.4 SUMMARY	53
5.2 REACTIONS TO CHANGE	54
5.2.1 Emotional reactions	54
5.2.2 Behavioral reactions	56
5.2.3 COGNITIVE REACTIONS	60
5.2.4 SUMMARY	64
5.3 THE OCCURRENCE AND NEED FOR SENSEGIVING	64
5.3.1 Support	65
5.3.2 Training	67
5.3.3 Information	70
5.3.4 Understanding	72
5.3.5 SUMMARY	73
5.4 Analysis summary	74
6. DISCUSSION	75
6.1 OUTCOMES OF SENSEMAKING	75
6.1.1 ACCOUNTS OF USABILITY	75
6.1.2 ACCOUNTS OF CLARITY	76
6.1.3 ACCOUNTS OF RELEVANCE	78
6.1.4 SUMMARY	79
6.2 REACTIONS	79
6.2.1 NEGATIVE REACTIONS TO CHANGE	79
6.2.2 Ambivalent reactions to change	80
6.3 SENSEGIVING	81
6.3.1 THE (POSSIBLE) OCCURRENCE OF SENSEGIVING	81
6.3.2 THE NEED FOR SENSEGIVING	82
6.4 CONSIDERATIONS AND POSSIBLE IMPLICATIONS	83
7. CONCLUSION	87
7.1 FINDINGS	87
7.2 IMPLICATIONS FOR MANAGERS	89
7.3 LIMITATIONS OF THE STUDY AND FUTURE RESEARCH	90
REFERENCES	92

1. Introduction

Today, organizations around the world are faced with a growing amount of challenges. Increased globalization, fast paced technological development, and environmental crisis – all pose as challenges in which organizations must respond and adapt. Norway is, also, faced with declining oil prices, which affect both organizations and society. Due to the fast and ever changing environment, organizations need to respond. Thus, organizational change is becoming more important than ever before.

"By any objective of measure, the amount of significant, often traumatic change in organizations has grown tremendously over the past two decades" (Kotter, 2012).

Simultaneously with a growing amount of change, so grows the body of literature on how to manage organizational change. Research and theory on change include how to change, what to change, by whom, why, as well as numerous other approaches and angles. Still, Balogun and Haily (2008) refers to a 70% rate of all change programs as failures. Therefore, it becomes even more interesting and important to gain understanding as to why change initiatives fail. This study aims to shed light on certain aspects that might contribute to explaining part of the image of why change tends to fail. Balogun and Johnson (2005) claim the understanding of how change recipients make sense of change as key in organizational change. Furthermore, Maitlis and Sonenshein (2010) argue that change recipients' emotions may provide valuable insight into their conception of change. In addition, Piderit (2000) suggests understanding employee reactions to change will help in the understanding of how to manage change processes successfully. Therefore, in order to shed further light on its relevance to change, this study will examine individuals' responses to change – both how change recipients have made sense of and reacted to a corporate change initiative. Furthermore, this study will examine how such responses may affect the implementation of a change initiative. The change studied is a pre-phase of a corporate change initiative in Statoil ASA, namely the implementation of a new management system. Thus, I raise the following research question:

How have recipients made sense of and reacted to the new management system? What are the possible implications for implementation of the new management system?

To answer the research question, this study examines the data from a user survey completed by Statoil ASA – "Management System User Survey U13 – Qualitative indepths report". The report consists of a wide range of comments addressing the new management system, from employees across the entire organization. This will provide the opportunity to form a wide picture of how the recipients of change in the organization have made sense of and reacted to the change initiative – that is the new management system. Ideally, I would study the actual implications of the change recipients' sensemaking and reactions, however, the empirical data captures only a "snapshot" in time, and therefore I am not able to study the actual implications. In order to say something about possible implications, this thesis will rely on previous research and theory on sensemaking, reactions to change, and organizational change.

1.1 Disposition

This thesis is built up by the following structure: First, the relevant theoretical background is presented. Following comes a presentation of the organization of study and the contextual features and intentions of the change initiative. Secondly, the methodical approach of research is described. Subsequently, comes the analysis along with findings and results, which are backed up by comments collected from the data. The results of the analysis are then comprehensively discussed in light of presented theory and research. Finally, the conclusion in regards to the research question is presented, followed by the implications for managers, limitations of the study, and suggestions for future research.

2. THEORY

This chapter presents existing literature relevant to the research question. First, literature on organizational responses to change is presented. Subsequent, the roles of change agents and change recipients are presented, followed by reactions to change. Thereafter relevant existing literature on sensemaking is presented, followed by sensegiving and sensebreaking, and lastly, research on the linkage between individual and organizational responses to change is presented.

2.1 Organizational Change

As a broad and general definition of what organizational change is, I look to Jacobsen (2012) who states "an organization has changed when it shows different characteristics at two different points in time" (p. 23).

2.1.1 Organizational responses to change

This study will draw on the framework developed by Lozeau, Langley and Denis (2002), suggesting how the interaction between new ideas and the organization might lead to various modifications of the organization and the change initiative through: transformation, customization, loose coupling, or corruption, as shown in figure 1.

Transformation is when new ideas or change initiatives modify the organization in accordance with the rationale and intentions behind the change initiative.

Customization means both the organization and the change initiative are changed. The rationale and intentions behind the change initiative get altered to fit the organizational context.

Loose coupling can be seen when the organization experiences a superficial adoption of the change initiative, leaving both the organization and the new idea basically unchanged.

Corruption is when change initiatives are implemented without affecting the organization. Instead, the change initiative may have been altered to reinforce previous practices, thus altering the change initiative but not the organization (Lozeau, Langley, & Denis, 2002; Stensaker & Falkenberg, 2007).

Stensaker and Falkenberg (2007) developed this framework further, by suggesting how individual responses can be linked to the organizational responses of transformation, customization, loose coupling, and corruption. Their findings will be presented after reviewing research on sensemaking. The below figure, displaying the four modes and the interaction between the organization and change initiatives, are collected from their article (2007).

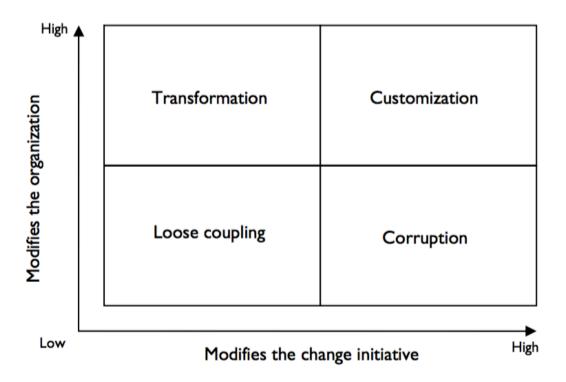


Figure 1 - Organizational responses to change

2.1.2 The roles in change

Change agents

To carry out strategic change, the organization is in need of people facilitating and leading the change initiative. The people fulfilling this role are known as *change agents*,

defined by Balogun and Hailey (2008, p. 2) as the "person responsible for making change happen in any organization". However, it is not necessarily a task fulfilled by one person alone. Most times, especially in major change efforts, a change agent is in need of support from additional change agents, in order to carry out the program (Balogun & Hailey, 2008). Any person within the organization may in principal take on the role as a change agent. However, the nature of the task often calls for persons in power positions, like the CEO; different directors; or managers. Furthermore, change agents may take on different forms, the primary being: *change champion, external facilitator, change action team or functional delegate* (Balogun & Hailey, 2008).

Change Recipients and Stakeholders

In any situation concerning a strategic change initiative, there will be people affected by the very change. *Stakeholders* are defined as the people "who can affect or are affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46). As strategic change initiatives are meant to achieve the organization's objectives, stakeholders will be affected by, or may affect change. Stakeholders are usually grouped into either internal or external - internal stakeholder being the people or groups "inside" the organization, e.g. employees, managers or shareholder; whereas external stakeholders are represented by for example customers, government, suppliers (Balogun & Hailey, 2008). The *change recipients* are, in simplified terms, the receivers of change, or the persons that must adopt and adapt to the change initiative (Balogun & Hailey, 2008). However, in many cases, change recipients may also be facilitators of change, e.g. middle managers, whom both receive and need to adapt to change initiatives from senior management, but also need to help implement the changes amongst the lower level employees. In other words, stakeholders may be change recipients, and vice versa.

2.1.3 Reactions to change

Piderit (2000) states that reactions to change consists of emotional, cognitive and behavioral dimensions, all which may overlap somewhat. In order to link the dimensions of reactions together and provide further insight, she applied *attitudes* from social psychology. Attitudes may explain how the different dimensions vary in valence, i.e. whether they take form as positive or negative reactions. Furthermore, the application of attitudes opened for the possibility of ambivalent reactions, both within and across dimensions, towards change.

The *emotional reaction* deals with thoughts and feelings concerning the change initiative and. It contributes to the development of attitudes toward change, which again affects the change recipient's commitment to change. *Cognitive reactions* to change involve the search for and processing of information aimed at creating motivation towards the change initiative. As a result, the change recipients develops attitudes toward both management and the change process itself. Strategic change initiatives can, in addition, evoke *behavioral reactions* to change, examples being resistance, sabotage, revenge and turnover, but also initiative (Piderit, 2000; Lines, 2005).

Resistance to change is considered the most common of the behavioral reactions and is also the most broadly researched (Stensaker & Meyer, 2008). To carry out a successful change implementation process, management needs to deal with the resistance to change. Lines (2005) has defined resistance as "withholding of information, attempts to delay implementation, and attempting to convince the change agents that the change initiative is unsuitable" (p. 11). Resistance needs to be dealt with differently, dependent on the underlying cause provoking resistance (Stensaker & Meyer, 2012).

At the other end of the scale, however, change might also evoke positive reactions and attitudes, often referred to as *commitment to change* (Balogun & Hailey, 2008). As cited by Neubert & Cady (2001, p. 421) Beer, Eisenstat, and Spector (1990) suggest that a high level of commitment to a [change] program motivates individuals to put forth the effort, initiative, and cooperative behaviors that are required to successfully implement change.

2.2 Sensemaking

2.2.1 Definition and concept

Being a relatively young field of research, the concept of sensemaking in relevance to organizational change is still somewhat understudied. However, since the 1990s an increasing interest for the topic has been driving researchers towards further exploration. The research highlights a critical relevance between sensemaking and organizational change and activity (Gioia & Chittipeddi, 1991; Gioia, et al., 1994; Balogun

& Johnson, 2005; Maitlis, 2005; Weick, et al., 2005; Balogun, 2007). Furthermore, Karl Weick states sensemaking as a critical organizational activity (1995).

Depending on the context, sensemaking has been defined in several different ways. One of the main reasons for deferring definitions has to do with an ontological difference in how sensemaking is regarded – whether sensemaking takes place within or between individuals (Maitlis & Christianson, 2014). The characteristics of these different "schools" of sensemaking will be described in further detail later on in this chapter. To help define sensemaking in a way applicable to this thesis I have turned to Maitlis and Christiansons' extensive review of the literature from 2014, where they have tried to summarize an integrated definition of sensemaking:

"A process, prompted by violated expectations, that involves attending to and bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action, and thereby enacting a more ordered environment from which further cues can be drawn" (p. 67).

In the following I will elaborate on the different aspects of sensemaking, and its relevance to organizational change management.

2.2.2 Sensemaking in relevance to change management

When regarding change management, the perspective of sensemaking has made itself relevant, by presenting an alternative approach to the classical top-down controlled perspective (Balogun, 2006). This perspective of sensemaking contributes to understanding why intended strategies tend to lead to unintended consequences (Balogun & Johnson, 2005). Balogun and Johnson (2005, p. 2) further express this importance "we know from research on sensemaking and cognition that recipient interpretations of change plans, and how these interpretations are mediated by their existing context of action, ways of thinking, and interactions with others, are likely to be key". Furthermore, Maitlis and Christianson states that "when sensemaking or sensegiving fail, so too may a change initiative" (2014, p. 90).

During the organizational change, the context in which the members operate changes, and thus their former meaning has to change. "Explicit efforts at sensemaking tend to occur when the current state of the world is perceived to be different from the expected state of the world, or when there is no obvious way to engage the world" (Weick, Sutcliffe, & Obstfeld, 2005). As stated earlier, sensemaking is triggered by cues in the environment. During change, these cues may be when change recipients encounter ambiguous events or issues that are of some significance to them, often involving threats to taken-for-granted roles and routines (Maitlis & Christianson, 2014).

Research has shown how certain groups, especially leaders, and stakeholders, influence others' understanding of issues. Gioia and Chittipeddi (1991) demonstrated how top leaders make use of sensegiving to influence the sensemaking of the change recipients. Others have pointed at the importance of middle managers, which often fills the role of both recipient and executor of change (Floyd & Wooldridge, 1997), and how they must try to make sense of top managements plan and at the same time give sense to the lower level employees (Balogun & Johnson, 2005). This approach, however, has received criticism for focusing too much on the role played by just one party and forgetting interaction and dynamics between the different parties who engage in the process of sensemaking (Maitlis, 2005). Although not all of the research is directly based on organizational change, the mechanisms provide an important insight.

2.2.3 Sensemaking as a cognitive process

When addressing sensemaking as a cognitive process, it is mostly connected to the "making of sense" within individual (Klein, Moon, & Hoffman, 2006; Louis, 1980; Starbuck & Milliken, 1988). Even though research regarding sensemaking in organizations mostly address sensemaking as a collective and social process (Maitlis & Christianson, 2014) there are some aspects of individual sensemaking interesting when addressing change recipients.

Balogun has referred to the concept of *schemata* as an important element of the sensemaking theory. The concept is defined as "the mental maps or memory models individuals have about their organization and their world more generally" (Balogun,

2007, p. 82). Schemata are essential to sensemaking due to the way they act as "templates against which members can match organizational experiences and thus determine what they mean" (Poole et al., 1989).

Organizational change is seen as problematic to individual's existing schemata, as it tends to undermine and challenge their interpretive frames of reference on how to make sense of the world (Moch & Bartunek, 1990). Tension is thus created between existing, old schemata, and proposed, new schemata, developing a need for sensemaking (Balogun & Johnson, 2004; Fiske & Taylor, 1991).

In organizations we often see a commonality in individuals' schemata, as a result of the need for shared understanding in order to cooperate (Barr & Huff, 1997; Langfield-Smith, 1992). This shared schemata amongst the organizational members may lead to an enacted reality (Weick, 1979; 1995) at group level in the form of routines, rituals, systems, norms, assumptions and beliefs (Balogun & Johnson, 2005)

2.2.4 Sensemaking as a social process

Individuals "work through a process of social construction, whereby they interpret and explain the information that they receive in order to produce what appears to them to be a plausible account of the world to enable action" (Locket, Currie, Finn, Martin, & Waring, 2014).

