

The impact of targets and incentive systems in a Beyond Budgeting setting

A case study of how target-setting and incentive systems are applied in a firm employing Beyond Budgeting principles

JOHAN STEN GUSTAVSEN KRISTIAN FREDRIK HORNNES

SUPERVISOR

Rafael Heinzelmann

University of Agder, 2019

Faculty of Business and Law Department of Economics and Finance **Preface**

This thesis is the result of the 5-year master course in Economics and Business Administration

program at the School of Business and Law, University of Agder. The topic is anchored in the

specialization of Management Accounting.

The background of this study was our interest in the Beyond Budgeting system as a response

to new market dynamics and the need for agility. The system challenges established

management control systems by focusing on future trends and decentralization. It manages this

by abandoning the budget and giving knowledgeable employees decision making power

through autonomy and decentralization. However, we wanted to study how concrete control

systems were applied to ensure strategic direction and motivation among employees. This led

us to research the management controls systems of targets, performance measurement and

reward systems.

The thesis is based on personal interviews with the employees of the case firm. This gave us

insight into both their systems and the opinions of the employees the systems affect. We

therefore want to direct our sincere thanks to all managers and employees who participated in

the study. Their input and honesty were essential for our understanding and the analytical

depth. We also want to include a special thanks to the firm's CEO, who gave us valuable insight

and feedback before, during and after the interview process.

In addition, we want to sincerely thank our supervisor, Rafael Heinzelmann, who gave us

essential feedback and suggestions throughout the process. His quick responses and assistance

were remarkable.

Kristiansand, June 3rd, 2019

Johan Sten Gustavsen, Kristian Fredrik Hornnes

2

Abstract

The goal of this empirical study is to understand how performance management systems are applied in a firm which has implemented Beyond Budgeting. The thesis focuses on the management control systems of result controls, which includes the process of setting targets, measuring performance and issuing rewards.

Collectively these systems are designed to guide and motivate employees, by aligning the goals of both principals and agents. To understand how these systems function in a Beyond Budgeting setting the analysis addresses the problem statement:

What is the impact of targets and incentive systems in a Beyond Budgeting setting?

The method used is an inductive qualitative case study, were interviews are conducted to gain credible and authentic data on how these systems are applied in the case firm.

By applying a theoretical framework, we find the effects of both targets and incentive systems within the firm. The targets that are applied in the firm are specific and effectively communicate strategic direction and goals. However, their impact is limited by certain factors. The targets are not adjusted with the rolling forecasts, and while strategic targets are communicated throughout the organization there is little use of official personal targets. The firm have specific strategies under development to counter these elements. The newer implementation partly follows the Beyond Budgeting system, however the focus seems to be on designing an impactful solution regardless of framework. Consequently, there is less focus on relative targets, but they will be designed as directional and ambitious.

Regarding incentive systems, the research identifies that the key factor is designing the systems to fit any given setting. Critical factors were observed to be a clear connection with effort exerted, impact size and timing. However, these factors vary across almost every position in the firm. Hence, simply implementing systems to match the Beyond Budgeting theory did not seem to yield optimal results. The result is that the motivational and guiding impact of these systems are dependent on matching the setting their applied to, more so than a specific system.

Table of contents

Preface		2
Abstrac	t	3
Table o	f tables	6
Table o	f figures	6
Chapter	1: Introduction	7
1.1	Report Background.	7
1.2	Problem statement	9
1.3	Relevance	9
1.4	Empirical basis	10
1.5	Scope and structure	11
Chapter	2: Theoretical framework	13
2.1 D	evelopments of Beyond Budgeting as an alternative control system	14
2.1	.1 Management control systems and the budget	15
2.1	.2 Critique of the budget	15
2.1	.3 The Beyond Budgeting system	16
2.2 T	he target-setting process	22
2.2	.1 Target criteria	23
2.2	.2 Disadvantages of targets	27
2.3 P	erformance Measurement	27
2.4 In	centive systems	29
2.4	.1 Background and concept of incentive systems	29
2.4	.3 Incentive system design	33
2.5 T	heoretical framework for analysis	38
Chapter	3: Methodology	41
3.1 F	ield of study	44
3.2 R	esearch design	45
3.3 D	ata collection	47
3 3	1 The Interview guide	10

Chapter 4: Empirical analysis	50
4.1 Historical background and business model	50
4.1.1Restructuring process	51
4.2 Beyond Budgeting implementation	54
4.3 The target setting process	56
4.4 Performance measurement	59
4.5 Incentive systems of the firm	60
Chapter 5: Analysis	63
5.1 Targets	63
5.1.1 Specific targets	64
5.1.2 Challenging targets	69
5.1.3 Acceptance of targets	70
5.1.4 The use of targets to evaluate performance	73
5.1.5 Feedback to targets	76
5.1.6 Deadlines	78
5.1.7 Learning orientation	79
5.1.8 Team targets	80
5.1.9 Conclusion targets	82
5.2 Performance Measurement	84
5.3 Incentive Systems	88
5.3.1 Current incentive systems	88
5.3.2 Short term incentives	88
5.3.2 Long-term incentives	96
5.3.3 Performance-based salary system	97
5.3.4 Incentive systems and Beyond Budgeting	99
5.3.5 Conclusions incentives	101
Chapter 6: Conclusions	
6.1 Main findings	104
6.2 Suggestion for further research	
Bibliography	109

Reflection note, Johan Sten Gustavsen	117
Reflection note, Kristian Fredrik Hornnes	120
Appendix 1	122
Appendix 2	123
Appendix 3	124
Appendix 4	128
Appendix 5	132
Table of tables	
Table 1: Beyond Budgeting Principles	19
Table 2: Target Criteria	38
Table 3: Incentive System Criteria	39
Table of figures	
Figure 1: Value Chain Model	51

Chapter 1: Introduction

This chapter will introduce the general background of this thesis. It will start with a report background, and then move on to define the problem statement of the thesis. The topics relevance will be discussed, followed by the empirics and scope of the study. Finally, the scope and structure of the paper will be outlined.

1.1 Report Background.

Historically, budgets have been a central management control system, and few businesses would imagine operating without them (Bogsnes, 2012). However, society and businesses tend to move towards higher complexity and being more dynamic (Hope & Fraser, 1997). As a management control system, the budget has been criticised for being time consuming and promote gaming (Hope & Fraser, 2003). At the same time, the budgets are based on past numbers, which are not necessarily an indication of future trends (Bogsnes, 2016a; Hope & Fraser, 2003). This makes the system less suitable when firms need to be agile and adaptable (Bogsnes, 2016a; Hope & Fraser, 2003).

As a response to these changes in the business environment, the Beyond Budgeting concept was introduced as an alternative to traditional budgeting practises (Hope & Fraser, 1997; Hansen, Otley & Van der Stede, 2003). The proponents of Beyond Budgeting suggest that the budget should be abandoned entirely. At the same time, it recommends decentralizing the decision-making functions to the most knowledgeable position in the organization (Hope & Fraser, 2003). The goal is to move away from the use of historical numbers, and rather base resource allocation on forward oriented methods, like forecasts (Hope & Fraser, 2003).

The decentralization and forecast-orientation of Beyond Budgeting thus create a need for a flexible workforce (Hope & Fraser, 2003). In order to achieve the necessary flexibility, the workforce would need to be self-governing and knowledgeable (Bourmistrov & Kaarbøe, 2013). The resulting autonomy would enable the organization to perform the correct actions on a short notice (Hope & Fraser, 2003).

This creates a need for management control systems that can guide and motivate the effort of skilled employees with decision-making power (Merchant & Van der Stede, 2017). The goal of an effective system would be to align the goals of both principals and agents (Prendergast, 1999). This will turn guide employee to work towards the strategic vision of the organization (Merchant & Van der Stede, 2017).

Merchant & Van der Stede (2017) introduce these systems as result controls. This system is comprised of setting targets for key dimensions, measuring the performance towards those targets, and issuing rewards dependant on the result (Merchant & Van der Stede, 2017, p. 38). They reason that the use of targets help guide employee effort, as well as enable individuals to assess their own performance (Merchant & Van der Stede, 2017, p. 40). Performance is then measured, either through objective variables or subjective evaluations (Merchant & Van der Stede, 2017, p. 39). Finally, rewards are issued when targets are achieved, which increases the motivation for employees to work towards those targets (Merchant & Van der Stede, 2017, p. 41). Other frameworks for management control system research outline similar connections. Otley (1999) included all these elements in his framework, which was then expanded up on by Ferreira & Otley (2009). In these systems all three topics of targets, performance measurements and incentive systems are tied to employee guidance and motivation.,

The Beyond Budgeting system include all the systems in their principles. It does however, specify certain characteristics believed to increase business agility (table 1). These are more specific than the general theories describe, as the Beyond Budgeting system define which traits are the most beneficial. Some Beyond Budgeting proponents highlight the need for a comprehensive application of the Beyond Budgeting principles, in order to fully utilize the system (Bogsnes, 2016b). These specifications make it interesting to research the impacts of the result control system, in a firm which apply the Beyond Budgeting principles

1.2 Problem statement

The problem statement of the study is as follows:

What is the impact of targets and incentive systems in a Beyond Budgeting setting?

This problem statement will be addressed through a three-step process. Initially, theoretical concepts will be introduced. This includes the Beyond Budgeting system, target-setting processes, performance measurement systems, and different incentive systems. Afterwards, the data collected will be examined through an empirical analysis. In this section the theoretical framework developed for the topics studied, will be used to analyse the systems of the case firm. Finally, the research findings on these topics will be identified and examined. The conclusion will include a discussion on the overall effects of systems the firm apply, and how they match against Beyond Budgeting theory. To further specify our research, we have formulated two research questions, which let us answer the problem statement.

How are targets applied in a firm applying Beyond Budgeting principles?

How are incentive systems designed in in a firm applying Beyond Budgeting principles?

1.3 Relevance

The relevance of the research lie in what factors are relevant for the systems in questions. This is based on the changing market structures and the need to fast adaption (Hope & Fraser, 1997). This will have consequences for how firms apply management control systems (Hope & Fraser, 1997). New systems must be both flexible and effective, and applicable to real-life situations. These factors have led to the need for new and agile management systems, such as Beyond Budgeting (Hope & Fraser, 2003).

Moreover, this needs to be done without creating detrimental side effects. The challenge is to effectively guide employee behaviour in order to accomplish the strategic goals, and ensure continued value creation (Merchant & Van der Stede, 2017). In order to understand the interdependencies between control mechanisms, there has been a call for a more holistic approach within management control systems research (Abernethy & Brownell, 1997; Malmi & Brown, 2008). This increases the relevance of the Beyond Budgeting system, which focuses

on the joint use of leadership principles and managerial systems (Hope & Fraser, 2003; Bogsnes, 2016b). The system is developed by practitioners more so than academics which should make it closely related to real-life scenarios (Bogsnes, 2012).

This makes it relevant to study what factors are actually relevant in a real-life setting. By seeing how the firm applies systems and how employees respond, we may increase the understanding of what aspects of the management control systems are relevant, and why.

Consequently, the aim of this thesis is to understand what is needed for management control systems to accomplish strategic goals and effectively motivate employees. This will be viewed in the setting of the Beyond Budgeting system. This involves seeing what factors are important for the Beyond Budgeting system to be relevant, which is based on the framework developed by Hope & Fraser (2003), and then made official through the organization *Beyond Budgeting Round Table* (Table 1). Then, a framework will be defined for the success of target-setting and incentive systems, and how performance measurement is used to connect the two systems. The target-setting process will be analyses using the criteria suggested by Lunenburg (2011), which he develops by examining previous empirical studies. Then, the incentive systems will be examined using the frameworks suggested by Lazear & Gibbs (2017) and Merchant & Van der Stede (2017). These will be used to determine how rewards are tied to performance measurement, and then their overall effects.

1.4 Empirical basis

The methodology applied in this thesis is semi-structured interviews with a selection of managers and project leaders in a medium sized, international technology firm. Relevant literature and theories will then be used to create an analytical framework for the analysis of the collected data. Interviews with the managers focus on information regarding system design, implementation and intention. Then the interviews with employees at the project level will be used to observe effects of each system.

The analysis examines the target-setting and incentive systems of the firm, by applying a theoretical framework to the data collected. Qualitative interviews will be applied to gather

data, which will then be analysed. This lets us study the design and implementation of targets and incentive systems within the case firm. The firm is currently in the process of an organizational restructuring. Therefore, the analysis will also cover the new systems which have been decided upon at the time of the data collection.

In conclusion, the report looks at both the current system, as well as its possible development, and then in turn how they are tied to targets, performance management and incentive systems. Qualitative, semi-structured interviews are essential to analyse both the existing systems in place, as well as the intentions and reasoning for the potential new systems to be implemented.

1.5 Scope and structure

The second chapter of the thesis starts with a theoretical section to introduce each of the topics being studied. The chapter is structured by subject and starts with Beyond Budgeting. It then covers target-setting, performance measurement and incentive systems in turn. Each section describes the systems historical development and moves on to outline a set of criteria for their implementation. In addition, the critique and challenges of each system is discussed. The chapter ends with presenting the theoretical framework.

The third chapter will explain the methodology used. This includes an outline of why an inductive approach was chosen to perform a case study. In addition, we discuss the importance of credibility and authenticity within qualitative research. Then the choice of data collection methods is outlined. This includes why semi-structured interviews were chosen, as well as the interview guide design.

The fourth chapter introduces the empirical analysis of the case firm. The section describes the background information of the firm, as well as explore the systems which have been and will be implemented. The fifth chapter then continue the analysis, as each topic is examined using their respective theoretical framework. Each sub-chapter will include a comparison of each system towards their respective Beyond Budgeting principle. Finally, in chapter six we will discuss our findings within each subject and suggest further research.