In addition to the construction of meaning, Weick et al. claim sensemaking may serve as a springboard for action, by turning circumstances into a situation that is explicitly comprehended in words (2005, p. 409). Thus, sensemaking not only occurs inside people's heads on an individual level, but it is also an interactive phenomenon that is affected by communication (Weick et al., 2005). Gioia et al. suggest three points in the quest for meaning in organizational life, which illustrates how sensemaking is turned into action by communication. First, sensemaking will occur when a flow of organizational circumstances are turned into words and salient categories. Second, organizing itself is embodied in written and spoken texts. And third, conversing, reading,

writing and editing are crucial actions that serve as the media through which the invisible hand of institutions shapes conducts (1994, p. 365).

The importance of communication in sensemaking is further backed up Taylor and Van Every "We see communication as an ongoing process of making sense of the circumstances in which people collectively find ourselves and of the events that affect them. The sensemaking, to the extent that it involves communications, takes place in interactive talks and draws on the resources of language in order to formulate and exchange through talk ... symbolically encoded representations of these circumstances. As this occurs, a situation is talked into existence and the basis is laid for action to deal with it" (1999). An underlying assumption of sensemaking is that it emerges from a process of social construction (Berger & Luckmann, 1967). Organizational sensemaking as a social process has been widely studied (Isabella, 1990; Maitlis, 2005; Sackmann, 1991; Sandelands & Stablein, 1987; Starbuck & Stubbart, 1988; Weick & Roberts, 1993), occurring when members of the organization interpret their environments in interaction with others, and thereby creating *accounts* that allow them to comprehend the circumstances and act collectively (Maitlis, 2005). Accounts are seen as discursive constructions of reality that interpret or explain the world (Antaki, 1994).

2.2.5 The concept of sensegiving

When addressing the concept of sensemaking, especially in organizations facing changing environments, *sensegiving* is considered a critical aspect. "Sensegiving is concerned with the process of attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organizational reality" (Gioia & Chittipeddi, 1991).

Sensegiving has been highlighted as a fundamental leadership activity during organizational sensemaking (Maitlis, 2005). However, sensegiving is not only regarded as a leadership activity. Research has shown sensegiving amongst stakeholders to have profound consequences, to affect strategic decision making, and also to have an influence on important organizational processes (Balogun, 2003; Balogun & Johnson, 2005).

Generally, sensegiving is triggered by a perceived or anticipated gap in organizational sensemaking processes (Maitlis & Lawrence, 2007). Furthermore, Maitlis and Lawrence (2007) examined the triggers of sensegiving for leaders and stakeholder, and found that; the leaders engaged in sensegiving when faced with complex sensemaking environments, and stakeholders engaged in sensegiving when faced with a sense of bounded responsibility to the circumstances.

2.2.6 The interaction between sensemaking and sensegiving

Sensemaking and sensegiving do not appear isolated. Gioia and Chittipeddi (1991) found that the two concepts, or processes, takes place in an "iterative, sequential, and to some extent reciprocal fashion", involving both management and stakeholders at several levels, during organizational change. A study performed by Maitlis (2005) showed that different forms of leader and stakeholder sensegiving produced different forms of sensemaking. Also, the very definition of sensegiving, presenting sensegiving as a process which aim is to influence sensemaking (Gioia & Chittipeddi, 1991), suggests a strong relationship between the two concepts.

2.2.7 The concept of sensebreaking

Sensebreaking is not as widely studied as is sensemaking and sensegiving, however, it presents an interesting perspective and a linkage between the two. Pratt (2000, p. 464) defined sensebreaking as "the destruction or breaking of meaning", with the purpose of disruption in individual identity through the creation of a gap in meaning. In other words, sensebreaking aims at breaking down the current meaning of an event, in order to replace it with new meaning. Thus, sensebreaking is preliminary to sensegiving - to give new sense one must first break the old sense down when attempting to influence sensemaking. Sensebreaking can also be seen as a way for leaders to challenge the status quo (Maitlis & Christianson, 2014).

2.2.8 The relationship between individual and organizational responses to change

In their study from 2007, Stensaker and Falkenberg identified five different individual responses to change, constructed through sensemaking: convergent responses, divergent responses, creative responses, unresolved sensemaking, and non-compliance. These interpretive responses were linked to the constructs developed by Lozeau et al.

(2002) – transformation, customization, loose coupling, and corruption – in order to see how individual responses to change influenced and contributed to explaining the organizational responses to change (Stensaker & Falkenberg, 2007).

Convergent responses are when individuals create accounts, and subsequent actions, which are in line with the corporate intentions for the change initiative. They found that for the organization to respond with *transformation* convergent responses were needed on the individual level.

Divergent responses mean the individuals have generated accounts, and subsequent actions, which are not in line with corporate intentions for the change initiative. Divergent responses lead to *corruption* on the organizational level.

Creative responses to change are when individuals further develop abstract ideas, in order for them to fit the organizational context. Therefore, creative responses may keep the initial rationale behind the change initiative, even though alterations are made. This changes both the change initiative, and the organization, thus leading to *customization*.

Unresolved sensemaking means that individuals are unsuccessful in make sense of the change, although attempts have been made. This may result in no restored action. When unresolved sensemaking takes place on the individual level, a *loose coupling* can be seen on the organizational level.

Non-compliance is when individuals generated accounts in line with corporate intentions, but no action followed. Thus, the individuals may know how to change, however, are not willing to. As with unresolved sensemaking, non-compliance can result in *loose coupling* on the organizational level (2007).

2.3 Summary

This chapter has presented theory and research relevant in answering the research question. Here is a brief summary of the concepts presented:

Four organizational responses were presented: transformation, customization, loose coupling and corruption. The responses affect both the change initiative and the organization in different ways.

Change agents are the people responsible for carrying out the change initiative, whereas change recipients are the "receivers" of change whom must adopt and adapt to the change initiative.

Reactions to change were presented to take form either as emotional-, behavioral- or cognitive reactions, however the dimensions overlap somewhat. Furthermore, the dimensions may vary in terms of positive and negative attitudes toward the change initiative.

Sensemaking is concerned with how people interpret and act upon their environment, in order to comprehend ambiguous events, e.g. change initiatives. Through the process of sensemaking, people create accounts, which are constructs of reality that interpret or explain their environments.

Sensegiving means attempting to influence the sensemaking of others. Sensebreaking however, means attempts to destruct or break the meaning of others.

The last concepts presented in the theory chapter were individual interpretive responses to change, and how these may influence the organizational responses to change. The responses presented were: Convergent response, divergent response, creative response, unresolved sensemaking and non-compliance.

3. RESEARCH SETTING

In this chapter, the context and setting for the study is presented. It starts with a brief introduction to the studied company. Then follows more specific information concerning the studied change. Last, the studied change is put in context of an ongoing, larger corporate change initiative.

3.1 Statoil ASA

Statoil ASA is an international energy company, primarily focused on oil and gas production. The company has its headquarters in Stavanger and is involved in operations in over 37 different countries (Statoil, 2016). Statoil has more than 40 years of history and has been one of the most important players in the Norwegian Oil Industry (Statoil, 2014c) The Norwegian government owns 67% of Statoil (Statoil, 2011).

Statoil consists of seven business areas, staff and support divisions, and corporate communications, as shown in the figure below (Statoil, 2014).



Figure 2 - Statoil Organization Chart

3.2 The management system

Statoil ASA operates with a management system accounting for all parts of the organization. The top-most tool in their management system is The Statoil Book, which describes the most important policies and requirements for the entire group. It explains and sets the standards for behavior, delivery, leadership, requirements and expectations (Statoil, 2016b)

On a day to day basis, however, the management system consists of governing documentation (GD), in which the employees needs to follow and apply in their work.

3.2.1 New management system platform

In 2012, Statoil changed the former management system platform APOS, in favor of a new platform ARIS (Vanvik, 2016). The employee's day-to-day management system (MS) now consisted of the main platform, ARIS, where most of the governing documentation (GD) was stored. In addition, some governing documentation was also stored in Docmap, which is also part of the management system.

The main objectives of the management system are increased focus on safety, reliability and efficiency (Statoil, 2014b). These objectives and what they entail may be seen as corporate's intentions with the management system, and are therefore critical to this research.

The change related to the new MS platform, ARIS, may be seen as a minor change initiative compared to the changes to come in Statoil. However, it is regarded as important because it contributed in laying the foundations for current changes.

When addressed in the thesis, the new MS platform will be referred to as the new MS or the change initiative.

3.2.2 The Management System User Survey

The Management System User Survey U13 was a company-wide survey conducted by Statoil in late 2013. It had a response rate of 53%, which was evaluated as good (Statoil,

2014b). The purpose of this study was to provide insight on how the MS was used and conceived by the employees.

The learnings provided by the Management System User Survey report were used in the planning and development of a change initiative, far more extensive than the introduction of the new MS platform.

This thesis builds on the data from the Management System User Survey, to provide even further insight to be used in the ongoing corporate change initiative.

3.3 Corporate change initiative

Statoil has for a long time experienced high turnover and good margins from its operations. These years, however, are over. The fact that the oil industry is experiencing a reduction in oil prices and gradually increasing competition from renewable solutions, calls for a restructuring of the oil companies.

Today, Statoil is therefore in the middle of a major corporate change initiative, consisting of three phases. Phase 1 is over and consisted of the design and planning of the new management system. Phase 2 is what is referred to as MS Roadmap and has involved pilot testing of the change at the production facility of Mongstad. Phase 3 is known as MS Implementation, and will deal with the actual implementation of the new management system. During a five-year period, Statoil aims to ensure that the new management system will be fully implemented and functioning throughout the organization.

The introduction of ARIS as a the new MS platform in 2012 laid the foundations for what is referred to as Phase 1, where a brand new management system was developed (i.e. not the MS referred to in this paper).

4. METHODOLOGY

The purpose of this chapter is to present the methodological research approach applied in this study. First, the chosen research design is presented. Thereafter the collection of data is accounted for, followed by a description of how analysis was performed. Then, the quality of the research is discussed, followed by ethical considerations.

4.1 Research Design

In order to address the research topic in a satisfactory manner, a proper research design is needed. Research design may be regarded as the strategy used when attempting to answer the research question (Saunders, Lewin, & Thronhill, 2012). I found that a *descriptive* research design would be best fit for this study as the problem is structured and well understood (Grønhaug & Ghauri, 2010).

A descriptive research design is characterized by structure, precise rules, and procedures (Grønhaug & Ghauri, 2010). The structure in this study is clear: examine and describe the content of interest within the data. Thereby applying clear rules and procedures.

Furthermore, this study aims at describing textual data and is, therefore, *qualitative* in nature (Sandvik, 2015a). Thus, the study takes form as a *qualitative description*. "Qualitative descriptive studies have as their goal a comprehensive summary of events in the everyday terms of those events" (Sandelowski, 2000, p. 334).

4.2 Data Collection

Through my participation in the FOCUS research program at The Norwegian School of Economic, I gained access to the data. Statoil, which is one of the partners in the research program, had already collected and analyzed both quantitative and qualitative data through their "Management System User Survey U13". Statoil wanted FOCUS to do a more theoretically oriented analysis of the Management System User Survey U13 – Qualitative in-depth report". And so I was given the task of providing theoretical perspectives on the collected data.

4.2.1 Data Sources

There are two different types of data sources: primary and secondary. Primary data is collected in for the purpose of the research problem, whereas secondary data is originally collected to serve other purposes that may differ from the study (Grønhaug & Ghauri, 2010). Therefore, the data in this study is secondary.

Primarily, this research is based on the data provided by the "Qualitative in-depths report". However, information is also on Statoil in general through their website and "The Statoil Book", in order to put the change initiative into context – this may also be regarded as secondary data. In addition, some information has also been collected regarding the management system, which was not provided by the report, from Statoil employee Olav Vanvik. This may be regarded as primary data as it was collected for the purpose of this study. The two latter sources of data have only provided certain details concerning context, thus, the focus here after will address the "Qualitative in-depths report" primarily.

Possibly the main advantage of using secondary data is that it provides great savings in time when it comes to collecting data (Grønhaug & Ghauri, 2010). Grønhaug and Ghauri suggest "data collected by an international organization ... are of high quality and reliable as they are collected and compiled by experts using rigorous methods" (2010, p. 94), as another advantage to secondary data. There are, however, disadvantages to using secondary data as well. What may be considered the most pressing problem related to secondary data is the fact that the data is not collected for the purpose of the research. However, as the research topic aims at describing how recipients made sense and reacted to the change initiative, through a content analysis, the mentioned disadvantage is not regarded a big problem.

Another challenge related to working with secondary data is the distance from the recipients and their comments. It is difficult to comprehend the comments in the manner they are written and thereby meant to be read, by the recipients, in regards to emphasis, pausing, voice, i.e. all of the non-textual aspects of the comments.

4.2.2 Sample

The sample in this study refers to the people who responded to the "Management System User Survey U13". More precisely: a particular group of the respondents to the user survey.

The user survey was passed out to all levels at every part of the company, resulting in approximately 4828 respondents. As such it may be seen as a *simple random sampling*, considering the whole population was given equal chance of responding (Grønhaug & Ghauri, 2010). This sample provides the basis for the *quantitative* report of the user survey. The basis for the *qualitative* report, which I am analyzing, is, however, the comments provided by the recipients. Approximately 3500 comments were submitted, with a representative selection included in the qualitative report.

The nature of the data

There is one large issue concerning the nature of the comments that will affect the entire study and must therefore be addressed properly.

Only the employees who answered "unsatisfactory" to certain questions in the survey were given the opportunity to provide comments.

"Unsatisfactory" meaning the answers that are conceived as negative by the design of the user survey, e.g. "Q: Do you agree that the management system enables high efficiency? A: Seldom". Thus, the data tend to be overall negative towards the new MS. Therefore; the analysis will be based solely from one point of view: the ones displeased with the change. This raises several threats to the research quality, which will be discussed later.

4.3 Data Analysis

4.3.1 Preparation of the data

The data received from Statoil was gathered in the "Management System User Survey U13 – Qualitative in-depths report". The report is structured in chapters of categories

identified by Statoil's own analysis, and also related to the quantitative questions from the survey. Each chapter contains comments related to that chapter.

It is important the data be independent of and unlinked to Statoil's analysis, to avoid influence and bias from Statoil's interpretations. Thus, it was necessary to extract the raw data (the comments) from the report. By copying the comments from the report PDF into a separate, 50 page Word document and then randomizing the order of comments, I had a new set of "raw data" independent of the Statoil report. Some comments, however, were weeded out in the extraction process. Those were the comments related to question where only a small percentage of the recipients had answered unsatisfactorily. The reason for this choice being that those particular comments represented only a small minority of the organization, and were thus not fit to describe the general conception of the employees.

4.3.2 Initial analysis of the data

Initially, a rough perusal of the "Qualitative in-depths report" was performed, taking loose notes in order to remember certain remarks. This review concluded in the necessity of an extraction of raw data, as described above.

The second step of the analysis was to perform a fine-grained read-through of the data, making notes of both theoretical observations and technical obscurities. According to Sandvik (2015b) reading through the data and searching for central themes should help give an overview of the data.