The scope revolves around impacts of targets and incentive systems. These systems are interdependent and based on performance measurements. Performance measurements are a key part in both target-setting and incentive systems. Consequently, its theoretical background will be introduced and used in the analysis of the other topics.

Chapter 2: Theoretical framework

As said in the introduction, the thesis studies the effects of targets, performance measurements and incentive system in a Beyond Budgeting setting. In order to study how these systems are implemented in practice, and compare to the principles of Beyond Budgeting, we will now introduce a theoretical framework of analysis.

The chapter will address each of the topics studied, starting with their historical context and development, and then presenting their relevant theoretical framework. Initially, the Beyond budgeting model will be presented, as this system will be the setting which the other topics are studied within. This includes the system historical setting and then move on to the concrete principles of the model. These principles will be outlined with a focus on the ones relevant to target setting, performance measurement and incentive systems.

The management control systems of targets, performance measurement and incentive system are interconnected and based of each other. Otley (1999) include these three in his framework for management control system research, here named as targets, rewards and feedback loops. This framework was then further developed, by Ferreira and Otley (2009). Here the three systems are represented as interdependent and employee oriented; targets are evaluated to gauge employee performance, which then form the basis for rewards (Ferreira & Otley, 2009). At the same time these systems aim to guide and motivate employees (Lunenburg, 2011; Merchant & Van der Stede, 2017). This mirrors what Merchant and Van der Stede (2017) define as result controls (Merchant & Van der Stede, 2017, p. 38).

These three topics will be covered in the order presented above. Initially targets will be presented. The section will start with the historical origin of target setting systems, and then move on to present a framework of analysis, based on the work by Lunenburg (2011). The section will finish with a coverage of the challenges associated with the target-setting process.

Then the concept of performance measurement will be outlined. The section will be split in two. The first part will show the general systems of performance measurement. In other words, the methods of collecting performance data. The next section will then outline the general

purposes of performance measurement, and how the data can be applied. The section will end with a presentation of theory which suggest the optimal uses of performance measurement.

Finally, reward systems also called incentive systems will be outlined. As stated by Merchant and Van der Stede (2017) there are a vast amount of variations of incentive systems. In order to create an analytical framework, we will first present a model illustrating why these systems exist, and how they are based on performance measurements (Lazear & Gibbs, 2017). Then we will present the framework of Merchant and Van der Stede (2017), which are used to evaluate the effectiveness of incentive systems. The section will end with a presentation of potential behavioural problems associated with the use of incentive systems (Prendergast, 1999).

The result is a theoretical framework, of which we can analyse their effect within the case firm, based on the empirical data collected. This will let us answer the problem statement below.

What are the impacts of targets and incentive systems in a Beyond Budgeting setting?

To best answer this problem statement, we have composed three research questions, which will shape our analysis. These will collectively be answered in Chapter 6, Conclusions.

How are targets applied in a firm applying Beyond Budgeting principles?

How are incentive systems designed in in a firm applying Beyond Budgeting principles?

2.1 Developments of Beyond Budgeting as an alternative control system

This chapter will outline the concept of management control systems (MCS) and the Beyond Budgeting system as an MCS. To explain why the Beyond Budgeting system was created we will start with the historical setting of management control systems and the use of budgets. We will then move on to the critique budgets have received, and how the Beyond Budgeting system was introduced as an alternative.

hen an outline of the Beyond Budgeting system is provided, with a focus on the principals relevant for this thesis. The sub-chapter will conclude with a summary of challenges associated with the Beyond Budgeting system. This includes a theoretical outline of the settings in which the system is relevant and not.

2.1.1 Management control systems and the budget

Management control systems have multiple definitions. According to Chenhall (2003) management control systems are perceived as "passive tools providing information to assist managers" (Chenhall (2003). These systems will, in turn, be the basis of targets (Chenhall, 2003). Malmi and Brown (2008) defines management control systems as: "all the devices and systems managers use to ensure that the behaviours and decisions of their employees are consistent with the organization's objectives and strategies" (Malmi & Brown, 2008).

Merchant and Van der Stede (2007) focus on dealing with employee behaviour, and what behaviour should be avoided. They state that "Management controls are necessary to guard against the possibilities that people will do something the organization does not want them to do or fail to do something they should do." (Merchant and Van der Stede 2007). Consequently, the need for MCS is not present if we can trust that employees work towards the organizational strategy (Merchant & Van der Stede, 2007, p. 8).

One of the most used MCS tools throughout the history is the budget. Ever since its introduction in the 16th century the budget has been a staple of modern economics. The last fifty years the budget has been a fundamental method for organizational administration (Bergstrand, Bjørnenak & Boye, 1999). The budget is defined as "a detailed and quantified plan of action for a given future period" (Hoff & Bjørnenak, 2010; Horngren, 2012, p. 206). Hoff (2004) describes seven main purposes for the use of budgets. They include planning, coordination, communication, defining and delegation of responsibilities, motivation, resource allocation, and finally feedback and control. The priority of these purposes and the intention of the budget tends to vary across firms. The budget also has a control function and is often used as a reporting tool (Bergstrand et al., 1999).

2.1.2 Critique of the budget

As a management control system, the budget has received considerable critique in recent years (Bogsnes, 2016a; Hope & Fraser, 2003) Historically, that budget has been so incorporated in management models that few imagined operating without it (Bogsnes, 2012). However, the

budget process can be time-consuming, as well as promote gaming both during and after negotiations (Hope & Fraser, 2003). Moreover, budgets are inherently rigid and quickly become outdated. This creates bureaucracy and a hindrance towards value creating decisions (Bogsnes, 2016a).

The budget is also criticised for being a poor data source for performance evaluations. The factors pointed out include poor causality between effort and result, as well the difficulty in controlling for external variables (Bogsnes, 2012). It is also thought that the budget hamper the development of products and strategy (Hansen, Otley & Van der Stede, 2003). Some of this critique is grounded in changing business environments. Trends towards globalization, fast pace market change and increased consumer power has created a need for flexible management control systems, which are able to respond to these changes (Bjørnenak & Kaarbøe, 2011).

2.1.3 The Beyond Budgeting system

Beyond Budgeting is a leadership philosophy, more than a concrete management control system. The philosophy has formed as a response to the criticisms traditional budgets have received in recent years. The goal of Beyond budgeting is to reinvent a firm's internal structures and control systems to enable quick and effective reaction to external factors (Hope & Fraser, 1997; Hansen et al., 2003). The system combines leadership principles and guidelines for management system to provide a holistic philosophy (Bogsnes, 2016b).

Unlike other frameworks, Beyond Budgeting stems from practitioners instead of scientist and researchers. This could explain why it is less focused on a strict formula, and more on being a leadership philosophy (Bogsnes, 2012). Hope & Fraser (2003) illustrate this in their definition of Beyond Budgeting.

"Beyond Budgeting is a set of guiding principles that, if followed, will enable an organization to manage its performance and decentralize its decision-making process without the need for traditional budgets. Its purpose is to enable the organization to meet the success factors of the information economy (e.g. being adaptive in unpredictable conditions)." (Hope & Fraser, 2003, p. 212).

The system has seen the most use in the Scandinavian region, with one suggested reason being cultural factors (Heinzelmann, 2015). Supporters of the movement argue that employees become more motivated and productive with increased responsibility, both in terms of decision making and results (Hope & Fraser, 2003). In conclusion, Beyond Budgeting is a dynamic management approach. The goal is not the removal of the budget in itself, but to increase performance through better management and forward-looking systems (Bogsnes, 2012).

Historical context of Beyond Budgeting

Beyond Budgeting is not an old approach compared to traditional budgeting. It was conceptualized in the late 1990's and early 2000's, but the idea can be traced to the 1970's when Svenska Handelsbanken stopped using budgets. The CEO at the time, Jan Wallander, highlighted that budgets were based on historical results. However, he pointed out the necessity of understanding future trends and the factors which define them (Wallander, 1999). Two years after Handelsbanken stopped using budgets, they went from being in an economic crisis to become one of Sweden's most profitable banks (Daum, 2013).

Bjørnenak (2010) used their lack of budgets as an explanation for why Handelsbanken achieved better results than its competitors during the banking crisis in 1980s and the financial crisis in 2008.

It was not until the 1990's that other firms started to adopt the idea of removing budgets. Among these were firms like Borealis, Skandia, AB Volvo, and ABB (Neely, Bourne & Adams, 2003). It was also during the 1990s that the concept of Beyond Budgeting first was formalized by Hope and Fraser (Hope & Fraser, 2003). Then, in 1998, Hope and Fraser formed a collaboration with Peter Bunce, and started the network of Beyond Budgeting Round Table (BBRT). The goal was to attain data and become an information-centre for managing companies without budgets (Beyond Budgeting Round Table, 2014). Their organization is the source for the official Beyond Budgeting principles, as shown below.

Another pioneer within the Beyond Budgeting movement is Bjarte Bogsnes. He said that the budget did not contribute enough to value creation, and that the potential of the organization

was hard to reach with the existing system (Bogsnes, 2016a). It was under his leadership that Equinor, formerly Statoil, adopted Beyond Budgeting in 2005 (Bogsnes, 2016a).

The 12 principles in Beyond Budgeting

The Beyond Budgeting framework is based on twelve main principles. The first six outline a leadership philosophy designed to empower employees. The other six define the design of management control systems. Collectively they serve as a foundation for organizational design, with the goal of enabling agile decision-making (Bogsnes, 2016b). This is the framework developed by the Beyond Budgeting Round table, and therefore the one used in this thesis. They are, however not meant as a checklist, as Beyond Budgeting is not formulaic, but should rather serve as a design philosophy (Bogsnes, 2016b).

Beyond Budgeting

- enabling business agility

Leadership principles Management processes 1. Purpose - Engage and inspire people around bold and noble 7. Rhythm - Organise management processes dynamically around causes; not around short-term financial targets business rhythms and events: not around the calendar year 8. Targets - Set directional, ambitious and relative goals: avoid 2. Values - Govern through shared values and sound judgement; not through detailed rules and regulations fixed and cascaded targets 9. Plans and forecasts - Make planning and forecasting lean and 3. Transparency - Make information open for self-regulation, unbiased processes; not rigid and political exercises innovation, learning and control; don't restrict it 4. Organisation - Cultivate a strong sense of belonging and 10. Resource allocation - Foster a cost conscious mind-set and organise around accountable teams; avoid hierarchical control make resources available as needed; not through detailed annual budget allocations and bureaucracy 5. Autonomy - Trust people with freedom to act; don't punish 11. Performance evaluation - Evaluate performance holistically everyone if someone should abuse it and with peer feedback for learning and development; not based on measurement only and not for rewards only 6. Customers - Connect everyone's work with customer needs; 12. Rewards - Reward shared success against competition; not avoid conflicts of interest against fixed performance contracts

1

Table 1: "Beyond Budgeting Principles", 2016, by Beyond Budgeting Round Table. (https://bbrt.org/the-beyond-budgeting-principles/)

The twelve principles are shown in Table 1. As the focus of the thesis is the use of targets and incentive systems, the relevant principles include number 8. targets, number 11. performance evaluation, as well as number 12. rewards. The next section will outline each of these principles in turn. However, to examine these three principles we must set them in the context of the rest of the Beyond Budgeting system. Therefore, a general presentation of the systems is outlined below.

Player (2003) state that the goal of applying Beyond Budgeting principles is to hone the performance potential of an organization. This is done by allowing people in the front lines more responsibility. The intention is that a decentralized structure combined with self-sufficient employees increase adaptability and avoid the performance trap of annual budgets. While the organizational change is extensive there are many, potentially long lasting, benefits (Player, 2003, p. 3).

As a consequence, decentralization is an important factor within Beyond Budgeting. Principle 5 describe autonomy, which is an important part of decentralization, and should help increase performance and motivation (Lazear & Gibbs, 2017; Hackman & Oldham, 1976). Decentralization should also make it easier to be competitive and reduce costs (Bogsnes, 2016a). This is because employees often develop their knowledge and skills, allowing the firm to be more innovative. (Bogsnes, 2016a) Moreover, decentralization leads to faster decision making, and that decisions are made by those with relevant knowledge. On the other hand, you have the risk of suboptimal decision making. Departments can make decisions that suits them and not the entire organization. You also have the risk of tasks overlapping of there is a lack of communication between teams (Bhimani, Horngren, Datar & Rajan, 2012).

Principle 8. describe the use of targets. When designing targets, they must be linked to strategy and the firm's overall purpose. The Beyond Budgeting philosophy emphasize the use of relative

targets, as fixed targets risk becoming disconnected from reality (Hope & Fraser, 2003). Consequently, you gain the ability to gauge both internal and external performance and respond accordingly. It is also important to make employees involved in the target-setting process. A proposed solution is to let teams set their own targets (Röösli, 2016a).

Principle number 11 describe performance evaluation. Measuring effort and value created is challenging in knowledge-based jobs (Bogsnes, 2016c). The quote "not everything that counts can be counted, and not everything that can be counted counts" (Cameron, 1963, p. 13) describe how complicated it is to precisely measure and fairly evaluate effort.

The Beyond Budgeting philosophy tackle this through two points: data collection and data purpose (Bogsnes, 2016c). Measurement, or data collection, should be done holistically. This is interpreted as a mix of subjective and objective measurements, depending on the situation. The philosophy is more rigid, however, on that data should be used for developmental purposes, not as a graded summation of output. By combining these measures with relative targets, employees can be evaluated by effort measured against external and internal factors. In addition, the inclusion of peer evaluation is emphasized. As managers are often disconnected from day-to-day activities, colleagues may be better suited as a data source (Bogsnes, 2016c).