Reading the data in regards to theoretical observations, allowed for examination of the possibilities of associating the data to sensemaking. After the read-through I decided to keep the sensemaking lens as the main perspective, as I discovered that the data might shed light on how the recipients made sense of the new management system. In addition, elements were discovered that would better be described as responses or reactions to change, rather than sensemaking. Thus, a theoretical approach regarding reactions to change, as well as the sensemaking perspective, was integrated into this study.

With technical obscurities, means issues or elements in the data that needed further explanation. To explain these obscurities, it was necessary to go back to the initial Statoil report for answers, or in some cases make contact with Statoil to clarify certain elements. Most of the obscurities were related to abbreviations and technical definitions.

4.3.3 Comprehensive analysis of the data

As stated by Grønhaug and Ghauri (2010, p. 199) "a key – if not *the* key – purpose of analysis is to understand and gain insights from the collected data". The amounts of data, however, were overwhelming, as is often the case with qualitative data. Therefore, it proved difficult to gain understanding and insight from mere reading. To more easily comprehend the data, the principles of a content analysis was applied (Elo & Kyngäs, 2007)

Content and template analysis

Content analysis is a method of analyzing written data (Cole, 1988). "The aim [of a content analysis] is to attain a condensed and broad description of the phenomenon, and the outcome of the analysis is concepts or categories describing the phenomenon" (Elo & Kyngäs, 2007). This bears resemblance to a template analysis. A template consists of codes, categories, and concepts representing the themes found in the data (King, 2004). The process of template analysis usually starts with coding, then follows categorization and lastly conceptualization, which eventually may lead to linkage to or development of theory. The relationship and nature between these constructs are shown in the below figure, obtained from Saldana (2013, p. 13).

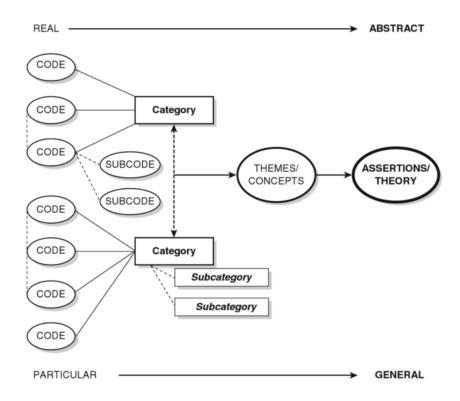


Figure 2 - A streamlined codes-to-theory model for qualitative inquiry

Codes are words or small phrases (Saldana, 2013) which serve as shorthand devices used for labeling, separating, compiling and organizing data (Grønhaug & Ghauri, 2010). When arranging the data in systematic order by applying codes, one is codifying (Saldana, 2013). Categorization is when units of data are classified and assigned to represent a more general phenomenon (Grønhaug & Ghauri, 2010). Comparing and consolidating the identified categories in various ways, "you begin to transcend the "reality" of your data and progress toward the thematic, conceptual, and theoretical" (Saldana, 2013, p. 11). Grønhaug and Ghauri have referred to this last stage of the process as abstraction (2010, p. 201), which is in correspondence with Saldana's' model (figure 1).

Executing the analysis

In the process of coding the data, what is referred to by Gibbs (2007) as *data-driven coding*, was applied. This is an inductive and open style of coding, as it is not based upon preconceptions or theory. Open coding should be an adequate starting method as the goal is to describe the data. Though issues of both sensemaking and reactions might exist, as was indicated after conducting the initial analysis, it was important that this

would not influence further work. To avoid misunderstanding, a comment found out of context needed to be reassessed and checked back to the original category and context in the Statoil report. This in order to assign it with a meaningful code. Furthermore, comments that were too business specific or technical were ruled out. As soon as assigned with a code, the comments were pasted into an Excel spreadsheet under that specific code. Codes continuously needed to be altered or redefined. Comments moved back and forth between suiting codes, and then codes were altered again and so on. The process moved back and forth until all comments were satisfactory labeled with open codes, describing the essence of the comments. During the coding process, some codes were attached to several comments, whereas others only attached to one. The rows were color-mapped in Excel to easier distinguish between codes with several comments, some comments, and few comments. Thus began the process of looking for patterns.

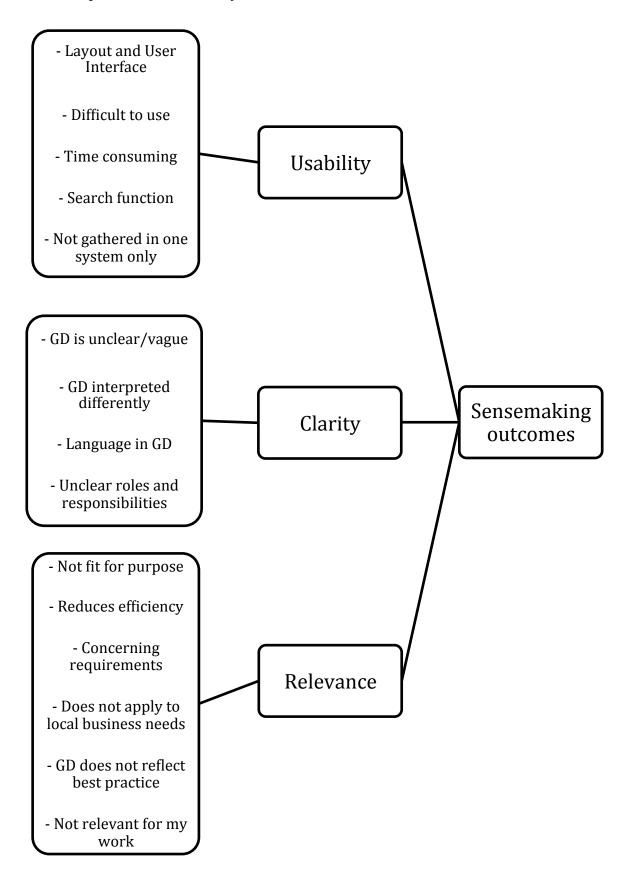
At first, the amount of codes was too large to comprehend in its current form in the Excel spreadsheet. By printing a physical document with all the codes, the problem was solved. The document was cut producing "puzzle pieces" – all containing a single code. This way it was easier putting different pieces together, in search for sensible categories. As with the codes, the initially suggested categories had to be categorized and recategorized over again. During the process, some data also needed re-coding for the puzzle to fit. This re-coding however, was conducted by *concept-driven coding*, which is more deductive in nature than is open coding, as it is rooted in theoretical concepts (Gibbs, 2007). Eventually, ten categories were extracted from the coded data: usability, clarity, relevance, support, training, information, understanding, emotions, behavior, and cognition. In the process of categorization some of the codes were ruled out, and thereby reducing the data material (this concerned mainly codes with very few comments attached to them). All of the categories now made sense in regards to the proposed literature. Thus began abstraction and the search for higher-order concepts.

When searching for suitable concepts, it was important to view the categories thoroughly in light of presented theory. As this is a descriptive analysis, it meant searching for concepts in which the categories could be described, and vice versa. This resulted in categories being divided into three concepts I found to be interesting: how recipients made sense, recipients' reactions, and the need for sensegiving.

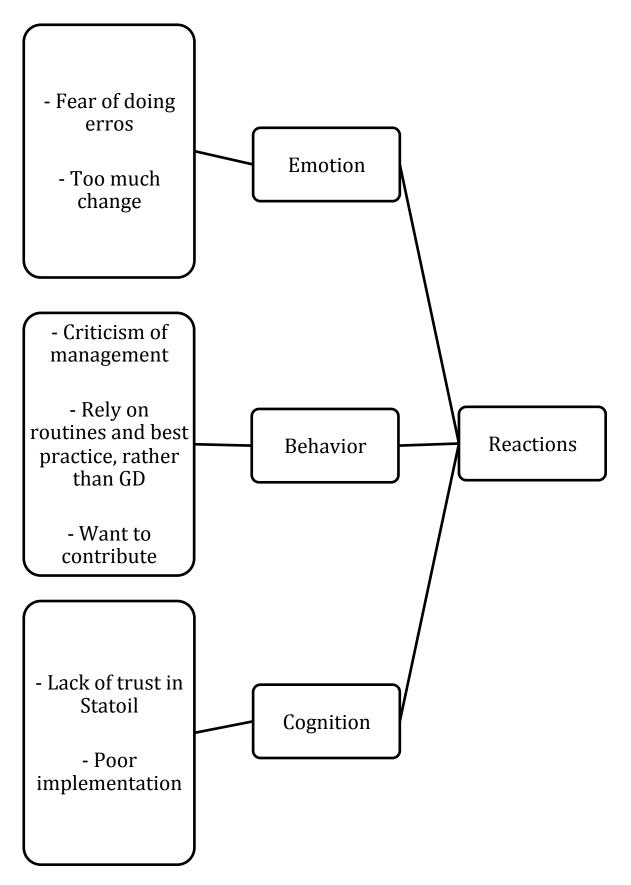
I believe the constructed concepts, categories, and codes may shed light on as to how recipients made sense of and reacted to the change, as well as valuable insight on how this might affect implementation and of the MS. Thus, it is in accordance with the research question. The insights gained from content analysis of the data material will thereafter be viewed in light of previous research and theory in order to gain further insight on implications for implementation of the change. Thus, this final part takes on a more deductive approach. Special emphasis will be put on the work of Stensaker and Falkenberg (2007), and their exploration of the linkages between individual responses to change and organizational responses to change.

4.3.4 Illustrations on the relationship between concepts, categories and codes

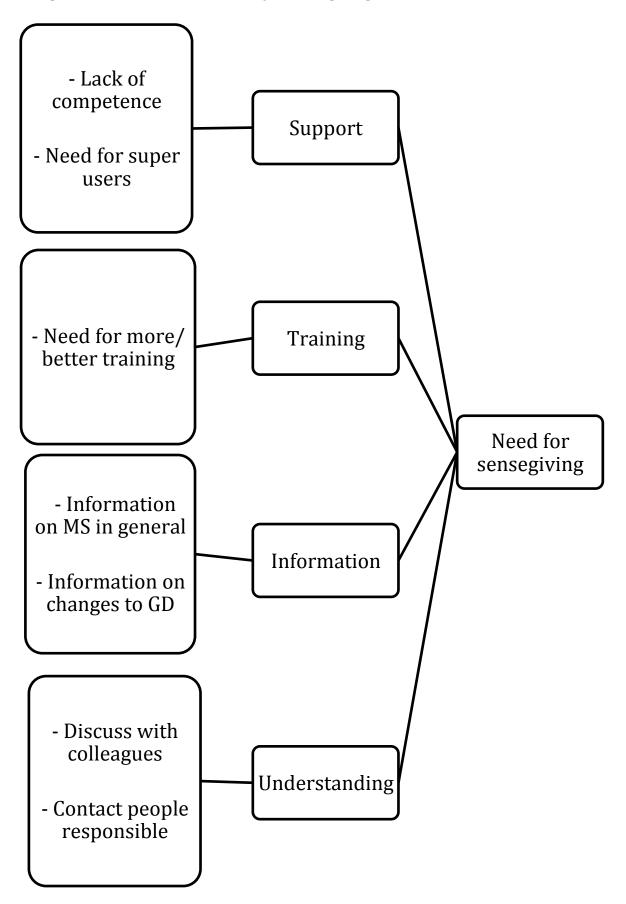
How recipients made sense of the new MS



Reactions to change (on the new MS)



The possible occurrence and need for sensegiving



4.4 Research Quality

When addressing and evaluating quality in qualitative research, it is important to bear in mind there has been certain disagreement amongst researchers. The most common measures or dimensions in research quality – validity and reliability – were, during the 1980's, rejected by many researchers as applicable for qualitative research (Morse, Barrett, Mayan, Olson, & Spiers, 2002). This rejection has, however, been reconsidered, and validity and reliability are now regarded part of the qualitative research paradigm (Golafshani, 2003). This part discuss the degree of validity and reliability of the research.

4.4.1 Validity

The validity of research concerns whether what is measured actually is what is supposed to be measured. Or in the case of this study, am I describing what was meant to be described? Grønhaug and Gharui provide four types of validity often emphasized in qualitative research: descriptive, interpretive, theoretical and generalizable (2010).

Descriptive validity

To what degree is the actual description true? In this study, it will refer to the degree in which the data actually captured the notion regarding the management system. There are mainly two issues concerned – one enhancing descriptive validity, the other threatening it. First and foremost, I believe descriptive validity to be enhanced by the fact that data has been collected from a large amount of people and thereby capturing the actual beliefs, feeling and notions of the recipients. However, recipients who answered the survey questions did so in an unsatisfactory manner, thus, only providing parts of the whole picture. Consequently, reducing the descriptive validity of the study. In order to address this problem the nature of the data is clearly stated early in the thesis.

Interpretive validity

How good is the interpretation, and is it the "correct" one? This will primarily count for the analysis of the data as the discussion is more suggestive and speculative. The discussion is however also affected, being based on the interpretation of the data. Whether the interpretation of the data is correct or not is not easily accounted for. The following will present the main threats to the interpretive validity of this study, followed by strategies that will deal with these threats to enhance interpretive validity. First and foremost, a threat may be the meaning I derive from the comments during the analysis.

The description of recipients' conception is also my own interpretation, and thus subjective. This interpretation may be biased by, for example, the wish to find satisfying or interesting results from the data, and, therefore, poses as a threat to interpretive validity. In order to enhance this, the analysis is supplied with several comments as examples of my interpretation, making the reader able to decide for him or herself. In addition, my supervisor, Inger Stensaker, would, as an experienced researcher, have been able to tell whether the interpretations were too biased, reviewed the interpretations. Another issue possibly reducing interpretive validity is in regards to the coding process. As I am working on this thesis alone, I have not been able to cross check my coding with another person, which may have enhanced the quality of the study. This poses a threat to the thesis' interpretive validity.

Theoretical validity

Is the suggested "theory" of explanation adequate? I review this issue as to whether the theoretical lens through which I have analyzed the data is adequate, and also to what degree theoretical explanation of interpretations is adequate. First, in descriptive research, many different theoretical approaches may be suitable, depending on what you wish to describe. Therefore, I believe sensemaking and reactions to change to be suitable theoretical lenses for this research. Assuming that the suggested theoretical descriptions hold true, the discussion chapter, will link the findings with previous research on the subjects of sensemaking and reactions to change. Thereby underpinning the descriptions and explanations, and thus increasing the validity of suggestions and statements.

Generalizable validity

To what extent may the findings be generalized to another setting? Since the aim of the study is to explain what is happening in this very company and context, generalizable validity may not be of equal importance compared to other types of validity. However, generalizable validity may be strengthened by the number of recipients in the study. Also, the recipients are from several different departments, spread across different nations, making the findings generalizable through many different settings. I believe therefore generalizable validity to be high in this study.