Finally, principle number 12 is reward, and describes the philosophy behind incentive system design. This encompasses recognition, salary adjustment, bonuses, promotion and so on. Common to all its variations is that they must add perceived value. In addition, as performance is ultimately about meeting the competition, it is reasoned that incentives should be based on relative targets (Röösli, 2016b).

This adheres to the critique Beyond Budgeting supporters place on the use of monetary bonuses. Many firms use individual bonus systems, distributing rewards when a fixed target is reached (Bogsnes, 2018). This works when quantity is the focus, but less so when quality is key (Röösli, 2016b). Bogsnes (2018) point out that a main reason why companies choose individual bonuses is to increase motivation. He states, however, that the motivational effects of individual rewards are a myth. He reasons that for simple jobs, with easily measured outputs, it can be a practical system. However, in modern markets cooperation and teamwork are crucial elements for success (Röösli, 2016b). Therefore, instead of individual bonuses Bogsnes (2018)

recommend shared bonus schemes, for instance based on company performance. He argues that "when we move to more complex and team based "knowledge" work, money loses its motivating power to purpose, mastery, autonomy, and belonging." (Bogsnes, 2018).

Challenges with Beyond Budgeting

There are also certain challenges associated with the Beyond Budgeting model. A key problem is when the majority of effort is used on implementing the leadership principles (Bogsnes, 2016a). The consequence is that management principles often become neglected. This means the management systems in place lag behind and become disconnected. Bogsnes (2016b) specify that the key to successfully use Beyond Budgeting is coherence. He argues that consistency between what managers say and what they implement is paramount (Bogsnes, 2016b).

There is also disagreement of how well the Beyond Budgeting model fits different settings. Rickards (2006) states that the model would only be functional for 10-20% of the biggest budgeting companies, and therefore has few potential users. He reasons that in order to benefit from the model, the firm must operate in an unpredictable and dynamic environment (Rickards, 2006). This imply severe competition and rapid market change. However, this is not the case for all companies. In addition, it has been argued that instead of removing the budget, it should be improved (Rickards, 2006). Some partly agree on shortcomings of the budget, but still highlight its structural benefits (Hope & Fraser, 2003).

So, while Beyond Budgeting has become a known model and philosophy, it has not gained the same traction as other modern management control systems. There seem to be some reluctance tied to adopting the philosophy wholeheartedly (Bogsnes, 2012). This relates to both the major change of removing budgets, but also the degree firms identify themselves with the critique budgets receive. In addition, firms who has recognised the problems within their organizations are still reluctant to adopt large-scale alternatives like Beyond Budgeting (Ekholm & Wallin, 2000; Libby & Lindsey, 2009).

It is reported that 94 percent of Norwegian firms continue to operate with budgets (Johansen & Madsen, 2013). This point aside, the adopters of Beyond Budgeting report a high degree of satisfaction. This could signal both limited scope for adoption, but also a hesitancy towards change (Bogsnes, 2012). It should also be added that many firms apply flexible budget models such as benchmarking, and Balanced Scorecard abbreviations. So even if Beyond Budgeting has limited adoption, the need for flexibility is more broadly recognised (Bogsnes, 2012).

2.2 The target-setting process

Targets are goals set for employees and enable managers to see how well employees perform. They are also an important part of Beyond Budgeting theory, where their use is meant to create responsive and adaptable organizations (Bogsnes, 2018). However, there are specific requirement of the target-setting process, in order to make them function as a performance measurement tool (Lunenburg, 2011). If there is something wrong with the target, it loses its analytical function. The historical background for target use will be presented initially. Then the criteria for the general target-setting process will be outlined (Lunenburg, 2011).

Target-setting was first formalized by Odiorne in his book *Management by Objectives* (1965). He showed that effective management can only be achieved through a precise definition of corporate and personal targets (Odiorne, 1965). The idea was that the entire organization could be managed through targets and sub-targets. While the implementation of targets often differs between firms, their importance has been supported by later studies. A study by Locke, Shaw, Saari & Latham (1981) compared effects of target setting on performance. They discovered that specific and challenging goals led to a higher performance in 90% of the time, compared to easy goals, "do your best" goals or no goals at all (Locke et al., 1981). As targets have been so widely supported, their use has become popular in all types of professions (Locke & Latham, 1990). Today, it is almost universal to use pre-set performance targets in for-profit organizations (Merchant & Van der Stede, 2017, p. 301).

Even though there are several definitions of targets, these tend to encompass similar factors. Lunenburg (2011) define targets as "what the individual is consciously trying to do"

(Lunenburg, 2011), while others define it as "a description of a desired future condition" (Jacobsen & Thorsvik, 2013, p. 37; Knudsen & Flåten, 2015, p. 257). We can conclude that the goal of targets is to influence employee performance and behaviour, promoting work towards one or more strategic goals. This has caused targets to become an important part of management practice (Locke & Latham, 2002). From the definition of targets, we see that they should be closely connected to strategic direction. Therefore, long-term strategic objectives should be determined before the target-setting process (Otley, 1999; Ferreira & Otley, 2009).

One term often used when talking about goals and targets, are Key Performance Indicators (KPI's). These are indicators which measures aspects deemed important for a firm's success (Locke & Latham, 2002). Key performance indicators are used to identify necessary actions to achieve long-term strategic objectives (Locke & Latham, 2002). They are also important to make employees focus on the right activities, and thereby create a cohesive direction (Bogsnes, 2018). Scoring high on these indicators often indicate a good result both financially and operationally. However, the indicators would be different both between firms as well as interfirm departments. Therefore, they need to be chosen carefully. A lot of firms express targets through KPI's, on different levels of the organization (Bogsnes, 2018). Bogsnes (2018) points out that it is important to only use KPI's as indicators. The indication can be either strong or weak, but it seldom tells the full truth (Bogsnes, 2018).

2.2.1 Target criteria

When setting targets and sub-targets there are several important factors to keep in mind. As shown previously, the Beyond Budgeting system state that targets should be directional, ambitious and relative (Bogsnes, 2016a). However, Lunenburg (2011) introduce a more detailed framework, which we will apply to the case firm. By applying this framework, we can see the extent of which Beyond Budgeting principles are used in the target-setting process. According to Lunenburg (2011), targets seem to be most effective when goals are specific, challenging, accepted by employees, used to evaluate performance, and feedback is provided.

In addition, to these points, the effectiveness of targets can be improved by deadlines (Lunenburg, 2011). Research also supports that targets which emphasize learning lead to higher

performance than purely performance-oriented targets (Lunenburg, 2011). Wherever teams are used, targets should also be team-oriented. This can, however, be supplemented with individual targets (Lunenburg, 2011). Each criterion is explained in depth below.

Targets should be specific

The first criteria in target setting is that they should be specific (Locke & Latham, 1990; 2002). Studies show that people perform better with specific targets being updated regularly (Locke & Latham, 1990; 2002). It helps employees realize their progress and know what to reach for. On the other hand, loosely defined targets, like generally improving, working hard and doing ones best, are observed to be less effective (Lunenburg, 2011).

In addition, specific targets help direct attention towards relevant activities (Merchant & Van der Stede, 2017, p. 301). Target specificity also reduce the variance in performance, as employees have a better understanding of how to achieve them (Locke & Latham, 2002). Moreover, when targets are used in performance evaluation, they must be specific in order to convey detailed performance information. This way specific targets define clear priorities and responsibilities, by communicating short-term strategic direction (Knudsen & Flåten, 2015, p. 259).

Targets should be challenging

Next, targets should have a balance between being challenging and achievable. Merchant & Van der Stede (2017) argues that targets should equal expected performance. This means that given a normal distribution of events, the probability should remain equal for both overperformance and underperformance (Merchant & Van der Stede, 2017, p. 304). Merchant & Van der Stede (2017) also state that the more difficult a target is, the higher is employee's motivation. However, this is only true up to the point where the employee no longer believes the target to be achievable (Merchant & Van der Stede, 2017, p. 305). This is in line with the findings of Locke & Latham (1990; 2002). Their study found that the targets leading to the highest level of effort and performance were the most ambitious ones. However, both over-

ambitious and easily achieved targets will decrease performance (Locke & Latham, 1990; 2002).

Targets should be accepted by employees

Another important aspect in target setting is acceptance. When employees agree with their targets, they exert more effort to reach them (Lunenburg, 2011). The main way to increase acceptance of targets, is to include employees in the target-setting process. If they can participate in the process and understand its strategic background, it should lead to higher acceptance and psychological ownership. This in turn, contributes to higher commitment, motivation and performance. (Locke & Latham, 1990; 2002; Knudsen & Flåten, 2015, p. 277). In addition to a better understanding, participation also provides an input on how challenging targets ought to be (Lunenburg, 2011).

Targets should be used in performance evaluation and feedback given

Targets are more effective when they are combined with performance evaluations (Lunenburg, 2011). The aim of connecting these systems is to make reaching the targets more important for employees. However, an evaluation requires the targets to be measurable, and employees should only be accountable for factors they are able to affect (Lunenburg, 2011). Hence, employees need to know what is expected of them, and how success is measured. The risk of failing to reach a target can also increase motivation. Having to explain to a manager that you failed to reach a goal is generally uncomfortable. This way autonomy and responsibility increase the stake for the employee (Merchant & Van der Stede, 2017, p. 301). Feedback also make targets more effective. Lunenburg (2011) explain that first, feedback helps employees determine their progress towards their targets. Secondly, feedback helps individuals realise what adjustments are required to improve performance. Knudsen & Flåten (2015) point out that feedback systems also increase employee motivation (Knudsen & Flåten, 2015, p. 277).

Deadlines, learning-orientation and team-targets

In addition to the factors described above, targets can be more effective by having deadlines, being used for learning and development and by having team targets (Lunenburg, 2011). Deadlines can improve effectiveness, as having a concrete deadline to reach, cause employees to exert more effort. However, there needs to be a balance between deadlines being too short and too long (Lunenburg, 2011). Too short deadlines will, as too ambitious targets, decrease performance. Employees without the ability to reach the target in time may get demotivated, and if they reach it the quality will most likely suffer (Lunenburg, 2011). Too long targets on the other hand, will make employees slow down and delay tasks to fill the available time (Lunenburg, 2011).

Research also support that targets focusing on learning leads to higher performance compared to pure performance targets. Employees with educational targets will develop competences over time by mastering challenging situations (Lunenburg, 2011). In addition, targets with a learning focus are shown in several studies to have a positive impact on work-related behaviours and performance (VandeWalle, 2001).

As formerly mentioned, having team-oriented targets are as important as applying them individually. This should increase the productivity by strengthening the feeling of belonging, which in turn improve the organizational culture. The most effective targets are often a combination of team targets and individual targets (Lunenburg, 2011). When such a balance is created, studies show that employees get more satisfied and contribute more to the team (Kristof-Brown & Stevens, 2001). Moreover, both educational and a team-oriented targets are important aspects of the Beyond Budgeting principles (Röösli, 2016a).

2.2.2 Disadvantages of targets

There are also some disadvantages associated with the target setting process. What often happens is that only quantifiable variables are given targets. Consequently, important tasks and challenges can be neglected as they are difficult to measure. However, being aware of such biases may reveal the importance of more qualitative tasks (Knudsen & Flåten, 2015, p. 277).

Another limitation occurs when monetary incentives are tied the targets. If employees participate in the target setting, they may influence the process in order to decrease target difficulty (Locke & Latham, 2002). Other challenges include too much focus on short term targets, ignoring long-term value creation. Target setting also become harder the more complex a job is (Lunenburg, 2011). Target-setting processes can also be expensive, especially when system changes require targets to be replaced (Knudsen & Flåten, 2015, p. 277).

2.3 Performance Measurement

Performance measurement is an essential part of both targets and incentive systems. It is the tool which let managers know how well targets are fulfilled, and how much effort is exerted by employees (Lazear & Gibbs, 2017, p. 215). This way, it forms the connection between targets and rewards. However, Lazear & Gibbs (2017) point out the most complex part of incentive systems is how performance is measured and need to uphold both accuracy and fairness. This section will briefly go through the basic forms of performance measurement, as well as categorise how results can be used.

There are two main ways of measuring performance; formulaic, also called objective, and subjective (Merchant & Van der Stede, 2017, p. 364). These are different data collection systems on the extent of targets achievement. In a formulaic system the performance measurement deduces fulfilment of pre-determined targets. This usually provides quantifiable data and an objective view on target achievement (Lazear & Gibbs, 2017, p. 209). This is the typical basis for the standard pay-for-performance structure, where performance is rewarded when performance increases over a certain threshold (Merchant & Van der Stede, 2017, p. 364).

However, the ideal performance evaluation includes all the value-adding actions of an employee, but no more. This is difficult to achieve with purely objective measures as external factors change over time (Lazear & Gibbs, 2017; Merchant & Van der Stede, 2017). In many cases subjective performance measurements can with benefit be added in order to provide a more holistic picture of employee effort (Prendergast, 1999). These systems involve measurements being performed by managers, who evaluate employees based on predefined criteria (Merchant & Van der Stede, 2017; Prendergast 1999).

The difference between formulaic and subjective is that formulaic will have a clear result of whether targets were reached or not (Prendergast, 1999). However, formulaic performance measurements can allow for behavioural problems, such as multitasking and gaming (Prendergast, 1999). Subjective systems also open for behavioural consequences, as employees can affect their evaluation by consorting with evaluators (Prendergast, 1999). These problems will be expanded upon in the incentive systems chapter, as they involve both performance measurement and incentive systems.

Taras (2009) state that assessment is the prerequisite to appraisal, and after data is collected it can be used for either a summative or a formative evaluation. A summative process involves assessing results within a certain period, often giving a form of grade depending on what is achieved. This means it simply judges what has happened during a given time frame. These systems are often combined with monetary incentives, like bonuses or pay-for-performance (Kuvaas & Dysvik, 2016). The formative process, on the other hand, is future-oriented and focus on the development of the employee. These systems will discern the target-achievement of a given period, and then reflect on how to improve on that result (Kuvaas & Dysvik, 2016).

The use of formative evaluation is supported by the observation of Budworth & Mann (2011), where newer appraisal models suggest a refocus towards employee development. The goal of the shift is to focus on organizational improvement, with a focus on teams rather than individual work. This seems to match the performance measurement principle of the Beyond Budgeting system (Bogsnes, 2016c). However, Taras (2009) proposes a combination of summative and formative assessment, where the summative is a result-oriented system that precedes the

formative assessment. The results can then be used to identify talents or training needs (Taras, 2009).

2.4 Incentive systems

Incentives are a vital part of economics. This is also recognized in the Beyond Budgeting system, which mandate that rewards should be based on shared success, not fixed performance contracts (Röösli, 2016b). But their use has also been criticised by Beyond Budgeting advocates. Bogsnes (2018) argue that when you move away from simple jobs, individual bonuses are not key motivating factors. He points towards autonomy, development and teamwork as more powerful motivators.

By looking at a detailed set of incentive system criteria, we can analyse how the systems of the case firm function, and how they match against the Beyond Budgeting Theory. This chapter will start with expanding on the basic theory of incentive systems. Then it introduced an analytical framework for further analysis. The chapter will also illustrate typical behavioural problems associated with incentive systems.

2.4.1 Background and concept of incentive systems

"Reward and incentive systems represent a powerful means of influencing an organization's culture, focusing efforts on high-priority tasks, and motivating individual and collective task performance." (Dess, McNamara & Eisner, 2016, p. 284).

This quote illustrates the goal of incentive systems; to guide and to motivate. Lazear & Gibbs (2017) state that there is strong evidence that employees respond to incentives, and these systems have potential for both great value creation as well as destruction.

The economic theory behind the use of incentive is the principal-agent problem (Lazear & Gibbs, 2017, p. 202). The principal-agent problem is one of the most common form of social interactions, as one agent is hired to act on behalf of another, the principal. The problem arises when you assume that each individual seeks to maximize their own utility, even though their

goals are misaligned (Ross, 1973). Modern corporations usually separate ownership and control, which is why this misalignment in goals occur (Lazear & Gibbs, 2017, p. 203).

Consequently, employee incentives depend on balancing the marginal benefit of changing behaviour against the marginal cost of said change. The goal is to achieve a joint strategic direction between owners and employees at all levels of the organization (Lazear & Gibbs, 2017, p. 231; Merchant & Van der Stede, 2017, p. 353). However, whether the result is favourable or detrimental is largely dependent on the form of incentive system used in each setting (Prendergast, 1999).

Lazear & Gibbs (2017) propose a simple mathematical formula to explain why a firm could benefit from implementing incentive systems. It starts with the assumption that a job has a singular dimension. Thus, the firm wants to stimulate the employee to provide a singular form of effort. This is denoted as e. Then the employee's total contribution to the firm will be denoted as Q, which depends of the effort exerted by the employee's effort. This can be written as the function Q = Q(e), representing the value created by the employee. This makes the firm's profit Q(e) - Pay, being the contribution of the employee minus their compensation (Lazear & Gibbs, 2017, p. 202).

Then we assume that the intrinsic motivation of the employee result in less value creation than the firm prefers. In this situation the employee can be assumed to incur a psychological cost when they increase their effort. This would be the *disutility of effort*, C(e) (Lazear & Gibbs, 2017, p. 203). It is typically assumed that C(e) increases at a steeper rate than e to reflect that increasing effort has a higher marginal cost (Lazear & Gibbs, 2017, p. 203).

This shows that the employee needs more compensation to counter the disutility of effort. Consequently, the employee can be incentivized to increase effort when pay is based on performance. This will, however, lead to a need for a performance measure, *PM*. *PM* then estimate the value creation of the employee, *Q* (Lazear and Gibbs, 2017, p. 203). Note that this show how performance measurements function as the firms estimate the exerted effort, and typically tie incentive systems to targets.

Pay is then a function of the performance measure; Pay = Pay(PM). Performance measures usually contain some error, as it cannot perfectly reflect the effort exerted. Hence $PM = Q + \epsilon$, where ϵ represent measurement error, and is a random variable (Lazear and Gibbs, 2017, p. 203).

Then you need to consider the fact that individuals often are risk averse, which can be represented as an additional cost. This is defined as the *certainty equivalent*, which represents the amount an individual is willing to pay to avoid risk. This is generally denoted as *certainty equivalent* = $\frac{1}{2} * R * \sigma_{pay}^2$, where the measure of risk is the variance of pay. R is the *coefficient of absolute risk aversion*. This represents an employee's risk aversion. The coefficient is low when risk aversion is low, and vice versa. Merging the formulae, we get an individual's net value from working for the firm (Lazear and Gibbs, 2017, p. 204).

$$Pay(PM) - C(e) - \frac{1}{2} * R * \sigma_{pay}^2$$

Since the value the employee creates for the firm is Q(e) - Pay, the firm would choose the incentive system, Pay(PM), which maximize the value function. But there are lower limitations set by the labour market, which means that the firm must also compensate for the effort cost, C, and the risk cost, R (Lazear and Gibbs, 2017, p. 204).

Now assuming that extra effort does not affect degree of riskiness of pay (R), then the incentive system must balance the marginal cost and the marginal benefits for both the employer and employee. The marginal cost for both the employer and employee is the disutility of increased effort. This is the cost of disutility the employee has to incur, but also the cost the firm has to cover for the employee to exert that effort. With marginal cost denoted as MC, this becomes:

Employee's MC for increased effort = Firm's MC for employee's exerted effort $= \frac{\Delta C}{\Delta e}$

Where the conflict of incentive systems often arise is when the marginal benefit for increased effort is unequal for the firm and employee (Lazear and Gibbs, 2017, p. 204). The employee's

marginal benefit, MB, from working harder would be based of the pay provided through the performance measurement:

Employee's MB for increased effort =
$$\frac{\Delta Pay}{\Delta PM} * \frac{\Delta PM}{\Delta e} = \frac{\Delta Pay}{\Delta e}$$

However, the marginal benefit of increased effort of the firm is based on the value creation gained from said effort,

Firm's MB for employee's increased effort =
$$\frac{\Delta Q}{\Delta e}$$

There will be a difference between these sets of marginal benefits through a combination of two factors. Firstly, inaccuracy within the performance measurement can cause effort to be either over or undervalued. Secondly, pay does not always fully compensate for the employee's exerted effort Lazear and Gibbs, 2017, p. 204). Hence Lazear & Gibbs (2017) propose that the design challenge of incentive systems is generally that,

$$Firm's MB = \frac{\Delta Q}{\Delta e} \neq Employee's MB = \frac{\Delta Pay}{\Delta e}$$

In conclusion, the difference between value creation and compensation is proposed to be the crux of incentive systems (Lazear & Gibbs, 2017). Lazear (2000) gathered empirical evidence supporting the effect of incentives when observing a simple job with an easily measured performance output. The result was a 35 percent increase in productivity, while wages only rose 12 percentage. Similar results were shown in the paper by Paarsch & Shearer (1996), as well as by Banker, Lee and Potter (1996).

However, these papers consider output rather than agents' exerted effort (Prendergast, 1999). Moreover, by assuming a one-dimensional work task, the model cannot be applied to the modern, knowledge-based work environment where the Beyond Budgeting model is relevant (Bourmistrov & Kaarbøe, 2013; Bogsnes, 2018).

2.4.3 Incentive system design

This sub-chapter will depict different main forms of external incentive systems. External systems involve the use of external rewards, such as monetary or otherwise externally beneficial factors. The goal is to guide and motivate employees (Merchant & Van der Stede, 2017; Lazear & Gibbs, 2017; Prendergast, 1999). The chapter will then outline common external reward systems with empirical examples exploring their usage and effects.

As stated, incentive systems are important as they reinforce effort towards the strategic goals of the principle. This is done by first performing a performance evaluation, and then rewarding according to how well targets were reached as judged by the evaluation. In an organizational context, incentive systems motivate positively by granting a reward, and negatively through the absence of a reward (Merchant & Van der Stede, 2017). Merchant and Van der Stede (2017) outline seven principles for external incentive systems. They state that rewards must have value, be impactful, understandable, timely, durable, and cost efficient. In addition, the systems reversibility should be charted as a safety measure (Merchant & Van der Stede, 2017, p. 366).

Rewards should be valued because if the reward is perceived as not having a value, it will not provide motivation (Merchant & Van der Stede, 2017, p. 366). However, what is perceived as valuable differs between individuals and position. In addition to short term monetary rewards, long-term opportunities like promotions, opportunities for development, autonomy and task variety are factors which add value (Merchant & Van der Stede, 2017, p. 366).

Secondly, rewards should be impactful. This includes both reward size and visibility. The amount must be large enough to add more value than the opportunity cost, as shown in the model above (Lazear & Gibbs, 2017). In addition, increased visibility can enhance value by causing peer recognition (Merchant & Van der Stede, 2017, p. 366).

Thirdly, rewards should be understandable. Understandable include both the causality aspect, as employees must comprehend why they get the rewards, but also its value. A disconnection between the cause for a reward and/or its value will diminish any motivational effect (Merchant & Van der Stede, 2017, p. 366).

Fourthly, rewards should be timely. By connecting rewards directly to the relevant performance period, you enhance learning effect by emphasizing causality. Moreover, a significant delay in the reward process is believed to have the opposite effect, with diminished impact on motivation. Fifthly effects of the reward should also be durable. The longer lasting or memorable the reward is, the greater the motivative effect (Merchant & Van der Stede, 2017, p. 366).

Finally, incentive rewards should be cost efficient. The system should achieve the marginal motivation effect at the minimum cost required. Moreover, the reversibility of rewards should be considered when designing incentive systems and performance evaluations (Merchant & Van der Stede, 2017, p. 366).

Incentive system criteria

The most used form of incentive systems is external incentives, which include all forms of monetary rewards (Merchant & Van der Stede, 2017, p. 357). Merchant & Van der Stede (2017) outline three main forms of monetary incentive systems: performance-based salary, short-term incentive plans, and long-term incentive plans. These are general categories, which most incentive systems can be sorted by (Merchant & Van der Stede, 2017).

Performance-based salary systems increase salary when the employee accomplishes a certain performance, or otherwise gain knowledge or skills which indicate increased performance for future periods (Merchant & Van der Stede, 2017, p. 357). The aim here is to incentivise employees to increase value creation on a permanent basis, by completing sponsored education, courses or certifications.

Short-term incentives include bonuses, piece-rates payments and commissions. Pay-for-performance are probably the most prevalent type, as these systems are based on variable pay (Merchant & Van der Stede, 2017, p. 358). This follows the model by Lazear & Gibbs (2017), were the pay is designed to directly motivate employees to increase their effort. Such systems are also defined as risk-sharing between the principle and agent, as the performance is rewarded only when the targets have been realized (Merchant & Van der Stede, 2017, p. 358). This does

not mean that the target needs to be financial though, only that it must be reached to earn a reward (Merchant & Van der Stede, 2017, p. 358).

Long-term incentives are defined by Merchant & Van der Stede (2017) as reward systems based on performance periods longer than one year. Their goal is typically to incentivise the creation of long-term value. They will also serve as a retention system, by motivating employees to stay within the firm, in order to maximize the value of the rewards being offered (Merchant & Van der Stede, 2017, p. 356). They are, however, generally awarded at management level or higher, based on the reasoning that decisions at these levels are the main drivers of long-term value creation (Merchant & Van der Stede, 2017, p. 360). Such long-term incentive plans are often centred around reaching or staying within certain target through a time period, were the targets are cumulative or end-of-period (Merchant & Van der Stede, 2017, p. 360).

Such long-term plans can be monetary or equity-based. Monetary systems typically involve a form for bonus at the end of the period (Merchant & Van der Stede, 2017, p. 360). Another common structure is equity based long-term incentives. These systems base rewards on the stock-price of the firm. Stock-option plans give employee's the option purchase as finite number of the firm's stock for a predefined price, during a specified period (Merchant & Van der Stede, 2017, p. 360). Usually the price is the same as the stock price the day the options is exercised. The idea is that by reading stock-options, employees will feel psychological ownership towards the firm, and work with the overall goal of increasing firm value (Merchant & Van der Stede, 2017, p. 360).

One benefit of stock options is that these plans incentives without cash payments, so firm liquidity remains unaffected (Merchant & Van der Stede, 2017, p. 360). However, the value of the shares is affected by market movements. Consequently, the stock price can fall during bearish market conditions, unrelated to firm r employee performance. In these situations, such plans can be thought to lower morale, especially if the downturn is expected to persist (Merchant & Van der Stede, 2017, p. 360). Moreover, stock-option plans create the potential for future stock issuance, resulting in dilution of ownership (Merchant & Van der Stede, 2017,

p. 360). Merchant and Van der Stede (2017) also note that short-term and long-term incentive systems need to complement each other, when both are in use.

Challenges of external incentive systems

The use of incentive systems has become a research topic characterized by disagreement. Kuvaas & Dysvik (2016) argue that financial rewards may disturb important psychological aspect like motivation. This is noted throughout modern incentive system theory, and the problem is well defined by Dess et al. (2016).