4.4.2 Reliability

Reliability concerns the trustworthiness of the study, and whether irrelevant conditions may have affected the results (Saunders, Lewin, & Thronhill, 2012).

The data used in this study was collected via a company wide user survey, performed by a large international organization. All employees were faced with the same opportunity of participating in the user survey, and everyone faced the same questions. This reduces the change of irrelevant conditions affecting the data, and thereby contributes to increased trustworthiness of the data collected.

In order to comprehend the overall reliability of the study, it is however important to consider how the collected data is treated and if in that process trustworthiness is affected. The way in which data was treated was addressed in the section evaluating interpretive validity. Here, both subjectivity and biases may have influenced how data was interpreted, thereby raising a threat to trustworthiness as well. However, as findings are presented together with comments, the study's trustworthiness is also increased.

In summary, even though trustworthiness may decrease somewhat due to subjective interpretations of data, the way in which data was collected enhances trustworthiness. As interpretations are presented along with data, reliability of the study seems satisfactory.

4.5 Research Ethics

How your choices as a researcher safeguard those subject to your work and those affected by it is important to consider (Pedersen, 2015). I have identified four important measures in which I will look after ethical considerations within my research.

Firstly, research ethics is proposed as important when entering the FOCUS research program. In order to participate in the program signing a declaration of confidentiality regarding FOCUS' research and it's partners' interests was needed. Furthermore, to gain access to the data material and information provided by Statoil, I had to sign another declaration of confidentiality, specifically design for Statoil.

Second, Statoil gathered the data provided in the "Management System User Survey U13" themselves. It is, therefore, reasonable to assume Statoil considering the rights and

safety of their own employees. This is demonstrated through a completely anonymous user survey, both to Statoil and myself. Thus, the employees' identity is safeguarded, and none of the comments may be linked back to particular individuals.

Third, when providing the data from the user survey, Statoil trusts me with classified information. In respect for the data and trust given by Statoil, I have carefully handled the documents, by, for example, never working directly with them in public places or discussing the information with outsiders.

Fourth, the limitations of my study have been carefully addressed, specifically in regards to the nature of the data. Hence reducing the risk of misunderstands the findings and its consequences.

5. Analysis

This chapter presents the analysis and findings related to the data material. It is structured according to the codes, categories and concepts presented in the last chapter. Presented alongside the analysis are representative comments from the data set. The comments, which originally were in Scandinavian and English, have all been directly translated to English in order to enhance readability of the thesis. At the end of the chapter, a summary of the findings from the analysis is presented.

5.1 Sensemaking outcomes

How the recipients made sense of the new management system, I found, best to be described through the terms of usability, clarity, and relevance. Overall the recipients are not overwhelmed by the new system, which is to be expected due to the nature of the data.

5.1.1 Usability

The category of usability is described through the recipients conception of how easily they find the physical usage of the new system. Identified as the main points of issue are the MS' layout and user interface, general usage, search engine, time consume and centralization of GD. In one of the comments, the main issues are summarized in clear language from one of the recipients, however without suggestions for improvements – which is most often the case throughout the data.

Difficult to use. Difficult to find. Difficult to navigate. Difficult to search.

Layout and user interface

In general, the recipients conceive the layout and user interface as poor, for various reasons. As layout and user interface are both visual and comprehensible, it will be easy for the recipients to discover differences from the last management system, which was already rooted in the individuals' schemata. Thus, visual deviations from previous schemata will contribute in determining how the recipients have made sense of the new layout.

It is visually tragic, and far inferior to how APOS was

Here, the recipient impression of the new layout is inferior to the layout of the previous management system. New accounts seem to have developed in relation to the previous schemata, making the recipient displeased with the visual profile of the new MS. Also, the articulation in the comment indicates a strong negative conviction in the recipient, using words like "tragic" and "far worse". This indicates certain frustration by the recipient. Such frustration with the visual layout can also be seen in other comments:

(...) layout in ARIS is very unprofessional

And

You need to change the layout!

Although these comments do not give indications about the recipients' previous schemata, the message is clear, as is the sense made. The three previous comments all state in a bombastic manner the conception of the MS layout as poor. Others again have addressed the layout making the new MS boring to look at; hence, the sense made is "boring" due to the bad layout. Closely related to the visual layout of the MS is the previously mentioned user interface, which also falls victim to recipients' poor appreciation.

This process display of boxes and arrows have made it impossible to navigate and comprehend. Not very user friendly

The sense made from the new user interface is a system not conceived as user-friendly. In most cases described as a result of navigation problems due to the many "boxes and arrows". It seems the recipients have developed new and stabilized accounts in which the new layout and user interface is conceived as poor. This conception might work as an obstacle in terms of using the new MS, consequently presenting a problem to management's intentions.

38

Difficult to use

From the comments, I find clear indication that the recipients find the new MS difficult to use. Elements that repeated are navigation problems, the complexity of both the system and the GD, and problems in finding the documents needed. Even though this is closely related to user interface, the concepts are different on several points. The user interface seems more concerned with the visual presentation of the MS, and thus more related to layout, whereas comments coded as usage address the physical use of the system. Usage, is however closely related to time consume, which will be discussed later.

ARIS is a maze usually. It can be very difficult to find the correct process or documents. You have to go through so many process diagrams before you find anything.

The phrase "maze" is repeatedly used as a description of the new MS, clearly indicating navigation problems. From theory, we know that unresolved sensemaking might be an outcome of the sensemaking process. The description of "maze" might indicate an unresolved conception of the new system among the recipients. However, as can be seen from the above comment, the reason for ARIS being addressed as a "maze" is clearly accounted for, thus indicating that the recipient has made sense of the new MS but are displeased with the structure. The next comment might further back up that sense also has been restored regarding the MS.

It is a good system but can be hard to navigate if you are not sure of the document names.

Here, the system is conceived as "good", suggesting that the recipient has developed new accounts in which the new system makes sense to the recipient, even though there are reasoned statements on problems with navigation. Unfortunately, this is one of few examples indicating an almost positive restored state of mind. Most of the data are either indicating unresolved sensemaking about the practical usage of the system,

I feel this system is very flawed, far to complex

Or restored sense with drastic negative remarks on its usability.

ARIS is very comprehensive and thotough knowledge is required to be comfortable with the maneuveration. This is time consuming when Fast Track processes are not facilitated.

Time consuming

As demonstrated in the last comment, the complexity of ARIS makes the system be perceived as very time-consuming. The data presents a range of comments addressing the issue of MS being time-consuming.

Even simple work can take long time and demand much resources.

In relevance to sensemaking, time consume might contribute to, or in some cases be the reason for, the recipients not using the system.

Now I don't look for governing documents because it would slow down my work.

The sense made is that the use of GD will slow down the recipient's work, leading to the action of not using GD at all. Though not using GD due to time consume is stated in some of the comments, the nature of the data does not allow generalizing this problem. However, knowing there is a broad agreement among recipients that MS is time-consuming indicates a problem which in worst case might lead to the recipients not using the system, as shown in the comment above. As to the reasons for MS being time-consuming, the most common argument provided is the complexity of MS. As to why the recipients find MS complex I can only speculate – either the system actually is too complex, or the recipients have not received adequate training.

It is too complex, and time-consuming to use

However, whatever the reason, the schemata of MS as time-consuming will most definitely prove to be a problem in achieving the goal of employees using MS on a habitual basis.

Not gathered in one system only

Another repeating remark on how the recipients have made sense of the new MS has to do with the centralization of the GD. According to the recipients, they find the use of MS difficult and confusing as a result of the governing documentation being scattered across several different systems.

It is also a HUGE problem that not all the governing documentation is located in ARIS, some are still in DocMap etc.

It might prove as an obstacle in successfully developing new accounts that make sense when employees struggle in their interpretation of the new system. However, signs that sensemaking has occurred despite the lack of centralization can be found.

I believe that we have a very good management system but it would be easier to have only one system instead of Aris+Docmap+....

To this recipient the new MS makes sense and is even perceived as "good", indicating that the system is in use. Furthermore, by using the system, the recipient interpret that a centralization of GD would make more sense than the current structure. From the range of comments addressing GD not being gathered in one system only, it seems that the sense made acknowledges the need for the system, but there is great room for improvement.

Search function

Closely related to the centralization of governing documentation, is the search function integrated into MS. When the employees are not able to find the relevant GD, they turn to the search function, which in many cases have proven a great disappointment.

The search function in ARIS is very bad. Often there are out of date documents. No reference to the newest version. I often end up in DocMap without qiute understanding why

Since the MS already is conceived as both complex, time-consuming and difficult to navigate in, the search function is seen as crucial to the recipients overall conception of MS' usability. A well functioning search engine might become a great attribute to those who are not very familiar with MS, or for those that for some reason are short on time. Thus, recipients discontent with the search engine should be addressed as problematic, as it may contribute to both non-restored sense and no restored action in employees' accounts of the new system.

"THE SEARCH FUNCTION IS USELESS IF YOU DO NOT USE THE RIGHT TERMINOLOGY
AND THE SYSTEM IS NOT AT ALL INTUITIVE"

In light of today's digital society expectations of a search engine are likely to be high. Therefore, in regards to the search engine, the recipients previous accounts are not shaped only by the previous management system, but by search engine knowledge in general. Therefore, to restore sense when faced with a new search engine might be hard, but equally important.

The search functionality should have Google standards.

... the search engine on Entry is so bad it is almost embarresing Statoil doesn't have anything better.

5.1.2 Clarity

Another major category appearing when describing how the recipients have made sense of the new MS is the systems clarity. Clarity aims to explain how easy it is for the users

to understand the GD's, and thus the function of the management system. Identifying this category is that GD is unclear/vague, has conflicting requirements, difficult language, poor language, differing interpretations, and unclear roles and responsibilities.

GD is unclear/vague

One of the most common issues raised by the recipients has to do with GD being unspecific and vague. I find obvious examples of confusion among these data – some recipients claim the GD lacks detail, whereas others wish for GD to take on a more "guiding" nature, which is conflicting with the cry for more details. This conflict might have to do with different backgrounds and assumptions among the employees, which again might lead to different sensemaking processes and development of different accounts. However, come to a common understanding, or the creation of shared accounts, the employees seem to comprehend the GD as both vague and unclear.

I think the governing documention is to vague in general to describe the highly specific work tasks of my daily work, i.e. very little influence

When the sense made from GD conceives it to be too vague in use of daily work tasks, the resulting action may take form as not using the GD as implied above. The notion of vague GD leading recipients to not using it is further backed up in data material.

I find the govenning documents sometimes to vague to give more than an idea of direction rather than as a real use

However, the underlying mechanisms resulting in recipients addressing GD as vague remains unknown. If recipients are not using GD, it might be due to any number of reasons, but they make sense of themselves not using GD because it is too vague. Thus, the recipients new account address GD as vague. The other major issue related to unclear GD concerns a "wish" for the documentation to take on the form of guidelines rather than directions. The fact that some address the GD as too vague and demand

more details, and yet others claim it to be too directing, leads me to the conclusion that GD is perceived as unclear. In the examples concerning guidelines rather than directions, The sense made is that GD actually is guidelines, and the employees seek recognition for using them as guidelines. In other words, this can be seen as an outcome of sensemaking, where both sense and action are back in sync, however, possibly not in the manner wanted by management.

GD interpreted differently

In close relation to unclear and vague documentation the recipients often find the documents open to subjective interpretation. Individual sensemaking has taken place, leaving the employees to interpret the documentation in different ways. The speculation, therefore, leads to question whether the recipients have created shared accounts, accepting that GD is open for interpretation, or if they have yet to find collective sense in the new system.

It is difficult to get concrete answers on the interpretation of the different requirements.

They get interpreted differently in regards to different experiences people have!!

In the above example, the recipient claims to have difficulties in getting concrete answers as to what the documentation requires, indicating that other recipients' interpretations diverge from the sense this recipient has already made. The frustration revealed in the articulation further indicates that a collective sense accepting different interpretations is yet to be made.

It is a lot of general requirements, therefore we must interpret it in order to fit our own projets. This will lead to a lot of different interpretations I believe.

This comment, on the other hand, I believe to indicate the opposite. The statement is written in a far more accepting manner for different interpretations of the GD. Once again, however, I am unable to make any generalizations as to whether the employees have found collective sense or not. Due to the nature of the data, I cannot know which department these employees work in, what backgrounds they have, etc., making it difficult to determine how collective sensemaking manifests itself.

Language in GD

The language used in GD is repeatedly stated as a problem. However, it tends to diverge into two different sub-categories – the language is either perceived as difficult or poor. Common for both is that the recipients struggle to understand the GD due to the language used. Furthermore, both these sub-categories to be the explicit result of sensemaking processes. By "blaming" the language for not understanding GD adequately, is in fact how the recipients make sense of their non-understanding. I will illustrate and elaborate on this through a few examples.

A lot/most of the managing elements seems to be written by experts for experts.

This is an example of a recipient perceiving GD to be written in a difficult language, thus the phrase "by experts for experts". I find this phrase representative for the other comments regarding GD as difficult to understand. From a sensemaking perspective, the phrase illustrates how the recipient has made sense for him or herself of not fully understanding the GD. At the other end of the scale, one can find comments addressing GD as poorly written.

Often incomplete sentences in poor Norwegian or English are used

Despite language being characterized as "poor" rather than "expert", there seem to be one commonality – the recipients struggle to understand GD. In light of theory on individual sensemaking they both have made sense of the same problem, however in a different manner. I cannot determine what made them make sense in different ways, but it is likely to originate from different starting points in schemata.

«Fancy» words are used instead of words actually used in daily speach

The language used has to be understandable for the ones who shall read, understand and use the management system. It seems to me like there is inconsistancy in denominations used, which makes it particularly unclear.

Furthermore, the broad range of comments concerning this issue reflects employees wanting to understand the content of GD. This "want" is a natural part of the sensemaking activity, as recipients try to comprehend ambiguous situation following them not understanding GD.

Unclear roles and responsibilities

The last major issue identified concerning the clarity of MS has to do with the conception of roles and responsibilities.

Roles and responsibilities are unclear

Research suggests that changes in organizational structure, roles and responsibilities trigger sensemaking about what the recipients' jobs entail and how to do them (Lüsher & Lewis, 2008). It seems the new MS in some manner have altered the employees' previous understanding of their roles and responsibilities, possibly leading them to make sense of how to act now.

The management system is too unclear on what roles have authority to make decisions internally, and in face of third parties on many different areas

The sense derived from the description of roles generally express that MS is not clear enough. There are examples of recipients stating overlap in roles and responsibilities, different interpretations and deviations from practice. This leads to confusion, and possibly non-sense.

I find it difficult to find my roles, and additionally difficult to understand the roles of others.

In some cases, there are examples of restored sense, in which the recipients seem to accept the vagueness in the description of roles and responsibilities, by making sense of the reason as to why it is not understood.

The use of words such as responsible or accountable should be better clarified and aligned with our Statoil Book.