"While they can be powerful motivators, reward and incentive policies can also result in undesirable outcomes in organizations. At the individual level, incentives can go wrong for multiple reasons. First, if individual workers don't see how their actions relate to how they are compensated, incentives can be demotivating. On the other hand, if the incentives are too closely tied to their individual work, they may lead to dysfunctional outcomes. Thus, the collective sum of individual behaviours of an organization's employees does not always result in what is best for the organization; individual rationality is no guarantee of organizational rationality." (Dess et al., 2016, p. 285)

The quote illustrates that while incentive systems can affect motivation, they can also cause unforeseen consequences. These consequences manifest as behavioural responses to the different compensation schemes (Prendergast, 1999). This is especially prevalent in complex jobs, where the number of aspects create a unique combination of variables which needs to be balanced (Prendergast, 1999). If this balance is not established compensation schemes can have unintended consequences, as shown below.

A typical problem is when agents maximize the best compensated tasks and not the activity, or combination of activities, preferred by the principal. This problem was defined as "multitasking" by Holmstrom & Milgrom (1991). The result is that balancing the reward for two or more activities can be difficult, especially if one activity is harder to directly measure than others. Another problem identified is "creative accounting" by principals, were performance is underreported to save payment costs (Cheatham & Davis, 1996).

Multi-tasking may lead to a reluctance to offer rewards based on objective, or formulaic, measures. Especially with complex jobs, a form subjective performance evaluations should be applied (Prendergast, 1999). The popularity of subjective performance measurement stems from the holistic attributes of the resulting evaluations. However, the system may create a new set of behavioural problems, such as measurement manipulation and distortion. Rent-seeking activities can be performed by agents with the goal of affecting evaluations. In this case, supervisors exaggerate performance measures of those agents who curry favour, as shown by Milgrom (1988) and Milgrom & Roberts (1988). Tirole (1992) showed that some agents simply bribed their supervisors for a better evaluation.

Another challenge with subjective performance measurement is compression of performance ratings, where supervisors do not distinguish sufficiently between good and bad performance. The phenomenon was explored among other by Landy & Farr (1980), where two forms of supervisor bias were identified: centrality bias, were employees were rated within a norm, and leniency bias were inadequate employee effort is overstated.

Another challenge arises with team production, when individual output cannot be identified and compensation is therefor based on team production (Prendergast, 1999). This formula $\frac{1}{N}$ illustrate that any member cannot earn a bonus larger their part of the group size, N. Consequently, they fail to take into account the added value for the other team members when deciding their own effort. Instead, members only acknowledge their own opportunity cost for exerted effort. Consequently, agents are less incentivised to increase their work-load, as rewards cannot exceed the total group performance (Holmstrom, 1982). In conclusion, the effects of incentive systems are hard to predict. There exists empirical evidence on their effort inducing impact, but also several behavioural problems (Prendergast, 1999).

By using the framework introduced by Merchant and Van der Stede (2017), the incentive systems of the case firm will be analysed. The goal is to see both motivational effects of the systems in place, as well as any behavioural responses. The results will then be compared to the Beyond Budgeting principles, to see if the Beyond Budgeting theory is applicable to the systems of the firm.

2.5 Theoretical framework for analysis

The theories presented above will serve as our theoretical framework for the analysis of this thesis. Specifically, the framework by Lunenburg (2011) will be used to analyse the target setting process of the firm. Then the Incentive system will be investigated using the model by Lazear and Gibbs (2017) and the framework by Merchant and Van der Stede (2017). To illustrate how these systems are connected, the performance measurement process will be explored using the definitions outlined by Merchant and Van der Stede (2017), and Taras (2009).

The framework of Lunenburg (2011) is summarized in Table 2. This will let us identify the degree of which targets are specific, challenging and accepted by employees. In addition, we will observe whether they are used for evaluation and feedback. The use of deadlines, learning-orientation and team targets will also be analysed.

Target criteria	Description
Specific	Helps employees know what to reach for and to measure their progress.
Challenging	Helps increase motivation, but must be perceived as achievable.
Accepted by employees	Participation contributes to higher commitment, motivation and performance.
Used to evaluate performance	Increase the impact of targets, and let employees know what is expected of them and how success is measured.
Feedback	Helps employees determine their progress and realise what adjustments are required to improve performance.
Deadlines	Clear time-frames for task completion helps increase effort among employees.
Learning orientation	Targets focusing on learning leads to higher performance compared to pure performance targets.
Team-targets	Increase the productivity by strengthening the feeling of belonging, which in turn improve the organizational culture.

Table 2: "Target Criteria", 2011, by Lunenburg.

Then the systems of performance measurement will be analysed in two steps. Initially we will see if the structure is formulaic of subjective (Merchant and Van der Stede, 2017; Prendergast, 1999). Then we will see if the results of the measurements are used for a summative or formative purpose (Taras, 2009; Kuvaas & Dysvik, 2016).

Finally, incentive systems will be analysed using the model presented by Lazear & Gibbs (2017), and the framework presented by Merchant and Van der Stede (2017). The model by Lazear and Gibbs (2017) will initially show whether the performance measurement provides successful estimates of exerted effort. Afterwards, we apply the framework of Merchant and Van der Stede (2017). The framework is presented in the Table 3.

Incentive System Criteria	Description
Valuable	Reward must be perceived as valuable
Impactful	Size of a reward must be impactful
Understandable	The rewards causality and value must be understandable
Timely	Receiving reward close to target achievement enhance effect
Durable	Long-lasting rewards have increased effect
Reversible	Reversibility should be known to prevent mistakes when awarding.
Cost-efficient	Rewards should be cost-efficient compared to increased effort.

Table 3: "Incentive System Criteria", 2017, by Merchant & Van der Stede.

Finally, we attempt to analyse each of these topics using their respective Beyond Budgeting principles (Table 1). This should tell us to what the degree the Beyond Budgeting system has been implemented in the case firm. For targets, Beyond Budgeting framework states they

should be directional, ambitious and relative. It also specifies to avoid fixed and cascaded targets (Table 1). Regarding performance measurement, they should evaluate performance holistically and with peer feedback for learning and development. They should not be based exclusively on objective measurements, nor for the sole purpose of issuing rewards. Finally, incentive systems should reward shared success against competitors, not against fixed performance contracts.

Chapter 3: Methodology

This chapter will outline the research design and the approach for information gathering in this thesis. The chapter will outline the reasoning behind the methodological choice designed to study the topics of targets, performance measurement and incentive systems, within the case firm. As shown, through the theoretical section, these topics are interdependent, as performance measurement serve to judge the achievement of targets. These two, in turn, determine rewards. Collectively these three functions as guidance systems within an organization (Merchant & Van der Stede, 2017).

Research methodology refers to the theory of how to conduct research. Regarding research design, methodology refers to the method which best describe the phenomena in question (Saunders, Lewis & Thornhill, 2012, p. 8). Depending on the field and phenomena, studies apply either qualitative or quantitative methodology, or a combination of the two (Saunders et al., 2013, p. 8).

In order to understand the effects of the management control systems studied in this thesis, we study the opinions and social effects tied to these systems. In order to illuminate the complexity of these social aspects within an organization, a qualitative approach is chosen (Messner, Moll & Strömsten, 2017). So instead of compartmentalising social aspects into variables, qualitative research treats the different aspect as interrelated and seek a holistic understanding of an empirical setting. Messner et al. (2017) emphasize this in cases where the phenomena study cannot be sufficiently explained through causal relationships. To understand the dynamic context of such settings, a more thorough and deeper understanding is required (Messner et al., 2017).

Qualitative research is often associated with the interpretive research philosophy. This philosophy state that social settings must be analysed through different means than natural phenomena (Saunders et al., 2012, p. 163). Hence, the essence of qualitative research is to study how the social world is produced (Messner et al., 2017). Because of this, the naturalistic quality criteria used in quantitative research are therefore less applicable, as they are based on different methodological assumptions (Ahrens & Chapman, 2006; Lukka & Modell, 2010).

This includes the criteria of internal and external validity, reliability and objectivity (Messner et al., 2017).

In contrast to naturalistic research, qualitative research seeks to understand dynamic contexts rather than confirming causal relationships (Messner et al., 2017). Therefore, an alternative set of criteria has been suggested to define qualitative research. These are defined as the concepts of credibility and authenticity (Lukka & Kasanen, 1995; Parker, 2012).

Messner et al. (2017) outline the definitions of credibility and authenticity. Credibility refers to the degree of which qualitative data convincingly depict the findings (Lincoln & Guba, 1985). This way the data must convince the reader of both the empirical strength of the data, as well as its theoretical interpretation (Lukka & Modell, 2010). The design of the empirical study is also a part of credibility as the focus of the study must match the design (Messner et al., 2017).

There are key challenges tied to the credibility of the data collected. The first is that the selectivity which qualitative research necessitate may create biases. As the data selection will be based on theoretical reasons, it will be affected of what the researches deems important (Messner et al., 2017). This can become problematic when topics are not studied deeply enough, as more complex aspects may be missed, resulting in biases in the data (Messner et al., 2017). On strategy to prevent such biases is increased exposure to the empirical field (Messner et al. 2017).

We had little pre-existing knowledge of the field of study or the case firm. However, we gained increased knowledge of both the case firm and the relevant topics through contacts within firm in question. We also use multiple informants from different hierarchical levels of the firm. Another aspect emphasized by Messner et al. (2017), is the confirmation of findings through additional data collection. When conducting additional interviews, the data collected confirmed the earlier research and broadened our understanding. Messner et al. (2017) defined this as theoretical saturation.

Another strategy supporting credibility is the use of triangulation (Lincoln & Guba, 1985, p. 305). This involves using multiple sources of data, which in this thesis this is done through

interviewing multiple informants (Messner et al., 2017). This approach is especially important when there is the potential for systematic biases within the data sample (Messner et al., 2017). We alleviate this by covering a large base of the management and confirming different views on the topics discussed. We also interviewee employees at different hierarchical levels, to widen our data base.

The second criteria for qualitive research is the authenticity of the study. The research is authentic if it correctly displays the complex empirical material being studied (Golden-Biddle, Locke & Reay, 2006). There are two aspects of authenticity pointed out by Messner et al. (2017). Initially, authentic accounts should show that the research and conclusions are based on a deep understanding of the field studied (Parker, 2012). Moreover, the details of the studied phenomenon must be justly represented. This is necessary to understand its complexity (Messner et al., 2017).

In this case a single-case study is advisable, as it allows for a richer and more in-depth collection of empirical evidence (Messner et al., 2017). This is the approach chosen for this thesis. Messner et al. (2017) also point out that direct observations and descriptions add authenticity, but here the study is limited by the constrictions placed on a master thesis regarding time and space.

In addition, interviews were done in Norwegian to provide as authentic data as possible (Messner et al., 2017). Both interviewers share the language natively with the participants, giving a common ground for information sharing. Finally, data was recorded with the goal of supporting authenticity. All interviews were audio-recorded, supplemented with notes to cover non-vocal elements.

Both credibility and authenticity must also be communicated efficiently (Messner, et al., 2017). Credibility is represented throughout the discussion of the empirical findings. By conveying the findings to the reader, the interpretation of the empirical material can be evaluated and confirmed as correct. Authenticity is supported by displaying the relevant empirical data directly (Pratt, 2009). This is done throughout the thesis, as quotes from the interviews are used to support the analytical discussion.

The thesis will also adopt an inductive approach, with data collection being based on semi-structured interviews. An inductive approach involves developing theories parallel with the data collection and analysis (Saunders et al., 2012, p. 48). This allows for the research of dynamic characteristics comprised of the opinions and meanings of subjects. By applying an inductive approach, were the data-collection is non-standardised, allow for alterations in order to better understand the phenomena studied. This is to support our reliance on interpretation of the observations, and a less structured interview process (Saunders et al., 2013, p. 552).

3.1 Field of study

In order to study the effects of targets and incentive systems in a Beyond Budgeting setting we have chosen to research their implementation in a firm as a case study. Case studies explore phenomena in their natural setting (Saunders et al., 2012, p. 179). This approach is chosen as the context of which systems are applied is important to explore their effects (Yin, 2009). By collecting data from this firm using a quantitative method, we will get an insight in how the Beyond Budgeting system function in a real-life setting.

The firm chosen as research objective is a multinational technology firm which operates within the telecommunication sector. The firm is classified as large by Norwegian accounting standards, as it reported just over NOK500 million in 2016. However, the firm employ less than 100 people, divided between their operations in several countries. The firm operates within a single business field, where its product is focused on long term strategic partnership with customers. This is done by launching projects in cooperation with customers, were the firm implements and maintains necessary equipment and provide a new revenue stream for the customer. This information was collected from publicly available data sources, including the case firm's website.

The organisation is divided into six departments set up as a value chain. There are three main activities starting with a sales department, followed by a delivery unit, and finalized by an operational unit. In addition, the firm has three support activities including technology and development, human resources and finance.

To improve reaction time the firm introduced Beyond Budgeting as a management control system in 2008, and recently started to refocus and implement the value-chain structure illustrated above. It was recognized that a demanding customer market and project-based contracts require quick reactions and a decentralized structure with empowered employees. This gives the case firm a suitable background for this study.

In addition, the firm is in a process of reinvention, which forces the organization to reflect over how to motivate employee through both targets setting and incentive systems. Consequently, the firm is ideal for a study of the use and effects of these systems under the influence of Beyond Budgeting.

3.2 Research design

This chapter will outline the chosen methodological method, in relation to the firm chosen.

The field of management control systems and performance management systems are partially based on empirical research, which is compartmentalized in nature (Chenhall, 2003). The consequence is that aspects of control systems are studied in isolation (Chenhall, 2003). In order to understand the interdependencies between control mechanisms, there has been a call for a more holistic approach within management control systems research (Abernethy & Brownell, 1997; Malmi & Brown, 2008). This thesis therefore adopts an explorative approach, where the Beyond Budgeting system will be research through a case study.

However, as pointed out by Malmi and Brown (2008), studying an MCS package becomes difficult, as the systems are large and complex. Therefore, we have chosen to focus on the interrelated concepts of targets, performance measurement and incentive systems. This narrows the topic down and lets us focus on the three aspects of management control system which guide and motivate employees; targets and incentive systems (Lunenburg, 2011; Lazear and Gibbs, 2017; Merchant & Van der Stede, 2017). These systems are then connected through the use of performance measurement (Lazear and Gibbs, 2017; Merchant & Van der Stede, 2017). The chosen approach is to conduct an explorative case study. This is done to understand how

the theory of beyond budgeting, specifically its description of targets and incentive systems, are applied in the case firm.

To enable the analysis this research project will emphasize the use of qualitative methods. We have chosen to focus on a single firm and explore their use of targets and incentive systems in a Beyond Budgeting setting. Data will be collected through semi-structured interviews. Interviews are a common tool for qualitative research, and is often used to understand opinions, attitudes and experiences tied to a phenomenon (Rowley, 2012). In exploratory studies, interviews are applicable when investigating causal relationships between variables. This allows us to understand the motivation and reasoning of the decisions the research subjects have taken (Saunders et al., 2012, p. 378). While interviews would pose a limit to sample size due to time constraint, they might generate a deeper insight into the topic studied (Rowley, 2012).

Interviews are generally sorted by their degree of structure (Rowley, 2012; Saunders et al., 2012). The distinction lies with the use of predefined topics communicated through interview guides (Heinzelmann, 2012). On one side of the spectrum, unstructured interviews have no predetermined topics, allowing participants to reflect freely on the topic studied (Saunders et al., 2012, p. 375). However, the most common interview format is semi-structured interviews, which include main topics with sub-questions (Rowley, 2012). This data collection methods allows for an explorative and inductive approach, as less pre-knowledge is needed and questions can be adjusted depending on the interviewee (Rowley, 2012).

A semi-structured review will also provide the opportunity to probe for answers, so that the participants can explain or expand upon their responses (Bryman, 2001; Rowley, 2012). This is especially important when a study adopts an interpretivist epistemology. This approach is used in the thesis because the goal is to understand the meanings participants ascribe to the systems studied (Saunders et al., 2012, p. 378). It could also help identify areas that were previously not considered, as new meanings are identified as significant (Saunders et al., 2012, p. 378). To emphasize this interpretivist approach, the unit of analysis will be individuals to get personal information regarding opinions and meanings tied to the systems in place (Sekaran

& Bougie, 2013, p. 104). Consequently, the phenomenon is studied through semi-structured interviews, and then theory is applied to explain the data collected.

As stated by Rowley (2012), research is dependent on the data collection. This makes the selection of interviewees critical (Rowley, 2012). The interviewees should be chosen based on the knowledge of the topics being studied, also called "purposive sampling" (Silverman, 2010). Our selection practices purposive sampling, by interviewing both managers and employees at the project level.

The participants were chosen because they have knowledge of the systems studied and how these are implemented within the firm. In addition, employees at the project level were interviewed to get a wider view of system's affect throughout the organization (Messner et al., 2017). This form of data triangulation helps us avoid any systematic bias within issues studied, which in turn support data credibility (Messner et al., 2017).

Following the guidelines set by Rowley (2012), we conduct six interviews lasting approximately one hour. We believe this is a sufficient sample size, as it covers approximately 60% of the upper management within the case firm. Moreover, the sample size cover around 9% of the total number of employees. Each interview object is presented in Appendix 1, with the interview table being formatted according to the example by Bleich and Pekkanen (2013). As quotes are used throughout the text, each interview object will be assigned as OX, where X will be the number of the participant.

3.3 Data collection

The data collection method involves using semi-structured interviews with a list of themes to direct the interviewee towards the subject in question (Bryman, 2001; Rowley, 2012; Saunders et al., 2012). This distinguishes the study as an exploratory study as the data collected are used to understand a phenomenon, and allows for a flexible approach (Saunders et al., 2012, p. 171).

The themes will help guide this data collection to get a deeper understanding of the case firm. This allows for flexibility in the data collection process, as interviews can be adjusted depending on the experience and position of the subject. Hence themes and questions can be

omitted and added for each interview, adding to the depth of a topic (Saunders et al., 2012, p. 374-375).

Pratt (2009) outline a general set of steps for inductive studies, which illustrates the process of from the point of data gathering to presentation of findings. This starts with exploring the opinions of informants, followed by a literary review of the topic studied. Finally, findings are presented. This is a general summation of the steps typically found in inductive studies and will be the approach adopted in this study (Pratt, 2009). It should be noted, however, that in addition to this three-step process we conducted initial readings. The topics of Beyond Budgeting, target-setting, performance measurement and incentive system theory were researched. The goal was to get a basic understanding of the topics and develop a fitting interview guide (Appendix 3).

After the initial reading, the first step of the research process is exploring the opinions of informants. In our study, data is collected through semi-structured interview, with permission from the *Norwegian Centre for Research data*. This involved ensuring anonymity and ensuring personal data is secured. Each participant was therefore given a consent-form to inform of the purpose of the study, as well as their rights as participants and our contact information, see Appendix 4.

An interview guide was used to ensure that data was collected on all relevant topics. This includes Beyond Budgeting, target-setting, performance measurement and incentive systems. These topics were explored according to the interviewee's knowledge of them. The interviews were audio recorded in order to collect data as clearly as possible. Notes were also taken for to collect details on non-vocal elements such as body language (Messner et al., 2017). Then to familiarize with the key points of the informants the data was transcribed (Rowley, 2012). The data is then analysed by organizing the data sets, through the use of classification and data interpretation (Rowley, 2012).

The second step involved a literary review of the topics covered in the interview (Pratt, 2009). The goal is to create a basic understanding of what elements are needed to understand the systems the firm has implemented. The review covers the theory of Beyond budgeting, target-setting, performance measurement and incentive systems. This allows us to study the systems

applied in the firm, as well as developing a theoretical framework of analysis to identify relationships within the data (Saunders et al., 2012 p. 549). The framework is then applied in order to deduce the effect of the different systems in place, drawing on the opinions of the informants.

Finally, findings are presented for each topic; target setting, performance management, and incentive systems, as well as how these are implemented in a Beyond Budgeting setting. Data will be presented continuously to support the analytical discussion (Pratt, 2009). Moreover, data is presented by using quotes from interviews in order to support data authenticity (Messner et al., 2017.)

3.3.1 The Interview guide

Interviews will be the main source of primary data. As the study has a specific exploratory approach, the interviews will be semi-structured with a pre-determined interview guide (Appendix 3). The goal of such a guide is to provide a conceptualization of the relations being studied and identify the relationship between variables (Saunders et al., 2012, p. 378). However, flexibility is emphasized to utilize interviewee experience in the data collection process. Therefore, the interview guide includes the main themes of the study, combined with more detailed question. This is to be able to gather more detailed data where possible.

The themes included in the interview guide include background themes of the target systems, performance measurement and incentive systems. Detailed question will revolve around a systems implementation and reception, while open ended questions will be used to infer deeper meanings and understanding.

Chapter 4: Empirical analysis

This chapter will outline the empirical data which serves as the background for the analysis in chapter five. The information is gathered through interview data and publicly available information. The chapter starts by describing the historical information of the firm, with its implementation of Beyond Budgeting principles. This section will also include a description of the firm's strategic process, as well as an overview of the organizational restructuring currently being implemented. Then, the we move on to explain the current target setting process. Finally, the current incentive systems are discussed, including incentive systems being considered in the near future.

4.1 Historical background and business model.

The case firm is a leading global mobile operator at sea, with headquarter in southern Norway. Their customers operate in several maritime platforms, across a wide collection of industries. In addition, they have become are part of a larger conglomerate.

The case firm has been operating without budgets since their implementation of Beyond Budgeting in 2008 and has since adopted a value chain structure within the organization. The firm's main activities are divided into departments consisting of sales, delivery and operations. This supports their business-to-business model where they open a new income source for customers, for the duration of a contract. Their product consists of implementation and operations of such projects. Throughout this period the case firm keep the ownership of all equipment and retain the responsibility for its operation. This is the background for the value chain model of the firm as shown in Figure 1.

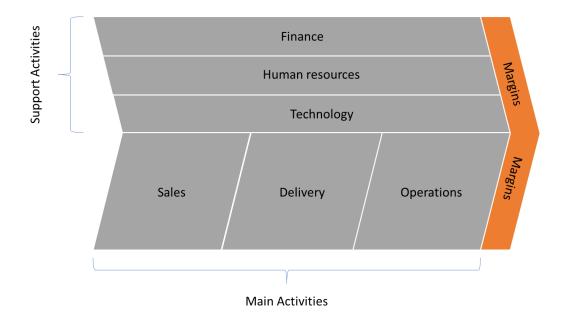


Figure 1: "Value Chain Model, Abbreviated for Case Firm", 1985, by Porter & Millard

Figure 1, based on the framework of Porter & Millar (1985), illustrate how the firm is divided into three main activities and three support activities. The main activities are comprised of Sales, which negotiates and sign customer contracts, followed by Delivery, which install the necessary equipment. Afterwards, Operations make sure that systems are functioning throughout the contract period. In addition, there are three support activities which are involved in supporting the main activities. Technology and system development will be factors in contract negotiations, delivery and installation and continued operation. The organizational structure is the basis for all the systems regarding target-setting and incentives, which are the topic of this thesis.

4.1.1 Restructuring process

The firm is also going through a reorganization process. Since it was established around 15 years ago as an entrepreneurial company, the firm has experienced significant growth. As the firm has grown, and employed a greater workforce, there has been and increased need for clear distribution of work-tasks. The result is that, while there was a tendency to work across

departments, there will now be an emphasis of clear work roles and specialization within departments. Despite this, O5 put a lot of weight on the wish to keep decentralization. He explains the restructuring as such:

"We're not looking at more structure, but different structure. Today, the organization does not necessarily reflect how we work. There is a bit of lag from earlier, or maybe it is a bit askew in relation to how the daily work is. I don't think it's going to be tighter, but I want to restructure in a way that people who today work in too many fields, get the opportunity to concentrate on one or two. If there has been a department with six people working on three different things, maybe that department should consist of three. I think it becomes more effective by enabling people to concentrate on some specific tasks." – O5

The manager shows here that the focus on clear responsibilities and autonomy. He continues to explain how the restructuring process will concretely create new segments in the value chain.

"Another example is one says he works 85% in finance, 5% in sales, 5% technology and 5% installations. That's natural. Then we need to cooperate. It shouldn't be that we then divide him in four, because his main focus is there but he still needs to cooperate with the others. Everyone working like this is fine. But those who work 40% in development, 40% in technology and 20% in sales, should they work in technology or in development? And when there is identified ten man-hours, it doesn't mean you can identify ten individuals. But some should with that discipline which has yet to be defined. And then it is often the case that if you do one thing one hundred percent, you do it more effectively than if you did it on the side. And the bigger an organization is, the easier it is to do these things. If we only were five in the company, everybody would have to work with development. I think that is typical for this organization. We've been an entrepreneur firm, were everyone had to do a bit of everything and have worked hard, and if we're going to make it, we need to land that next contract. That mentality is still lingering. But now we've become so big that we're and industry, and that means we need structure to become efficient. And then some say that we're too few people, but

no, we're not too few. We are too many working with too many things at the same time." -05

The process will include the employees in the restructuring process. And while employees do not have individual targets as of this point, another manager explain that after the process is finished this will be implemented. Since this process is time consuming, the firm has chosen to wait with target setting until the organization is set and implemented. Hence the target setting, and evaluation process has been put on hold until all employees are placed in the right location. This could explain how some employees experience the targets and evaluation to be absent, as shown later in this chapter

"Yes, we still haven't set any target on a team or individual level. This is a little connected to us being in the middle of a restructuring process. I think it would be a bit futile to set target now, and then you might end up working with something else in a month. So, we have chosen to wait until we've set the new structure. But then the plan is that each employee will have one or more KPI's which are connected to the action plan and must-win battles. The whole idea is that everyone will feel that they contribute to reaching the goals of the organization. But we're not there yet, that we're on an individual level." – O5

A project employee explain that a key point of the restructuring process is defining roles and responsibilities.

"Having an organization that is effective in relation to the different roles and responsibilities one has. Managing to clarify what responsibilities, roles and areas of responsibilities one has, because that is very easy to mix up." – 06

Overall this reorganization will reshape the firm. This new structure seems to facilitate several Beyond Budgeting principles more effectively. Initially leadership principle nr. 4, organization will be emphasized as new teams will be formed, and the belonging should be heightened as employees take part in placing themselves (Table 1). Then as confirmed, there will be a focus on keeping principle nr. 5, by supporting continued autonomy. The target setting process will

also be a closer match to principle nr. 8, as targets become more directional and keep being ambitious. However, whether they will be fixed or relative there is no data on.

4.2 Beyond Budgeting implementation

This chapter will cover the empirical information of Beyond Budgeting implementation within the firm. It will start with the initial reasons for adoption and continue to today's uses.

Budget were the main management control tool in the firm before 2006. In this period the whole conglomerate evaluated its existing management models and decided to change to the Beyond Budgeting system. The budgets used throughout the concern were good tools for control, but they experienced constant market changes, and saw the need for a more dynamic framework. Moreover, the budget-making process was bureaucratic, consumed unnecessary time, and characterized by budget gaming. Overall, the process was tedious, without providing optimal management information. Being consistent with the rest of the concern, the case firm adopted the Beyond Budgeting model as a part of this change.