5.1.3 Relevance

Data categorized as "relevance" concerns to what degree the recipients found GD relevant, or irrelevant in most of the cases, for their work. The major issues attached to the category is that GD is not fit for purpose, too many requirements, reduces efficiency, does not apply to local business needs, does not consider best practice, or simply is not regarded as relevant for work situations.

Not fit for purpose

What recipients consider the purpose of MS may vary, in regards to their work situation. Statoil has stated the goal for MS to be increased safety, efficiency, and reliability. The comments, however, show that MS in many cases is not fulfilling these goals, with emphases on efficiency. Furthermore, it fails to fulfill what some employees believe should be the goals. Thus, there is a general trend regarding MS not fit for purpose.

There will always be a possibility of the means (complying to governing doc) becoming the goal

Some of the governing documentation is not fit for purpose

These responses are typical outcomes of sensemaking. The recipients seem to conceive GD not fit for the purpose they expected it to fulfill. The recipients justify this conception for various reasons.

(...)more concerned with following documentation than solving problems, and thereby forgetting the purpose of governing documentation

Not enough focus on simplifying the system and making it fit for purpose.

Other comments are more specific, claiming GD to lack focus on risks and costs. The developed sense indicates GD not being in line with recipients' expectations, leaving them to explain why this is and concluding with "not fit for purpose".

The following sections further describe reasons for employees not finding GD relevant, which in term might be linked to why it is regarded as not fit for purpose.

Reduces efficiency

Recipients believe following instructions and requirements in GD reduces efficiency. There are also raised concerns about an overwhelming focus on safety at the account of efficiency. The requirements in GD are interpreted in relation to the conception of how work should be done, and the derived sense attributes GD to reduce the efficiency of their work.

Less focus on the process and more on actually getting things done would be nice

The above example indicates an employee who wants to get "things done", which should be in the best interest of the company. However, the employee blames an overly process-focus for not being able to execute work tasks in the manner he or she sees fit. The problem of process focus is further elaborated through other comments.

Many of the processes set out in the governing documents are inefficient and could be streamlined without impacting safety concerns.

In addition to processes reducing efficiency, this comment also implies safety focus contributes to reduced efficiency. Overall the employees seem to be more concerned about efficiency than safety. Many comments confirm this by stating safety is too much in focus, and that they are robbed of their ability to work efficiently.

However, current rigid governing documentations robbes us of every possibility to be efficient/reasonable and take initiative

Even though recipients are not pleased with the situation, the sense they make from GD indicates that process is more important than efficiency. Possibly, when employees then act according to their accounts they work less efficiently, making the sense of less efficiency focus a self-fulfilling prophecy – despite one of the MS goals being increased efficiency.

«sometimes we work around the requirements and works less efficient, but at least we fulfill the requirements"

Concerning requirements

There is a lot of referring to the requirements in GD. Most common issues being too many requirements, requirements for the sake of requirements, requirements leading to poor solutions and impossible to fulfill requirements.

In light of a sensemaking perspective, "blaming" requirements may be an outcome of sensemaking due to many different reasons. The nature of the data, however, once again leaves this part open to interpretation and speculation. The indications found from analyzing the comments suggest reasons like not fully understand the requirements, boring to read the requirements and reduced autonomy. In worst cases the sensemaking process in conceiving the requirements may lead to unresolved sensemaking. In other cases, unwanted outcomes may be ascribed to requirements.

A lot of the requirements cannot be fulfilled. The rules and requirements in ARIS very often leads to dispensations and deviations.

When situations like this occur, the recipient has developed new accounts, which allows the requirements to be blamed for errors. This kind of restored sense can possibly be harmful to the company.

Does not apply to local business needs

Another issue regarding the conceived relevance of MS concerns the sense that GD does not apply to local business needs. This may be among the clearest signs of outcomes of sensemaking, as it may reflect a clear sense of why the GD is not relevant.

Overly prescriptive without consideration of local business needs. Does not allow optimization at the local level

We are struggeling to get the Statoil ASA processes to work here in the US.

is often far from business units reality. We should have more local governing docs for business unit if there's nothing similar in Norway.

Most of the comments indicate that the different units are familiar with GD, but find it inadequate for their line of work or department. The recipients read the requirements through a lens created from their former accounts, which of course will differ among the units of Statoil. Thus, they interpret their readings differently, and the relevance of some requirements may be considered low. The result of the sensemaking regarding GD as not adaptable may lead to the action of not using GD at all.

GD does not reflect best practice

In any business, best practice and experience play a crucial role in the company's culture and way of work. If sensemaking processes have led employees to regard MS as not

relevant, due to poor reflection of best practice and experience, this may prove as very problematic to the company.

In many cases ARIS overrules all education, experience and logic

This comment illustrates MS as not being in line with what is perceived as crucial elements in executing work, and thereby not in line with the recipients previous schemata of his or her work situation. The new accounts indicate an understanding of the system that not appreciate best practice or experience.

In the past we had BEST PRACTICE. That was something one could relate to, live and develop. Now, there are other, probably non-performing, who think they know best how the various jobs are performed. This signals distrust and creates demotivated project executers. This is not in the company's best interest.

The developed new sense reflects a conception of past experience and best practice not being appreciated, which is stated as demotivating to the employees. Furthermore, the articulation by the recipient shows clear signs of frustration with this new work situation. Other comments elaborate on GD emphasizing theoretical rather than practical approaches to work.

Governing documentation is usually a theoretical approach which seldom is used in practice

The recipients pointing to GD being too theoretical might do so to explain why they fail to adapt GD in their daily work situations. Consequences of such sense may be either failure in executing work by following GD, or ignoring GD relying solely on best practice and experience as usual.

Not relevant for my work

Last of the issues ascribed to the relevance category are indirectly indicating, or even directly addressing GD as not relevant for work. Included are also comments from recipients stating the do not need GD for various reasons.

I used to seek governing documents to guide my work. I soon found that very few are relevant to the work that I do. Now I don't look for governing documents

This comment might illustrate the interaction between sensemaking and action. The recipient's previous accounts facilitated activities in which the recipient "used to" apply GD to his or her work processes; e.g. sense and action were in sync. This enactment (for unknown reasons) found GD not relevant for work, thus interrupting the activity of applying GD, leaving sense and action out of sync. When sense again is restored the new accounts regards GD as not relevant, and thereby leading to the action of not using GD – or non-restored action. Most of the comments do not provide a "timeline" like this, and so I am not able to tell what leads to what. However, in this case the comment provides clear indications even though not addressing why GD suddenly stopped being conceived as relevant.

Others refer to experience or the nature of their work, when explaining why GD is not relevant.

Have the experieince to do the tasks at hand.

I do a lot of repetitive tasks and don't need to read up on every occasion

Here, the sense made neglects the importance of GD justifying it with reasons for not being in need of it. The last comment, however, acknowledges to some degree the need for GD but also claims to be aware of requirements and expectations. Others again claim to be working in areas in which GD does not apply.

Current functional area of work (corporate strategy) is barely covered in the MS.

I am working on special projects and the management documentation is not directly relevant to my daily work.

Whether these comments "speaks the truth" or not is unknown, but they show how recipients justify to themselves why GD is not relevant.

5.1.4 Summary

This chapter has described how recipients made sense of the new system. The analysis described the occurrence of these phenomena in regards to the systems' usability, clarity and relevance.

The main findings regarding the recipients' sensemaking consists of employees either making sense of the new MS resulting in restored sense, or situations indicating no restored sense.

Most of the comments conceive MS as difficult to use, unclear or irrelevant. These conceptions seem to be outcomes of recipients' sensemaking, and in some cases provided as explanations as to why the MS is not being used as intended. Seeing as they are able to provide explanations, this could imply that sense is restored. Other comments however, indicate employees either being in the middle of a sensemaking process, or examples of the occurrence of unresolved sensemaking. This might be the case when comments do not signalize employees being able to comprehend MS at all.

Since the data captures only a snapshot of the moment, I cannot say for certain anything about how the sense made will affect the actions of the recipients, and thus not how this sense will affect their adoption of the new system. However, seeing as the main findings indicate accounts that conceive MS as difficult to use, unclear and/or irrelevant, it is reasonable to believe that adaptation and adoption of the new MS will be met with reluctance. This will be further elaborated in the next chapter.

I cannot say anything about what led to their sensemaking either, but a lot of the data indicates that action (in using the MS) has led to sensemaking. The results being that the MS is difficult to use, unclear and not relevant. This too will be further discussed in the next chapter.

5.2 Reactions to change

While the last chapter sought to describe how recipients made sense of the new system, this chapter addresses and describes the recipients' reactions towards it. As presented earlier the employees' reactions to change may take on emotional, cognitive or behavioral dimensions, all of which are affected and linked by the recipient's attitude toward the change, in this case the implementation of the new management system. Analyzing the data detected signs of all three dimensions, and thus sorted the relevant comments into the categories emotion, behavior and cognition.

5.2.1 Emotional reactions

The category addressing recipients' emotional reactions is primary characterized by fear of doing errors and the notion of too much change going on. The emotional reactions derived from these issues will in the following be described in more detail. However, emotion is difficult to read from mere textual data, without being properly attached to person and context. Thus, it probably is much more emotional reactions going on than can be found from the data.

Fear of doing errors

Fear may be regarded a strongly negative emotion, and possibly a strong impediment to adaptation to change. In this case, the recipients describe not fear of the change itself, but rather fear of not acting accordingly to GD.

The system today is tedious, kills initiative and generates fear within the organization of doing errors.

This implies that the earlier described extensive focus on fulfilling requirements generates fear of doing errors when attempting to fulfill these requirements. As to why

the recipients are afraid of doing errors, adequate answers cannot be found in the data. However one comment mentions unspecified consequences.

People are afraid of doing errors and the consequences it might bring

If the system is built around fulfilling requirements - which we know from the last chapter is conceived to be both too many, to difficult or not even relevant – it should not be driven by fear as a motivator. To what extent this notion of being afraid to do errors can be applied across the company is unknown, but the wording of the comments leads me to believe that such a culture has developed in some units. One of the most critical consequences in fear of doing errors is, in fact, the simple solution to do nothing at all, which can be found within Statoil.

Parts of the culture now facilitates a silent accept of not doing anything, in order to not do anything wrong.

Such cultural development may be devastating for Statoil, and represents one of many problems affecting emotional reactions to change.

Too much change

A common reaction to change is the feeling that there is too much change going on, even if that might not be the case. The implementation of the new MS seems to be no different. However one has to consider Statoil have implemented a lot of change over the years.

The frequency of change make work tasks impossible to execute before being certain of what governing documentation says. This contributes to organizational anxiety, which make you doubt your own qualifications in the execution of work tasks.

What here is referred to as "organizational anxiety" is, in fact, a negative emotional reaction to change. Employees who feel they experience too much change might not

express this through "I feel", but in the nature of "too much" lies a notion of stress, which again might lead to anxiety.

New systems are introduced before other important documentation

From research on change we know employees tend to feel that just the slightest change affecting their daily work routines might trigger negative reactions toward the change initiative. The implementation of the new MS seems to be no exception. Some recipients present arguments as to why too much change might not be good for the organization. Possibly these represent negative emotions expressed through reason.

too many changes over the past 6 years. changes create inefficiency, confusion, risk... Some changes are required, but the changes in format are just not necessary over and over.

However, not all recipients seem to react in a negative manner regarding the amount of change initiatives.

There is so much change going on all the time, and we receive good follow up on weekly department meetings and the information we need.

Here, the recipient recognizes there is a lot of change going on, but does not show signs of negative emotional reactions towards it – quite contrary. It seems the recipient shows signs of positive emotions, in light of receiving sufficient information. Negative reactions, unfortunately, outnumber such responses.

5.2.2 Behavioral reactions

The behavioral dimension of reactions on both the adaptation and implementation of MS is described in terms of criticism of management and employees relying on routines and best practice instead of GD, as well as wanting to, or actually trying to, contribute in improving MS.

Criticism of management

As a behavioral reaction to change, the recipients tend to both blame and criticize management for various problems and reasons. The comments, as expected, are of negative valence, and thus reflect negative attitudes towards the change.

leader wants to contribute as little as possible, sick of work. Is to look good on paper but not in practice.

The above comment represents one of the "most negative" and possibly irrational examples of management critique. From the wording in the comment, the recipient clearly ascribes several negative attributes to his or her leader. Even though the comment cannot directly be linked to emotional responses, it certainly shows signs of being affected by emotion – it seems almost influenced by a combination of bitterness and resignation. The notion of leaders lacking both interest and inspiration is further elaborated through the data.

Many seem uninterrested. Individual interpretations and explanations on management level is useless, and power is more important than reason – almost without exeption

Little involvement from my leader

It is hard to tell why the recipients have developed negative attitudes towards the change in the first place, but the fact that they have, and now are blaming the management for being uninspired does not seem to help to alter that attitude. Some of the comments exemplify why they find their leaders uninspired and uninterested.

I perceive managements actions, if one does not find answers in governing documents, that no one dares to make decisions

To broaden the understanding of why leaders are perceived as uninspired I can only speculate. Possibly, leaders are just as confused with the new system as are the employees. Leaders and middle managers are no exceptions to the sensemaking described in the last chapter, and perhaps they conceive the MS as hard to make sense of, like some of the employees. Another possible reason about sensemaking is that the sense leaders have derived differ from the sense made by employees, thus they struggle to understand each other. In this case, there might be a need for sensegiving, which will be elaborated on in further detail in the next chapter. Among the comments, I have found an example that might contribute in shedding light on the situation from a manager's perspective.

as a leader, I would like to have a list or overview of the docs, processes, KC, requirements needed for my role. A sum up of these documents could also be useful to have a first impression of content when taking new job

First, the reason this comment is described as criticism of management is that this leader demands something that must be addressed on a more senior management level, thus criticizing management. Furthermore, it gives an impression of this particular leader lacking an overview of MS. If this issue applies to other leaders; it might contribute explaining why employees perceive management as uninspired and uninterested.

Rely on routines and best practice, rather than GD

Another important behavioral reaction to the change initiative is not adapting to it at all, that is not using GD.

Mostly we use best practice

Comments attached with this label exemplify what they rely on for their work instead of GD. However they do not state why the employees choose to rely on other methods instead of GD.

Usually we rely upon internal work procedures.

This is interesting related the emotional reaction described earlier, concerning the fear of doing errors. Here, it is stated stat the fear or doing errors originate from a fear of the consequences. The behavioral reaction of not relying on GD might violate requirements stated in the documentation, even though the actual result of the work done might be more than satisfactory. Once again, the comments cannot be linked to one another, and there are of course a possibility of them being stated from completely different units. Even though the comments cannot be linked it is interesting to such different responses to the implementation of MS. Common for the responses, however, is that they are negative in nature and thus rooted in negative attitudes towards MS.

Work is described in other hand outs/by colleagues/routines

Using and relying on old ways of doing things, instead of adapting to the new work situation is a common response when faced with change and might be regarded as reluctance towards the change initiative.