One of the managers interviewed were the project manager for the concern-wide Beyond Budgeting implementation. This manager explained why the changes was made and divided them between internal and external factors. The internal factors included strict resource allocation, suboptimal decision-making, and budget gaming.

"The reason was really the classic budget trap which everyone is hung up on. The fact that you're constantly measured on your costs, and that each department must use this much on this and this much on that. Every account is measured, this much on salary cost, this much on marketing and this much on sales, and so on. Then it is the classic case where you get suboptimal decisions in terms of what you should prioritize. Pluss that you get a tendency within the process itself, when you're setting targets, with budget gaming by buffering what you need compared to what is necessary to be as effective as possible. It was to avoid all this." – O1

Then the external factors were centred around market change, and the need for adaptation.

"Pluss that the whole agility and dynamics on the markets we operate in swing so much. If you lock yourself to a budget for a year, maybe from November the year before, then the whole reality is supposed to be like that. But it never turns out like that. Then you lock yourself in terms of flexibility, and being able to take the necessary decisions, for then to adapt on the way." -01

The new Beyond Budgeting model was implemented as a project. It was started at the corporate level and subsequently implemented in the case firm. In 2008 the concern operated without budgets for the first time, and in 2009 the implementation process was finished, and the project closed. The management system continued, however, to be implemented in the concern firms. Since each of these firms are different, it is interesting to study how the case firm has adapted the use of the management control system.

The general goal of the system was to strengthen the implementation of strategy throughout all departments and give greater authority and responsibility to local units. Thus, the system implementation mirrors the Beyond Budgeting values. In addition, the focus has changed towards the future, and the main tool to deliver towards strategy is the use of rolling forecasts and targets. O1 explains that one of the biggest differences after implementation was the focus on continuously generating results.

"It increased the focus on generating results continuously, and you became much more granular regarding how you follow up performance. What is good performance in one region, is not necessarily good performance in another." -01

In Beyond Budgeting the use of rolling forecasts are supported through several management principles. Principle nr. 7 state that management processes need to become dynamic, instead of being based strictly on the calendar year (Table 1). In addition, principle nr. 9 state that plans and forecasts are important alternative to the budget (Table 1). They make it possible to plan based on likely outcomes, rather than past results. One of the main systems that the firm has implemented from the Beyond Budgeting system is their use of 5-quarters rolling forecast. O1 further elaborates on the use of forecasts within the case firm, and how the rolling forecast is implemented on a 5-quarters basis. He also describes the use of forecast in the strategy process:

"The length of the forecasts is defined as 5-quarters rolling forecasts. New forecasts, which are consolidated with the conglomerate, are done quarterly. In connection with the quarterly report, there is also a report of the new forecast for the next 5 quarters. The only exception is when you have the forecast reported in Q2, which include Q3, Q4, and the whole following year. So, 6 quarters. This is because it's then used in the strategy process and discussion." – O1

Here, the main systems in place is the use of rolling forecast and focus on decentralization. It seems like the firm focus the most on rolling forecasts as a management principle, and decentralization and autonomy as a leadership principle. This follows the Beyond Budgeting values nr. 9, planning and forecasts, and nr. 5, autonomy (Table 1). From the empirics we see that the use of rolling forecast is well established and has been so for many years.

4.3 The target setting process

The next section will outline the target setting process of the case firm. This will form the basis for analyses of the use of targets in the firm, and how it matches to the overall Beyond Budgeting values and target setting theory.

The firm has divided its targets into two categories, where fifty percent are financial, and fifty percent are operational. These are set on a yearly basis, and do not follow the same time-line as the firm's forecasts. This is because the targets follow the financial year of the firm, where the financial reporting and auditing is independent of the forecast process. The targets are dependent on the firms focus for the next year. This focus is determined by the strategic direction and what is defined as "must-win battles". The targets are outlined in the table in Appendix 2. This table is abbreviated from the firm's main targets, and anonymized.

The operational targets are based on the operational needs and developments needed in order to achieve the strategic direction. O2 illustrates the operational targets accordingly:

"We have landed four operational targets. One of them is about getting more out of what we have already invested in, with marketing and getting the technical [elements] working. Then it is about building a new culture and a new organisation. ... So, you

can say these [operational targets] are about the soft elements, and less related to economics." – O2

As seen in the table in Appendix 2, the operational targets are based on improving value from existing contracts, creating a new product management system, and building culture. One manager further explains the strategy behind these operational targets.

"These operational targets that we set, or KPI's, they are based on must-win battles. You have a strategy and the action plan, and then you have must-win battles, which describes what we need to accomplish to succeed. These must-win battles are built on targets, which might state that the goal is to earn X, and then the must-win battles elaborate that to earn X, you need to solve these defined steps. That way we define what is needed to achieve the target. Then these operational targets may be based on what we believe is the most important within these must-win battle." -05

The financial targets were then specified by O1:

"The financial [targets] focus on what is the strategic pillars in the company. In other words, growth, efficiency and simplification. Growth is revenue, so revenue-growth. Efficiency is either EBITDA or EBITDA-growth. ... And then you have simplification which goes more into OPEX and such, and how we rationalize and streamline." – 01

Matching this with the table in Appendix 2, we see that growth is represented by revenue growth, calculated as total gross revenue. Then efficiency is based on EBITDA, which is calculated before other items. Finally, simplification is based on operational cash flow, calculated as EBITDA – CAPEX. The weighting and range of each of these targets are represented in the table in Appendix 2. In addition, there is the target for baseline CAPEX. This gives a frame of target capital expenditure and include the Dynamix Capex pool used to allocate additional funds to promising projects. In conclusion these specific targets create a financial framework for the firm. The organizational targets, on the other hand are soft, and oriented towards continued development and improvement.

The strategic process and target setting

The target setting process is based on the financial year and not the forecasts. They are established as part of the strategy process, which last from June to November, ending with defining next year's targets. The goal is for these to initially be short-term and ambitious. Of further elaborate the strategy process:

"The strategy process may be anything from 3 to 5 years, but the first year of the strategy period will be what apply short-term targets to. These are tied to the short-term incentives, STI, which we set for the first year. In this case, they are set around the turn of the year." -01

Next, he illustrates that the strategy process is communicated throughout the system. The goal of the communication is to create a joint direction within the company.

"What we do, is that we communicate and gain acceptance and a buy-in from the organization, on the company's targets. We are very explicit on that we collectively are going to deliver and try to create a joint acceptance, for the direction and something we will deliver together. Then you get a buy-in on that this is done through cooperation, and a collective ownership towards it." -01

The target setting process is based on a top-down approach. The board set the targets for CEO and the management team and then CEO designate the targets further down the organization. Employees have not been able to contribute to the target-setting process so far, but there seem to be some plans for them to take part in future decision-making processes.

Subsequently, the targets and forecasts are evaluated. In this evaluation process the firm links input and output, with the goal of look past results to find the drivers of revenue and costs. The evaluation is a continuous process, which is tied to the forecast process. This way the firm is able to take action if their results or the forecast deviate from the targets. O1 explains the dynamic evaluation as following:

"By doing a continuous evaluation, so that when you carry out a new monthly report or new forecast, you see that the outlook is different. And that suddenly everything changes direction. And then you must look at how to respond. If you reach a gap between what you see in the outlook of the forecast versus what you have as targets, you must either take some corrective actions to change it, or you realise that there is simply nothing you can do and that you'll underperform. The 5-quarters forecast is supposed to be a "best-estimate" of the future given the normal probability of events. The point is that whatever we think is probably to occur, we should build into the forecast. Everything which is outside of that, you keep out of the forecast. This way it becomes an unbiased estimate of the outlook. In reality, you should have equal probability of hitting over as under on what you deliver on the forecast. You should not buffer up or down." – O1

As we can see O1 also point out the importance of having an unbiased forecast. While targets are tied to the financial year, they are still based on the strategic process, where the forecast are developed. Thus, the forecast serves as the background for targets, and any buffering either way will have large consequences on the following targets and evaluations.

4.4 Performance measurement

There are two systems of performance measurement in the firm. The first is the fulfilment of the organizational targets, as shown in the table in Appendix 2. There were no observations indicating a systematic use of targets for a formative purpose towards the upper management or subsequent target setting. Instead the next years targets were based on the forecast published in the same period, serving as next year's basis for performance measurement.

The second form of performance measurement is the evaluation tied to the new incentive system for the sales personnel. This will be discussed instead of the old system, as it had the same performance measurement as the upper management. The only difference was that it involved the sales managers discussing with the CHRO, instead if the CEO and the board. In the new system effort is measured by the sales persons existing contract and whether it is completed or not.

"What we decided in January, with a green light from the board, was to make a new bonus system for the salesmen. And then we will connect that directly to what they are working with, which again of course is connected to targets. They will get pure sales goals, and not a lot of other [targets]." – O2

Finally, there is the performance-based salary system. This system is not considered to include a performance measurement. This is because it seems to be awarded subjectively, by the need for certification and salary raise, not based on previous performance. Hence it does not involve a performance measurement system, other than whether the course was completed or not.

4.5 Incentive systems of the firm

This section will outline the monetary incentive systems implemented in the firm today, as well as their proposed changes for the near future. This will serve as the empirical background for the analysis in chapter five.

There is not a wide-spread use of incentive system in the case firm today. There are however, three systems which have been identified. Of these, two are short-term and one will be categorized as a performance-based salary system. The two short-term systems are comprised of a bonus system for managers, and a bonus system for sales personnel. These systems have previously both been based on the overall company targets, as presented in the last sub-chapter. Thus, reward size was dependent on the completion of fifty percent financial and fifty percent organizational targets. Below O2 outline the system, were the reward is paid at the end of the financial year.

"They have up to this point been based on the same principles. Fifty percent financial targets, and then the rest is individual or department-based, which is meant to support [the financial targets]." -02

There are some changes being implemented for these short-term reward systems. For the upper management, it has been decided to change from an individual to a team-based reward, for the coming year. This sentiment was shared by another manager who confirmed the need for team-based targets. He does, however, reflect on the need for targets being designed to fit the current needs of the firm.

"This can change in a year ... and the process of setting targets is situational. What's important this year could be completely different in two to three years. Were we stand today ... the whole company must understand what our challenges are, and how we should solve them." -03

The previous manager then describes how the system used to be for the sales personnel. The reward size has been one month's salary, based on the same targets and financial year as the management group. He also illustrates how much of the bonus is typically realized.

"They might have gotten nothing, or 10 percent of a month's wage. ... Well they can get 15 percent of one month's wages, which is maybe 50.000." – O2

He continues to explain that they see large potential in changing this incentive structure. A new system is being implemented this year and aims to be better designed to fit the tasks of the sales personnel. He also state, that the new system will be independent from the financial year, in addition to be based on pure sales targets.

The last form of incentive system within the firm is a form of performance-based salary. This system function by awarding employees a raise after completing a course or gaining a certificate. This skill improvement or certification is rewarded by a salary increase, as it indicates higher future performance. In addition, the system is used to further educate employees and equalize wages within the firm.

"We have had a couple of equalizing tasks, so what we've done is salary smoothing by giving employees some challenges. And the ones achieving a positive result has been giving a higher salary. So, over the last three years we've lifted quite a few people up. Those who don't do them, stay where they are. ... As an example, you could get 40 hours to take a course online with a degree. If they complete that course, they will get a reward. Another example is operational goals. If they manage to roll out det new solution for a technical system, they might get 10% salary increase, in addition to anything else." – O2

This was a response to a former wage gap in the firm, as explained by the manager interviewed. The solution was to implement the performance-based salary system, where development and wage raise was combined.

"Many had quite low salary, and it was a big issue. ... But in the big picture it didn't involve large amounts of money. When you have NOK 500 mill in revenue and a question if NOK 120.000 should be divided between a group of employees, it puts it in perspective. That shouldn't be the reason why people are annoyed." – O2

He further elaborates on the continued use of this system, and its future uses:

"This year we've lifted [the system] up a bit, so this year, and partly last year as well, we're going to give [the employees] quite a lot of expensive courses. Then we're talking about expensive courses, were it costs NOK 150.000 to take the course." – O2

It seems the system may be reshaped into an educational system, more so than a performance-based salary increase. The value would then become the opportunity to take the course and developing one's skillset. As stated by O2, these systems are not mandated, and are used to increase the skills and equalize salaries of the workforce.

"It's not written anywhere, it's not laid down that were going to work like this. But I've implemented it after I began [working here]." -02

In conclusion, the empirical background of the firm includes Beyond Budgeting implementation, a target setting process defined at the organizational level, and several incentive systems. This will serve as the empirical background for the analysis in chapter 5. These different systems will be analysed in turn, and then our findings will be discussed in chapter 6.

Chapter 5: Analysis

Aim of this chapter is analyse the systems described in chapter four, by applying the theory explained in chapter 2. This theoretical framework will be used to analyse the empirics and observations collected through interviews, as described in chapter 3. The chapter will answer our two research questions, in order to address the overall problem statement:

What is the impact of targets and incentive systems in a Beyond Budgeting setting?

The first part will analyse the firms target-setting process and their effects. This will be done using the framework by Lunenburg (2011). The target-setting processes identified will also be compared to the Beyond Budgeting principles throughout. This lets us answer the research question:

How are targets applied in a firm applying Beyond Budgeting principles?

The second part will look at the existing performance measurement systems, as well as reflect on the opinions of employees on the topic. The third will analyse the incentive systems in place, as well as a new one being used this year. Each sub-chapter will include a comparison of the firms' systems to the Beyond Budgeting principles. This will let us address the problem statement.

How are incentive systems designed in in a firm applying Beyond Budgeting principles?