Want to contribute

Comments identified as wanting to contribute in improving the system take on a different manner than the previous described behavioral reactions, as they show signs of positive intentions possibly rooted in positive attitudes.

Suggestions for improvement. Participates in hearings, but experiencing that comments to for example Corporate Management System is not being treated or considered.

Most of the comments, however, also state that suggestions for improvement are not taken into consideration. This might be experienced as demotivating by the recipients wanting to contribute and possibly contribute to downgrading their attitude towards the change.

An interesting aspect regarding the positive behavioral reaction of wanting to contribute in improving GD is that it might represent ambivalence among some recipients.

Going forward I think we could improve significantly the execution of the Governing Documents by aligning sub-surface best practices across relevant parts of different business areas.

Positive suggestions, like the one above, suggest positive intentions. Such intentions are likely to arise from a conception of MS not being good enough just yet. In addition, to leave a positive comment in the data, the recipient has to answer negatively on a question in the user survey in the first place. Therefore, it seems likely these recipients are affected by negative attitudes toward the change, thus indicating ambivalence. Some of the positive intentions are even represented as positive behavior, in the manner that actions are taken to contribute to the adaptation of the new MS.

Furthermore it is difficult to understand the methods (procedures). I have contributed in developing a summary of methods, contact me on [e-mail address] for further information.

5.2.3 Cognitive reactions

Last of the identified reactions to change are the cognitive reactions, which is by far the biggest of the categories on reactions, as is expected due to the nature of the data. Issues to be described in this category are a lack of trust in Statoil and poor implementation of the MS. Common to most of the comments are the conception that MS is not good enough. However, there are examples of employees recognizing positive aspects of the system.

Lack of trust in Statoil

The comments reflecting a lack of trust in Statoil is either about broken expectations towards the company, or other companies using better solutions than Statoil. These

cognitive responses are presenting concerns about the MS not being in Statoil's best interest, and may thus be seen as negative reactions towards the change.

The major issue that needs addressing is about creating a culture where people collaborate, talk and share.... this doesn't exist at Statoil enough. I don't know what the solution is but creating governing documents that people have to spend alot of time looking for and dont need to talk to one another for or learn from one another creates an isolated work place that isn't useful on so many levels. Creating networks or work sessions that bring people together across the organisation to network and form a human bond is more likely to have a positive impact on how the employees work together and share information in the future.

The main issue described by this recipient is that MS does not facilitate a culture for learning from each other and, therefore, the new MS is not considered a good solution. Thus, the change initiative is not welcomed. Such cognitive responses reflect a belief that the change initiative might be destructive to the company. The culture in Statoil is being raised as a concern about adapting to the new MS in several comments. Others point to the content of MS as to why the change is not in the company's best interest.

If Statoil is to be competitive and innovative in the future these documents must be reviewed and amended appropriately otherwise no matter what new technologies and discoveries the value of Statoil will suffer, as it has evidence being the stock price.

A major concern is Statoil's competitiveness, and that GD currently does not contribute positively to this. However, it is reasonable to believe that the ones who decided to implement MS regard it as crucial to the company's competitiveness. We know from research on change that managements' intentions is not always conceived as positive among the employees, which also seem to be the case here. The strict nature of GD is furthermore believed to cause Statoil to choose less efficient solutions than competitors.

We often build more expensive than our competitors. We spend more hours than competitors, and we have to large organizations to answers challenges. To a large extent, this is due to too comprehensive governing documentation.

The notion that competitors operate with better solutions than is emphasized in a range of comments, all of which indicating the same sort of reaction: the new management system may destroy the company.

Go learn how to run your management system from a proper 'benchmark' company and stop wasting peoples time with BS.

I do miss a process where functional area leaders are encouraged to compare their governing documentation to similar type of documentation in other leading IOC's.

These are examples of recipients having reactions to the new MS indicating a clear lack of trust in Statoil. They justify their beliefs by referring to competitors as superior to Statoil, whishing for a benchmark. These kinds of reactions seem to represent strong negative attitudes toward MS. However, there are examples of employees showing signs of positive reactions to the implementation of a new MS.

I can understand why we have all this governing documentations, but it comes with significantly increased costs. This makes Statoil expensive to operate, and to be competitive, we must outsource.

In spite of showing signs of a positive cognitive reaction, this comment also seems to be rooted in a negative attitude toward MS. This is interesting because it suggests ambivalence within the recipient – who believes the system is needed, however, it contributes negatively to the company. Supporting the description of partly positive comments as ambivalent is the fact – stated earlier – that they answered a question in the survey in a negative manner in order to get the chance to leave a comment in the first place.

Poor implementation

The second concern described along the cognitive dimension of responses to change is comments, which addresses the implementation of the change as poor. In other words the recipients react negatively to the implementation.

Wish for an active implementation strategy when introducing ARIS

Such responses indicate that the adaptation of a new MS has not gone as planned or without pain. Even though a painless implementation of organizational change remains utopian, the reactions are still there and needs to be dealt with. Negative cognitive reactions to change implementation may lead to recipients' developing beliefs that the change should never have been made in the first place. It seems information about the change is regarded as a problem.

In general, there is poor information on changes

Insufficient introduction of ARIS when it was implemented

Poor communication during change may lead to uncertainty among employees, possibly contributing to negative responses. Whether responses concerning poor information are applicable throughout the organization cannot be said, but it seems to be an issue among some employees. Poor change communication may serve as a brick in a greater picture regarding calls for more extensive change management. This also seems to be an issue emphasized by recipients and is clearly expressed in the following comment.

The most important issue is change management, and explain better who is the responsible for each role.

5.2.4 Summary

I have shown and described reactions to the change initiative that is the implementation of the new MS. The reactions identified have been categorized and described through the categories of emotion, behavior and cognition. In particular emotional reactions, but also to some degree behavioral reactions, have been difficult to locate and describe due to the nature of the data. However, some crucial aspects of such reactions have been mapped out and described, which might indicate them being present in a larger degree than I read from the data material.

Overall I find negative reactions. Emotional reactions are generally presented as fear or anxiety. Behavioral reactions are best described through relying on other constructs than GD, and criticism of management. Whereas cognitive reactions, which is the most easily identified, concerns beliefs that this change is not in Statoil's best interest.

There are, however, some positive reactions located within the data, which might indicate the presence of ambivalence. Since the comments cannot be linked to one another, I am unable to say much about ambivalent attitudes toward the change. However, the positive responses to change are submitted after answering a question about the MS in a negative manner. Therefore, one might suspect ambivalent attitudes being present.

5.3 The occurrence and need for sensegiving

This last part of the analysis focus on describing issues identified as a need for sensegiving, or in some cases the actual occurrence of sensegiving – even though the data does not contain much information on the latter. A "need for sensegiving" refers to situations where there should have been set in motion extensive efforts of sensegiving, but comments indicate this is not the case. One cannot know what extent of sensegiving these individuals may have experienced; the comments may only illustrate a need for more sensegiving. The analysis is divided into four categories identified as support, training, information and understanding.

5.3.1 Support

The description of this category reveals a lack of competence in MS and requests for super users. These issues are repeatedly brought up by the recipients, and might suggest a need for sensegiving in order to restore the identified issues.

Lack of competence

When putting in place a brand new management system a strong support system is likely to be key. However, many recipients do not regard the support system as strong.

Lack of competence often makes the "support" inadequate.

This comment suggests the MS support system to be inadequate due to what is referred to as "lack of competence". The notion of a general lack of competence is found in several of the comments.

a lot of people in those positions are not competent/qualified to do the job

Do I feel the Process Owners have a full understanding of our operational business, associated challenges, and applicable risk level? Answer: NO.

Like the ones above, many of the comments address process owners and other managers as lacking in competence regarding the new MS. From a sensemaking perspective this might indicate employees are struggling to make sense of certain aspects of the MS. Likewise it might indicate managers are struggling to make sense, and thus are not able to provide adequate support. Even though know the reason remains unknown, a possible solution might be to appoint super users of the MS. Such a solution is already identified and requested by recipients, which will be described next.

Need for super users

Due to the recipients' not being able to get satisfactory support from their current leaders, they reuest super users or a more competent management. As will be shown, the labeling of "lack of support" and "need for super users" are closely connected.

Very hard to know who to go to to get the proper support if I am not able to comply with the governing documentation or if I need clarification of documentation

A common concern raised by recipients is that they do not know whom to contact when in need of support. Uncertainty about where to get the support might make it difficult for employees to restore sense about how to do their job and possibly trigger negative reactions toward the change initiative. Most of the comments, however, address not the problem of finding support, but to get adequate support.

Because, if one asks questions then those who are supposed to answer e.g. middle managers, often cannot answer. Or they do not know anything about the documents which should fulfill my need. Mostly I end up with figuring out on my own, what was actually a question.

Managers not being able to support their employees are repeatedly commented on. The comments show signs of frustration about the situation and confusion concerning how to act. Many recipients also express their managers providing answers clearly revealing they do not have an adequate understanding of the MS.

(...)Often we are just asked to figure things out on our own, but I do not think that is good enough. I would have liked to have a super user

Superusers might be able to fill a gap currently identified within the MS.

I have not experienced any support from management around how to do my job. There has been no feed back, good or bad. I am not able to give input around how our team works or how others affect our work. I have not been able to give feedback on processes for better workflows. effort seems to be very focused on writing the system not on collaborating to improve the system.

The recipients express a need for managers that are able to answer questions, provide guidance, taking feedback and solving problems. Thus, there is a need for more extensive use of super users in the MS. This opens an opportunity for sensegiving.

5.3.2 Training

Another trend clearly arising from the data is the great need for more training and education in regards of using the management system. There is a wide range of comments addressing training and education as inadequate, too late, poor or even completely absent.

No training, so we have to figure out on our own how governing documentation is structured in regards to functionallity and content

The comment suggests there has not been any training in regards of the new MS, thus leaving recipients to sort things out on their own. This of course is just one recipient's opinion and does not represent an objective truth regarding the absence of training. However, it is interesting that multiple individuals share this perception.

never been ofference any guidance or training as part of the position, learn by word of mouth only, which is not good enough

While the first comment provides one explanation for how to learn the new MS, the second one provides another equally interesting view. Here, the recipient suggests that understanding of MS is developed between individuals, thus suggesting the possibility of a sensemaking-sensegiving cycle between recipients. On the other hand, there are

comments indicating that training does exist, but has not been prioritized or has come too late.

The time needed for training in ARIS is never put at disposal, in contrary to how APOS in the Hydro era. This is a self-study Statoil has initiated without putting adequate time and resources into it. Kind of frightening regarding this is governing documentation, which we are supposed to follow. I believe this to be poor handling of safety.

What is really interesting about this comment is that it refers to the former MS platform, APOS. The fact that the recipient states they were trained in APOS, might contribute in shedding light on the recipient's previous schemata. When the new MS was implemented the lack of training may thus have caused a serious breach with the recipient's expectations, possibly triggering extensive efforts of sensemaking and thereby the need for sensegiving. In addition, the comment addresses the handling of safety as poor, which is also interesting seeing as safety is one of the main goals of MS. There are further examples of recipients perceiving the training as non-prioritized.

TRAINING HAS COME TO LATE.

And by caps lock, indicating not being pleased with the situation at all. There are a lot of comments from frustrated employees claiming training has come too late. Yet another interesting detail is that recipients tend to disagree concerning the nature of the training received.

En skikkelig opplæringsvideo og ikke kurs (med indeksering og kapitler man kan bla i) om hvordan man bruker ARIS (abbonere, se endringer, mm.). Hvis dette finnes bør det promoteres veldig mye bedre.

A proper training video and not a course (with indexes and chapter to swipe through) concerning how to use ARIS. If this exists it should be informed about

Whereas some wish for training by video, others state that this actually what they get, however, regarded as not sufficient,

training by email messages and online videos isn't sufficient

Yet others again further elaborates on the e-learning, by wishing for training by competent people.

give better hands on training for this system, not walk through on the computor, but by an actual person.

All the comments addressing the nature of the learning indicates different perceptions of what training is received, and also what kind of training they would rather want. Recipients disagree on both points. This suggests that training might be different across the units and that individuals have different conceptions about the received training – possibly as a result of different sensemaking.

The last important subject identified in the comments is that training is perceived poor and inadequate.

There is no proper training in Statoil. It is an online course, which is highly superficial and skips the most common challenges related to ARIS

Generally there should be better and more organized training in our management system

It seems the employees' wishes to use the system as it is purposed and use it in their daily work. However, without the notion of being provided with proper training, the MS might be difficult to grasp – as is described earlier in terms of usability, clarity, and

relevance. The perceived lack of training leaves a gap in the recipients' conception and sense of the system.

5.3.3 Information

The category of information is divided into two types of comments: information on MS in general and information when changes are made to GD.

Information on MS in general

Comments labeled as information, or rather lack of information, on MS in general, contain issues related to awareness, and the nature of information. There is a range of comments stating that recipients are simply not aware of how and when to use MS or where to find it.

Awareness seems to be the biggest issue in my department.

I am not aware of them

If the recipients' are not aware of the MS, it will, of course, prove very difficult for them to adapt in their everyday work. Awareness tends to be a result of information. However, that does not indicate that lack of awareness means lack of information. An equally likely scenario is that the employees simply become "blind" to the information provided – possibly as a result of subconsciously rejecting the change. One explanation of how information on MS might be related to awareness is stated in the following comment.

Ex.: Information of governing doc is always received on the screen, and seldom in conversation or smaller meeting.

Information on the computer screen is more easily overlooked than when provided through conversation, thus leaving a seemingly unused opportunity for sensegiving. What may come as a result of low awareness are difficulties in grasping when and how to use GD and where to find it.

Don't know when I should use it and also don't know where to find it

Not sure how to use it during heavy workload.

Why these recipients do not know where, how and when, I cannot know. Still it might be an issue solved with the individuals absorbing information, leaving the possibility open to whether or not they have received information regarding these issues.

Information on changes to GD

Furthermore regarding information recipients claim that they are not informed when changes are made to GD, which seem to be quite often.

Statoil does not alert relevant staff when changes are made to governing documentation.

Nor do they alert when new documentation is added

I believe this to reflect one of two possibilities. First, Statoil actually do not inform when such changes are made. This may be felt as problematic to the recipients trying to cope with MS, and contribute in creating negative attitudes toward the system. Second, the employees overlook the information provided, which is equally bad seeing as employees will blame management for it.

The management system is in constant change/replacement – difficult to comprehend

Some regard the system of being changed all the time, yet others believe changes to be too slow.

I think changes in governing documentation is way too slow. Referrence to old requirements a year after they have expired, for instance. It took several years from APOS disappeared until equivalent requirements came to DOC map. This is frustrating and impossible to comprehend in regards to work

Whatever the actual situation, information seems to be key as it may provide clarity to what is happening when and why.

5.3.4 Understanding

The category of understanding deals with how recipients deal with issues related to comprehending the new system. It is divided into asking and discussing with colleagues, and contact the people responsible, in pursuit of clarity.

Discuss with colleagues

There seem to be two main reasons for discussing GD with colleagues – asking for help to understand or execute GD relating to work tasks, or relying in colleagues instead of using GD at all.

usually just getting some one else to find what I am needing, then feeling like an idiot,

This comment suggests collaboration between employees. Furthermore it suggests some employees having a better understanding of MS than others, which again is perceived embarrassing for the lesser-informed employee. Thus sharing of information seems to exist among employees.

Information sharing is mainly based on people network, therefore it is limited and not systematic.

However, recipients possibly being "forced" to share understanding and information with one another is not necessarily perceived as entirely positive. The above comment indicates a longing for more systematic and extensive information. The problem with relying on information from colleagues is addressed as problematic in other comments, seeing as other employees might not be able to provide adequate answers. Some state that, in addition to colleagues, they turn to their leaders for help.

I think relevant information comes from leaders and colleagues.

Contacting the people responsible

As with comments related to discussing with colleagues, the recipients tend to contact their leader if they experience challenges with the usage of GD. The comments indicate that leaders may provide satisfying answers, which is a contrast to some of the data described earlier. However, the comments do not say anything about what issues are discussed with managers nor do they address the actual answers provided by the leader.

I alos ask people with responsibility for different areas if i need to

Call for meeting with responsible for govenning documentation

Being able to rely on the people responsible might prove reassuring when faced with difficulties. Since several recipients state this behavior, it seems there is some kind of system or culture for information sharing among leaders and employees, at least in some departments. If so, this knowledge can be used as valuable input in how to share information and thus ease the recipients understanding of how and when to use GD, and where to find it.

5.3.5 Summary

In this part I have attempted to describe the need for, or possible occurrence of, sensegiving. This is done through the categories of support, training, information and understanding. The results showed comments suggesting that sensegiving might occur both between recipients and from management to recipients. It also showed signs of a great need and thus possibility for sensegiving, especially regarding training and support in the MS.

Regarding the occurrence of sensegiving, I cannot prove whether or not it actually has taken place, but the comments provide indications of the presence of sensegiving between recipients. Furthermore, addressing the need for sensegiving, to what degree sensegiving is already present cannot be known – it is not detectable from the comments, or the recipients may not be affected by it. However, the presence or absence

of sensegiving does not alter the fact that sensegiving (or more extensive) is needed. This will be further elaborated in the discussion part.

5.4 Analysis summary

Throughout this chapter I have described recipients conception of the new management system along three different, yet most likely linked, concepts. First I described how recipients made sense of the new management system. The findings showed recipients had created accounts regarding MS mainly as difficult, unclear and irrelevant. I then described recipients' reactions toward the new MS, which was mostly negative. However, there were also signs of ambivalence in some of the comments. Last I described the possible occurrence of sensegiving, and also the need for sensegiving. The results suggested occurrence of sensegiving among recipients, and from management, as well as both the room and need for sensegiving – especially regarding training and support. The main findings of this analysis will in the next chapter be linked with theory on sensemaking and reactions to change, in order to provide some meaningful understanding of the findings implications for Statoil.

6. DISCUSSION

In this chapter the findings for the analysis will be incorporated with established research and theory on sensemaking and reactions to organizational change. The aim is to discuss certain aspects of the observed phenomena and their possible implications for the change initiative that is the implementation of a new MS. Since the comments are anonymous they cannot be linked with each other to show coherence between different categories. Thus, the outcomes of sensemaking will be discussed separately. The same principle accounts for reactions and sensegiving. At the end of the chapter the findings will be further linked to existing research to suggest possible implications for the implementation.

6.1 Outcomes of sensemaking

From my findings, I suggest that recipients have developed accounts of the management system as difficult to use, unclear and/or irrelevant to their daily work. These accounts may be affected by and affect the change initiative in various ways.

6.1.1 Accounts of usability

Research on sensemaking suggests action might be a way of testing provisional understanding (Maitlis & Christianson, 2014). Translated action may be a way for the recipients to test their provisional understanding of the MS. This testing seems to have resulted in the recipients regarding the MS as difficult to use, thereby shaping their accounts on the change. Then again, what was the recipients' provisional understanding? Perhaps the provisional understanding was no understanding?

In general, recipients find the MS difficult to use. The identified accounts vary in their explanation of how and why MS is difficult to use, supporting the suggested scenario of fragmented sensemaking. Leaning on Stensaker and Falkenberg (2007), the identified accounts of usability might correspond with both divergent responses and unresolved sensemaking. Some of the comments suggest accounts concerning MS as too difficult and time-consuming to use. However, corporate intentions were for MS to increase focus on both efficiency and reliability. A system regarded as time-consuming and difficult to use, seems not to be in line with neither efficiency nor reliability, suggesting some of the accounts are not in line with corporate intentions. Thus, this resembles divergent responses towards the new MS. The consequences of such responses may be actions

that are not in line with corporate intentions and thereby contribute to inhibiting intended change implementation. Examples of such actions can be recipients refusing to use GD because it will slow down work processes – as stated in some of the comments. However, there are also comments that might be regarded as divergent responses, but not addressing concrete subsequent actions.

Yet other comments suggest accounts in which recipients are unable to make sense of how to use the new MS, for example, recipients addressing MS as a "maze" or impossible to understand and navigate. Such accounts might correspond with unresolved sensemaking. Leaning on the findings of Stensaker and Falkenberg (2007), the consequences of unresolved sensemaking may be no change action. In that case, the presence of unresolved sensemaking will prove problematic for successful implementation.

6.1.2 Accounts of clarity

The new MS seems in large to confuse the recipients. It is regarded as both vague and unclear, for various reasons. Experienced employees who are faced with a system telling them how to do the work they already know how to do, and then not understanding the system, might pose as a threat to their identity as experienced workers. Maitlis (2009) suggested that sensemaking might occur when peoples' ability to do work central to their identity is undermined. Even though the comments do not explicitly state that recipients feel their identity to be threatened, many indicate such a perception especially the ones concerned with not understanding the language in the GD. In order to explain these situations to themselves, the recipients have created narratives addressing the language as written by experts or non-practitioners, rather than those actually performing the work tasks. This assumption is supported by the research of Brown and colleagues who have explored narratives as a way of defining individual and collective identities (Brown, Stacy, & Nandhakumar, 2008). When making sense of a situation, narratives may contribute to the negotiation of collective accounts (Maitlis & Christianson, 2014). Therefore, individual accounts explaining the lack of clarity in MS by narratives of poor or difficult language may be negotiated into collective accounts formed by those very narratives. This however, might only be a possible consequence of what the data reveals as individual accounts.

In addition to the accounts created on language, recipients find the description of roles and responsibilities in GD to be unclear, which is expressed through frustration and confusion. Weick has argued that the disintegration of role structures can lead to the subsequent collapse of sensemaking (1993). In this study, it is unlikely that the role structures have actually disintegrated. However, through their comments recipients express a perception of disintegration and unclear role structures. I speculate to whether mere perception of the phenomenon might also result in the collapse of sensemaking. The analysis, suggested that some of the comments indicate the occurrence of no restored sense or unresolved sensemaking. When the outcome of a sensemaking process is no restored sense, action and cognition are out of sync (Sandberg & Tsoukas, 2015). The consequence of no restored sense regarding the roles structures may, therefore, lead to recipients not following the proposed role structure, thus undermining important aspects of the change initiative, which again may lead to critical consequences in regards to adapting to the system. Stensaker and Falkenberg (2007) argued in their study that unresolved sensemaking leads to no change action. If the same principles are transferred to this study, the recipients' inability to comprehend the role structures might lead to no restored action, thus violating corporate intentions regarding these role structures.

Recipients also raised concerns about the issue of different interpretations of GD and how this lead to confusion. The fact that recipients clearly state that different interpretations of GD is a problem suggests a difference in the individual sensemaking within the organization. Due to different positions, interests and background, individuals are likely to construct different meaning from the same situation (Brown, Stacy, & Nandhakumar, 2008). Different interpretations of GD contribute to the earlier suggested fragmented sensemaking scenario. This may have consequences for the common understanding of the MS, and thereby for the change initiative as a whole, as there is a possibility of the "wrong" interpretations developing as the dominating view.

Once again turning to Stensaker and Falkenberg (2007), some of the comments concerning different interpretations of GD seem to correspond with creative responses.

Thus, there is a possibility that the original intentions in the GD may be further developed or tailored to fit a specific context, e.g. local adaption of requirements. Some of the comments explicitly state that GD is interpreted to fit specific projects.

6.1.3 Accounts of relevance

As with interpretations, differences in individual sensemaking outcomes may affect their notion of relevance. In the comments, recipients state different reasons for not finding the GD relevant, which also suggests they have created meaning through different narratives. I cannot tell the reason for recipients perceiving GD as irrelevant, nor if it actually is relevant to their work. The recipients' accounts on relevance need not be accurate, however, as long as it is plausible (Weick K., 1995). Thus, as long as the recipients believe the GD to lack relevance, they will possibly act accordingly – that is without the use of GD as intended by CMS. As stated by Stensaker and Falkenberg "individuals, through the accounts they generate based on sensemaking processes, affect change and responses to change" (2007, p. 143). Therefore, this may prove as an inhibitor to the change initiative.

The analysis revealed accounts regarding the MS to reduce efficiency. These accounts are not in line with the MS goal of increasing efficiency, and may, therefore, lead to divergent responses towards the MS. This opens for the possibility of actions like not using GD in an effort to work efficiently, or work inefficiently and labeling GD as the reason for this outcome. The use of GD was intended to increase efficiency.

Furthermore, there are examples of recipients showing signs of unresolved sensemaking, especially concerning too many requirements. Once again, as suggested by Stensaker and Falkenberg (2007), this may lead to no change action. In this case, no change action could take form, due to inability to comprehend all the requirements.

In addition to accounts that may be linked to divergent responses and unresolved sensemaking, some the accounts on relevance might also suggest the possibility of creative responses. Comments reveal recipients that have made sense of the MS as not applicable to local business needs. Even though the comments does not address any

particular actions related to these accounts, Stensaker and Falkenberg (2007) argue that such accounts may lead to individuals altering the change to their organizational context An example is recipients conceiving GD as not relevant because it does not fit the local business needs, and may alter original corporate intentions in order to make it applicable.

6.1.4 Summary

The discussion on how recipients made sense of the new MS suggest a scenario consisting of fragmented sensemaking, i.e. the recipients' show signs of several different and narrow accounts. Some of these accounts have been linked to the different interpretive responses developed by Stensaker and Falkenberg (2007), thereby providing insight suggesting possible subsequent actions of these accounts. In some cases, such actions are also shown in the comments. Accordingly, this part has discussed the different individual responses to the MS. Later, in this chapter, these individual responses will be linked to possible organizational responses, in order to shed light on possible consequences of such responses.

6.2 Reactions

The analysis of the data have mapped out and described examples of reactions to change, represented by the dimensions of emotion, behavior, and cognition. Mostly they are represented by negative attitudes towards the change initiative, which might result in or illustrate resistance to change. However, there are also examples of possibly ambivalent reactions towards the change initiative, providing a more nuanced picture from otherwise "negative" data.

6.2.1 Negative reactions to change

Even though the findings indicate difficulties in identifying emotional and behavioral reactions to change, there are some examples to be found. The most interesting of the findings considered being fear and anxiety along the emotional dimension, and relying on other constructs than GD along the behavioral dimension. Cognitive responses are however more easily identified. Most common amongst cognitive responses are the lack of trust in Statoil and the perception of poor implementation of MS. In common, all of the responses are characterized by negative attitudes towards the change initiative. Piderit (2000) argues that successful organizational adaptation is dependent on not only overcoming resistance to change but rather generate support and enthusiasm.

Generating support and enthusiasm seem difficult when only regarding negative comments. Some recipients express that cultures characterized by fear of doing errors have developed in certain parts of the organization. One of the comments addressing the fear of doing errors refers to a silent accept of not doing anything, in order to avoid errors. While the intentions of the MS were meant to increase focus on safety, efficiency and reliability, it will achieve none of those if recipients are afraid of using it. In which case the emotional reactions pose as a threat to successful implementation of the MS. Even though the data does not provide insight on the extent of such reactions, the ones identified should be located and dealt with and learned from.

Another type negative reaction, which may have implications for the successful implementation of MS, can be found along the behavioral dimension. Some recipients state that they rely on routines and best practice instead of using GD. Thus, the recipients seem not to comply with the new management system. Turning to Stensaker and Falkenberg (2007), this behavioral response seems to correspond somewhat with their identified response of non-compliance – where the individuals understand the change and intentions perfectly clear, but chooses not to act on it. However, it is important to emphasize that the comments do not explicitly state that the recipients understand MS – they only state that recipient relies on other sources to execute their work tasks. In their study, Stensaker and Falkenberg (2007) revealed that non-compliance could be seen when individuals were critical to the change process and how it had been managed. Transferred to this study, this bears resemblance to the identified cognitive reactions of MS as a negative contribution to the company and the ones addressing poor change implementation. Therefore, it is possible that the negative cognitive reactions might lead to non-compliance.

6.2.2 Ambivalent reactions to change

As suggested earlier, responses indicating positive attitudes towards the change initiative may, in fact, be signs of ambivalence when taking into account that the recipients answered unsatisfactorily or "negatively" to questions in the user survey.

What is interesting about the suggested presence of ambivalence is that it provides a more nuanced understanding of the recipients' reactions to change (Piderit, 2000). In this study it represents some of the only identified positive tendencies concerning the MS. Such responses contribute to describing and understanding the complexity and variety of responses to the new MS, present within Statoil. Earlier, I suggested the presence of a fragmented sensemaking landscape. The supposed presence of ambivalent reactions, in addition to the described negative ones, might indicate a great variety of reactions toward the new MS as well.

Concerning the implementation of the change initiative, ambivalence opens for both positive and negative outcomes. If management is able to act upon what is perceived as positive, then perhaps the positive part of the reactions might in time overrule the negative ones. However, this would also account for the negative reactions. Thus, making ambivalence a possibly dangerous construct when handling change. Due to the limitations of the data, this will, however, remain speculation.

If comments could be linked, it would be interesting to investigate the possible relationship between ambivalent reactions and sensemaking.

6.3 Sensegiving

6.3.1 The (possible) occurrence of sensegiving

The findings from the analysis, suggested that sensegiving might have occurred between recipients. To back up this suggestion the findings will be linked with literature on sensegiving. The occurrence of sensegiving can mainly be found within the category of "understanding", which describes efforts recipients make to better understand and comprehend the new MS. Many of the comments are concerned with discussion among colleagues and seeking assistance from colleagues. Maitlis (2005) summarizes organizational sensemaking as a social process in "organizational members interpret their environment in and through interactions with others" (p. 21). Furthermore, communication with others is seen as a crucial part of the sensemaking process (Weick, Sutcliffe, & Obstfeld, 2005). The findings shows that both interaction and communication between recipients in order to comprehend MS, takes place. Therefore, it is reasonable to believe this interaction to be part of their sensemaking process. Gioia

and Chittipeddi suggest a strong relationship and recurring interaction between sensemaking and sensegiving (1991). Research further suggests sensegiving may occur at all levels of the organization, also between stakeholders (Maitlis & Lawrence, 2007). Seeing as the recipients in my study are regarded as stakeholders, I therefore suggest recipients, in their sensemaking effort through interaction and communication, engage in sensegiving with one another in order to better comprehend the new MS. Balogun (2006) has referred to this as *inter-recipient* sensemaking and sensegiving processes, and suggested they affect change. These proposed processes of sensemaking and sensegiving among recipients may be regarded as positive, due to the fact that they may help each other better understand and thereby create shared accounts. However, there is also a possibility this suggested sensegiving may be rooted in accounts that do not regard MS as a positive initiative.

6.3.2 The need for sensegiving

The need for sensegiving is best regarded through the categories of support, training, and information. To summarize, the recipients' state they are in need of more training, they propose a need for super users of the system, and express a lack of awareness regarding MS. All believe these issues have in common a gap in the sensemaking process, which might be filled by sensegiving. Sensemaking theory defines sensegiving as a process intended to influence sensemaking (Gioia & Chittipeddi, 1991). In which case, this provides managers with an opportunity for sensegiving efforts that may steer the recipients' sensemaking in a preferred direction. There is, of course, a possibility of such sensegiving efforts being present in the suggested issues in the first place. However the data does not provide this information. Therefore, I will make the two following assumptions, in order to carry on with the implications of the need for sensegiving. First, sensegiving is not present as it should be in the suggested situations. Second, if sensegiving is present, recipients for some reason are not extensively affected by it. Nag et al. (2007) found that certain conditions might buffer employees from managements' sensegiving effort. Assuming the first assumption holds true, there is, in fact, a strong need for sensegiving by management. Recipients are crying out for super users in the management system. Such super users might work as great change agents and sensegivers, assuring adequate adoption of the MS. Super users would be the ones employees turn to when they do not fully understand the MS. The super users thus have a great opportunity to provide sense about the management system, hopefully making employees more able to make sense of it and thereby comply with it. As for the lack of training, the introduction of more extensive training in the MS may provide management with an opportunity in shaping recipients' accounts toward MS in a preferred way. Consequently, training may help alter the unwanted sense or unresolved sense possibly created by the recipients. Regarding the lack of awareness, the comments illustrate that information might be the problem. More information is not necessarily direct efforts of sensegiving. However, the nature of the information might be a vessel for more extensive sensegiving. Assuming the second assumption hold true, and sensegiving is actually taking place to some extent, the efforts mentioned above still stand but perhaps applied with a different strategy for how to provide sense.

There is, nevertheless, a curiosity connected to "the need for super users" – it violates the intention of the new MS providing increased autonomy. Referring again to the study of Stensaker and Falkenberg (2007), the accounts created regarding a need for super users are not quite in line with corporate intentions, thus these might be examples of divergent responses.

Furthermore, what is identified as the need for sensegiving puts emphasis on the suggestion of a landscape characterized by fragmented sensemaking – as the accounts created provide several different interpretations of the situation with MS.

6.4 Considerations and possible implications

The above sections have identified reactions and responses, in which some are not in line with corporate intentions. This includes accounts the recipients have created on the new MS and their reactions towards the change initiative that is an implementation of the new MS. Drawing on the study by Stensaker and Falkenberg (2007), some of the accounts have been suggestively connected with the interpretive responses they revealed. Seeing as this study revealed fragmented sensemaking, accounts were found that might correspond with divergent responses, creative responses, unresolved sensemaking and non-compliance, however not with convergent responses – as were expected due to the nature of the data. In their study Stensaker and Falkenberg linked these individual interpretive responses to the organizational responses introduced by Lozeau et al. (2002). Drawing further on Stensaker and Falkenberg (2007), the same principles will be transferred to this study in an attempt to illustrate potential implications of the identified accounts in this fragmented sensemaking scenery.

First, however, it is important to clarify three delimitations. First, the accounts identified are based on data provided by a minority of the organizational members. Second, the sensemaking is fragmented, and the comments cannot be linked. Therefore, it remains unknown whether certain responses are characteristic for certain business units. Third, the data does not provide insight on organizational responses. When these aspects are taken into consideration, linking the identified individual responses with potential organizational responses may provide valuable insight.

Stensaker and Falkenberg (2007) found that *transformation*, which is the preferred organizational response by the change agents, required *convergent responses*. Since convergent responses are not identified within the data, the likelihood of MS being incorporated as intended is small – when relying only on the provided data material. If this were to be the issue in the entire organization, the implementation of MS would certainly not go according to corporate plans.

In their study, they linked the organizational response of *loose coupling* to the individual responses *unresolved sensemaking* and *non-compliance* (Stensaker & Falkenberg, 2007). This study has revealed accounts and responses, which previously were suggested to correspond with either unresolved sensemaking or non-compliance. Common to these responses are no subsequent action. Recipients unable to make sense of the new MS – e.g. due to conceived lack of clarity – may very well not act upon the change. For Statoil, this will mean the MS being implemented, but not fulfilling it's intentions due to not being acted upon as intended. The possibility of non-compliance was suggested to take form as a behavioral reaction, as for example, relying on routines instead of using GD. Such a scenario will also loosely couple the change to the organization – it might be physically implemented but neglected or refused used.

Furthermore, Stensaker and Falkenberg found the organization responded with *customization* when influenced by *creative responses* (2007). Transferred to this study, creative responses are linked to the accounts regarding GD as not fit for local contexts,

or faced with different interpretations of GD. For Statoil, this would entail both the organization and the change initiative becomes modified to a high degree. The main intentions of the change would probably still be there, however further developed to fit the context.

Finally, there is *corruption*, which Stensaker and Falkenberg (2007) found to be the result of *divergent responses*. Alarmingly, this study has identified several accounts that might correspond with the characteristics of divergent responses – that is when the sense made does not conform to corporate intentions. One of the primary goals of the MS was to increase efficiency. However, through several different accounts recipients regard it doing the opposite. In order to keep working efficiently, employees might alter and re-label the change (MS) to such a degree that the initiative fits the old ways of working, and thereby hinders the organization from changing according to corporate intentions.

Whether or not the above scenarios will develop from the identified accounts, is impossible to predict from the data. However, it provides valuable insight into possible consequences from the outcomes of sensemaking. If the identified accounts are allowed to further develop into shared accounts and spread through further sensemakingsensegiving processes, then the organization might face such scenarios. In that case, this will influence the successful (as intended by corporate) implementation and adaptation of the new MS. This will again have consequences for the greater change initiative, in which the implementation of the new MS is part. Management might want to take efforts to prevent proposed scenarios playing out, especially in regards to corruption and loose coupling - customization is not necessarily negative to the change initiative, as intentions may still be intact only further developed. The findings of fragmented sensemaking outcomes suggest recipients should be given the opportunity of further and more extensive sensemaking, which will comprehend the ambiguous aspects of the MS. Furthermore, managers may want to engage in more extensive sensegiving, in order to affect and possibly ease the sensemaking efforts of recipients. These suggestions are also in line with the findings of Stensaker and Falkenberg (2007). As for cases in which the recipients seem to have already developed accounts regarding the new MS, sensebreaking may be necessary as it could make the recipients more responsive to managers' sensegiving (Pratt, 2000).

7. CONCLUSION

In this last and concluding chapter of the thesis a summary of the findings from both analysis and discussion are presented. I also suggest possible implications for managers. And finally, the limitations of the study are given further emphasis, and suggestions for future research are made.

7.1 Findings

The main purpose of this study was to investigate *how* recipients made sense of and reacted to the new management system. In addition, the research would examine possible implications for the implementation of MS, based on how recipients made sense and reacted. Three concepts of study were identified: how recipients made sense, their reactions, and the possible occurrence and need for sensegiving. The introduction of the new MS platform was a predecessor to a larger corporate change initiative to be rolled out in Statoil ASA; it was the organizational change concerning the new MS that was studied. The change entailed increased focus on safety, efficiency, and reliability as the main intentions of the MS. The study was based on data from the Qualitative in-depths report of the "Management System User Survey U13" – more specifically, comments provided by employees who answered unsatisfactorily to the questions in the user survey. Thus, the study examined data from employees presumably negative towards the MS. Results and findings are subsequent.

When assessed with sensemaking theory, the comments from the user survey suggest a landscape characterized by a wide range of accounts on the new management system. Thus, there is a landscape of fragmented sensemaking. The accounts indicated several problems in conceiving the new MS, as is expected due to the nature of the data. In addition to accounts concerning the new MS, I was able to discover certain reactions, better described through the dimensions of emotion, behavior, and cognition. Furthermore, some of the comments were described in terms of sensegiving, suggesting the occurrence of inter-recipient sensegiving, but also what seemed to be a need for sensegiving – especially related to what is perceived as lack of training and the need for super users.

How recipients made sense of the new management system was characterized by the indication of several accounts, most of which were not in line with corporate intentions. The MS was conceived as difficult to use, reducing efficiency, not adaptable to local context, and leading to different interpretations. Drawing on the research of Stensaker and Falkenberg (2007), the identified accounts were linked to divergent responses and creative responses on the individual level. Some cases were, in addition, linked to unresolved sensemaking, as it seemed the recipients were unable to make sense of the new MS.

As for reactions towards the new MS, comments were found and analyzed, suggesting reaction along the emotional, behavioral, and cognitive dimensions. Identified emotional reactions suggested a notion of fear and anxiety within the organization, which may possibly form resistance towards the change initiative. As for behavioral reactions, some of those identified had to do with recipients not using GD in favor of old routines and best practice. These reactions were linked to the work of Stensaker and Falkenberg (2007), and labeled as possibly non-compliance. In addition, what was described and suggested to be cognitive reactions, concerned recipients regarding MS as not in Statoils' best interest. Further drawing on Stensaker and Falkenberg, I suggested these reactions might lead to responses of non-compliance. Also, some comments indicated positive attitudes towards MS, even though they had responded to the user survey in a negative manner, thus opening for the possible occurrence of ambivalence within some recipients.

Seen through a sensemaking lens, some of the comments revealed what can be seen as the need for sensegiving. In addition, there were signs of the occurrence of interrecipient sensemaking-sensegiving efforts. Many recipients were concerned with the lack of adequate and sufficient training in the new MS. There was also a request for super users and more extensive support on the system, which was interesting because it indicated breaches with the corporate intentions of increased autonomy. This lead to the conclusion that sensegiving was needed, in order to fill these gaps. With the need for sensegiving, follows an opportunity for managers to give sense in accordance with the intentions of corporate. Also, in order to comprehend the new MS, some recipients

stated they turned to each other, indicating recipients helping each other make sense through sensemaking-sensegiving efforts.

With the aim of investigating possible implications for the implementation of MS, the research turned to the findings of Stensaker and Falkenberg (2007) linking individual responses to change with organizational responses to change. By linking the identified accounts from this research to organizational responses, correspondence with customization, loose coupling and corruption were suggested. The data does not allow for determination of whether these organizational responses may develop or not, however, suggesting the possibilities might prove valuable insight – especially for the change agents who are to carry on with the corporate change initiative within Statoil.

The findings, even though not providing any new insights, contribute to existing research by further examining individual responses to change. It shows how recipients from different departments and business units across an international organization have reacted to and made sense of a corporate change initiative. The findings show a fragmented sensemaking scenario, consisting of several different and narrow accounts, even though all were faced with the same change, thus shedding further light on the different sensemaking of individuals within an organization.

7.2 Implications for managers

This part primarily addresses implications for the managers and change agents who are to guide Statoil through the ongoing corporate change initiative. However, some of the principles may be applicable in general.

The findings of the study provide managers insight as to how the employees feel and conceive the new MS. In order to successfully implement MS, managers would ideally want recipients' sensemaking to be in line with corporate intentions. This study has shown that is not the case for all employees. Faced with this insight, it might be important to map out where in the organization the different outcomes of sensemaking identified can be found. If certain business units are characterized by, for example, creative responses to change, there is a possibility of the development of customization

as an organizational response in that business unit. The same principle will account for loose couplings or corruptions, which should be regarded as unwanted organizational responses by managers, as it might inhibit successful implementation of the MS as intended.

Furthermore, the identified scenario of fragmented sensemaking suggests certain amounts of ambiguity tied to the new MS. Employees should be given the time and resources to make sense of this change. To support and shape the employee sensemaking, managers should focus on the opportunities for more extensive sensegiving, through for example support and training.

However, the larger corporate change initiative has further developed since this user survey was conducted. Thus, I advice managers to look for signs of particularly two things in the organization: first, the possibility of the accounts identified in this study have spread through the construction of more collective accounts. Second, they should look for signs or indications of customization, loose couplings and corruption. If found, managers may want to engage in sensebreaking, followed by new sensegiving, as an attempt to restore new sense among the recipients and thus, possibly, get the change initiative back on its intended track.

7.3 Limitations of the study and future research

As emphasized throughout the thesis, the nature of the data sets clear limitations of the study. There are especially three aspects that contribute to limiting and delimiting this study. First, the fact that the study is based upon data illuminating only the negative aspects of the change provides insight into only parts of the whole picture. Thereby the data is taken somewhat out of context. In addition, the comments are submitted by only a minority within the organization, most employees have answered questions in a "satisfying" manner and thereby not submitted comments. It would be interesting, and possibly enhance this study, if one were to get insight in comments submitted by employees comprehending the change as positive or neutral. Second, comments are submitted completely anonymously, and it is therefore not possible to link comments to one another, in an attempt to explain possible relationships behind responses. If comments could be linked, then the possibility of telling how e.g. cognitive reactions were linked to accounts of sensemaking, or how accounts were linked to behavioral

reactions and thus action. Third, the data only provides a "snapshot" in time, thereby not opening for the possibility of telling what may have lead to what. If data were collected at different points in time, one might be able to say something about actual development or consequences.

The limitations of the study have made it difficult to provide any concrete insight on how the identified responses and reactions to the change may affect the implementation of that change. Also, it provides only parts of the whole picture of how recipients responded and reacted to the change initiative. However, it has provided interesting and possibly valuable insights on how the recipients made sense and reacted, and, by drawing on previous research, the possible implications these responses may have on implementation.

Even though the contribution to existing research may be regarded as limited, the study opens to interesting suggestions for future research. This study identified a range of accounts and reactions to the change initiative - where employees presumably regarded the change as bad - without being able to study the interaction between responses possibly taking place. Future research should aim at connecting such accounts and reactions, especially regarding the relationship between ambivalent reactions to change and sensemaking. This might open for insight that could build on and develop the research on individual responses to change even further.

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