5.1 Targets

Target setting is an important part in beyond budgeting and often define the baseline of incentive systems. From the theory we know that targets influence both employee performance and behaviour (Locke & Latham, 2002). In this section we will analyse the case firm's target setting process, as identified in the empirical analysis (Table 2). This will be done by applying the framework presented by Lunenburg (2011). This framework states that performance is positively affected when targets are specific, challenging, accepted by employees, used to evaluate performance, and when feedback are given (Lunenburg, 2011). In addition, there will

be sub-chapters analysing deadlines, learning orientation and team targets, as they too affect performance.

The case firm uses a top-down approach in their target setting. This is in line with the theory of management by objectives (Odiorne, 1965). As shown in the empirical sector the organizations overall targets are fifty percent financial and fifty percent operational. This outlines the weighting of the firm's main organizational targets.

5.1.1 Specific targets

The first criterion is target specificity (Lunenburg, 2011). Having specific targets is said to be one of the most important factors in target setting (Locke & Latham, 2002). People perform better with specific targets that are quantified and regularly updated (Lunenburg, 2011). In our case company the targets are tied to the forecast presented at the end of the strategic process, as outlined in the empirical section. As shown in the table in Appendix 2, the financial targets are fixed with quantified numbers. Each financial target is also divided into a minimum, medium and maximum achievement of the target. As O1 explained:

"The financial [targets] focus on growth, efficiency and simplification. Growth is then revenue, so revenue-growth. Efficiency is either EBITDA or EBITDA-growth. And then simplification is more regarding OPEX and how you rationalise and streamline" – 01

The operational targets, on the other hand, are very soft targets only with some quantification. As O2 explained:

"We have landed on four operational targets. ... You can say these [operational targets] are about the soft elements, and less related to economics." -02

Even if the operational targets are less quantified, they are specific in what must be achieved to reach them. In addition, they are just as important for the firm's success, as a manager state:

"All the operational target lay a foundation for the economic ones. If you don't succeed with those, it becomes rather difficult to reach the economic targets." -05

As O5 mentions, it is important to focus on more than financial results. To emphasize this, refocus, having the operational targets be more specific should yield good results. By being 50% financial and 50% operational, the targets cover the activities the firm chooses to prioritise. At the same time, the firm signal that the financial and operation aspects are equally important. This mirrors target setting theory perfectly, where targets should be designed to direct employees' attention towards strategic activities (Merchant & Van der Stede, 2017, p. 301). It appears that the firm has found a balance with their use of specific targets (Lunenburg, 2011). This would in turn make them more suited as the basis of reward systems, as effort is measurable (Lazear & Gibbs, 2017; Prendergast, 1999).

Having the operational targets be softer and strategically oriented, rather fixed, is also in line with the Beyond Budgeting theory. However, the financial targets are fixed, which separates them from what the Beyond Budgeting principle recommends. The system's philosophy emphasizes the use of relative targets, as fixed targets easily become disconnected from reality (Hope & Fraser, 2003). Yet, the case firm confirms that since they only have indirect competitors at the moment, it would be difficult to implement relative targets against competitors. Nonetheless, there could be potential for the use of internal relative targets. However, while the Beyond Budgeting principles highlight relative and soft target, it is individual for each firm what suits best for their situation.

The empirical analysis also shows that the tasks within the firm are often both varying and complex. This increase the need for specific targets (Merchant & Van der Stede, 2017, p. 301). One popular term is key performance indicators (KPIs). The key performance indicators are used to ensure focuses on the right activities and guide employees in the same direction (Locke & Latham, 2002).

KPI's can be used by organizations as specific targets, sometimes connected to bonuses. However, our observations shows that there was little use of KPI's tied to employee tasks as of now. Some employees think that this is something the firm could benefit from implementing:

"The potential for finding KPI's in this company is very clear. You could have KPI's like delivering on time, delivering under budget and HMS (Norwegian term for EHS,

environment, health and safety). And then there is the sales on each specific [contract]. For instance, would usability and marketing contribute to increased sales." – 04

As the manager points out, the firm could benefit from an increased focus on key activities. Nonetheless, it is important to not apply to many targets (Röösli, 2016a). O4 continues to add that the number of KPI's should be few in total, but that the employees should be able to influence and contribute to them.

"In [former company] there were very clear KPI's. Both towards operations and construction. There were not a lot of KPI's, but there was a big focus on them in the firm. And everyone understood them. Some felt you could contribute on the KPI's that covered your area. I think that was very positive." – 04

As established from the theory, to have an effective evaluation, employees should only be accountable for factors they are able to affect. Moreover, they also need to know what is expected of them (Merchant & Van der Stede, 2017, p. 301). It seems like these are important factors missing in the company's targets setting process, which will be discussed in the section of target acceptance and evaluation. One employee finds both the strategy and target to be concrete, but it is not specific who are to do what:

"I think the strategy is fairly concrete, as well as targets being fairly concrete, but I believe we would reach the targets quicker if we became even more clear on who are to do what, when and where." -06

The management was observed to share this view, but as mentioned they will wait until after the restructuring before they implement specific goals throughout the organization. Establishing overall strategy first means individual targets will be directly based on the overall strategy. This allows them to be specific, as wished by the employees. The goal seems to be that employees feel they contribute directly to achieving the firms overarching targets.

This confirms that the management group emphasize the importance of specific targets. This is shown by the time set aside for making the operational targets both specific and measurable. Especially the goal of building culture, or Winning Team, as is outlined below.

"Winning Team is first of all putting the right condition in place, but it is also there to motivate people, talk about behaviour, strategic direction and how we should have it at work. But again, that doesn't measure the success, only that we've done it, worked on it, or that the leader team has worked on it. First of all, we need to document that it is done, but to find the effect of it, we landed on [this measurement]." – 05

He continued to emphasize how difficult the target is to measure:

"We used two months on discussing how we were going to measure Winning Team." – 05

The target they agreed upon was to increase the score of employee feedback by a specified number of percentage points. The target-setting process can be time consuming, so cost-efficiency needs to be kept in mind (Knudsen & Flåten, 2015, p. 277). At the same time, it seems the firm has gone through an extensive process to find the targets which best represent their strategic direction. This will most likely improve the targets overall. O5 continued to explain that the feedback score is not a perfect measurement for organizational culture improvement, but it is concrete and achievable.

"We have discussed how to measure the development of Winning team or achievement of Winning team. With Winning Team, we mean the behaviour among the employees. And then you could say that indirectly that is connected to income, because if you have a team where people succeed and enjoy going to work there is a bigger chance for that increasing earnings. You could say that you measure it by reaching the income or better then. But again, that could be random. And then you could say, how much value is there in using [the engagement enquiry] to measure Winning team. I think there is a definite value in it, as a KPI should be measurable. You could include sick days and plenty of other things in the parameters, but since it's the first time we're using this KPI we thought about how to measure it and found out we could use the engagement enquiry. I think it's a good target, because if people feel the work place environment becomes improved, we'll score a little better than last time. And then you get an average, and it may be some who drag the result down, but we're enough people that it should be reflective" – O5

The manager also reflects on the challenges of having targets and bonuses based on improving enablement score:

"And then you have the risk that you may affect what they answer. It is anonymous, but you could go out ahead and tell everyone to give a good response on those specific part, because that gives us a higher pay. Of course, we intend to no do that. I'm not too worried that we're not going to reach it, but if this is the right way to measure it, that I am unsure of." -05.

This reflects some of the challenges connected to performance management, especially if bonuses are attached (Prendergast, 1999). By having 15% of the bonus tied up to this goal O5 hopes it inspires the management group to emphasize engagement within the firm.

"I call it an attempt. Of course, say that 15 percent of the bonus of the upper management is tied to this, then it is pretty essential that we perform well. Then there is the increased motivation in the leader team, from creating the Winning Team and a heightened engagement in the firm." – 05

This shows they have tried to measure targets holistically, exactly like the Beyond Budgeting theory recommend (Bogsnes, 2016c). From our understanding it looks like they, with this attempt, achieved an increased focus on employee engagement through the Winning Team target.

In conclusion, the firm was observed to have quite specific targets. These were equally divided between operation and financial, which in turn have sub-targets, as shown in Appendix 2. Even though their communication to employees could be improved, the upper management know the exact targets and how much each is weighted. This way they achieve targets that are both specific and measurable.

5.1.2 Challenging targets

Lunenburg (2011) also highlight that targets should be challenging. The firm get specific financial targets from their board, which represent their mother company. These targets were observed to be ambitious. One manager explains.

"The concern set the financial targets, which are 50 percent. One revenue goal, which are quite ambitious. A lot of percent above what we calculated as realistic." – O2

When asked if they have challenging targets one employee explained:

"Yes, they are. I think so at least. We need that, or else it becomes boring." - 06

Target theory state that targets should equal expected performance, which means fifty percent chance of both achievement and failure (Merchant & Van der Stede, 2017, p. 304). This means that while being challenging, they need to be achievable (Lunenburg 2011). In this regard, the firm seems to have overambitious targets. The consequence is that they become too challenging, which was observed to have a negative effect on motivation. To avoid this, the firm needs to make sure that targets are balanced between ambitious and insurmountable. A balance would be achieved by tying targets to the rolling forecasts, adjusting as the forecasts change. This way they can retain ambitiousness while staying realistic.

The reflection of having achievable targets is shared by a manager in the case firm, especially when targets are connected to bonuses:

"When you agree on that you are going to have a bonus system, then you need to have targets which are achievable. You must consider how you structure the whole system, but for me, when you've worked hard and dedicated, then the bonus should be achieved. Right now, I experience the bonus discussion as that in reality everyone is detached. I have a level of ambition where I want to at least beat the target or over-achieve. If I regularly only do half [of the target], I don't take it seriously. That is my personality." – 03

The theory says that the more difficult the target is, the higher is employee's motivation, until the point where they think they do not have abilities to reach it (Merchant & Van der Stede, 2017, p. 305). O2 confirm that an overambitious target does not necessarily have a motivating effect. He argued that the size of the reward would have some effect, but in the end, it is the intrinsic motivation that is most important.

"There is a big difference. Do you have the possibility of getting six month's wages, or one or two? If it's 1 month's wage based on a useless target, then you don't care about it. Well, in reality you do, [but] it is not an incentive. You do as well as you can regardless [of the bonus]. – O2

In conclusion, it appears that the firm's targets, specifically the financial, are too difficult to achieve. The observed result was a lack of motivational effect from the system, which follows target-setting theory (Merchant & Van der Stede, 2017, p. 305). The unachievable targets ended up in the best case being ignored, or in the worst case have detrimental effects. This could be remedied by adjusting the targets according to changes in the rolling forecasts.

5.1.3 Acceptance of targets

Next, employees need to agree with their targets to increase performance (Lunenburg, 2011). This often achieved by including employees in the target-setting process. The result observed has been higher levels of commitment, motivation and performance (Locke & Latham, 1990; 2002; Knudsen & Flåten, 2015, p. 277). In the case firm, it appears employees will take part in the target setting process in the near future, but they have not been included so far.

"Not up to this point. But now they could take part in it, and then they could contribute to finding how they could achieve the target. Now that we have the responsibility for this [process], that's is how it will be." – O2

It appears the firm has been given increased freedom over its target setting process from the board of directors. However, they have not been able to specify individuals targets up to this point. One project employee confirms the lack of participation and adds that he or she does not have individual targets.

"Not for me personally. I know a bit about the financial targets, which revolve around revenue and similar thing. I think they're quite good at communicating these. But if we have, and then I'm saying if we have other KPI's across the organization, then I'm not aware of it. It might exist, or it might not." – 06

The lack of participation is partly because of the selling process and restructuring shown in the empirical analysis. O5 explain that changing this is one of the goals of the restructuring process:

"The plan is for each individual to set their own goal, but as mentioned we will wait a bit with this as they need to know what our goal is. This is our target, and then how can you contribute to reaching our goal. In that case, our goal needs to be very specific, so that the individual targets can be equally specific. If we say we're going to be the best in the world, then one person can say he's going to be the best in the world within his field of study. But how will you measure that? It is important that the target is as specific as possible. Even though there's always the risk that it is hard to measure things, especially Winning Team." – O5.

In contrast to what Locke & Latham (2002) and Röösli (2016a) recommend, the firm seems to not have included employees in the target setting process. This is an aspect the firm would be able to improve on, as employees expressed a willingness to take part in establishing their own targets. However, several managers pointed out that this is a specific goal of the restructuring they are currently undertaking. It will be interesting to see how they end up implementing participation, and if it increases acceptance. According to theory the result should be higher commitment, motivation and performance (Locke & Latham, 1990; 2002; Knudsen & Flåten, 2015, p. 277). One manager explains how they will use workshops to improve on the participation aspect:

"Even in a small firm, such as this, we work in different directions, and that is entirely unnecessary. I'm thinking that with the first workshop, everybody will understand why we are here, and how we have to work together. And there will be some work in between, where we must build this organization. And then the next step becomes how we will help with reaching those targets. I believe that working in the direction of the goals or targets becomes much easier [then]" – O2

If the case company wants to achieve the best possible result it is important to make the employees know how they can contribute to the overall strategy. However, observations showed that opinions differed regarding who should set targets. From the theory we know that participation also gives a better understanding of the targets, as well as making sure they are reasonable (Merchant & Van der Stede, 2017, p. 301). As one manager says:

"You can't just force a target down someone's throat, that you don't believe in." – O2

This follows the guidelines set by the Beyond Budgeting model, as employees become involved in the process. The model specifically highlights that teams should set their own targets (Röösli, 2016a). The reasoning is that employees often have the best understanding of what is achievable (Bhimani et al., 2012). This supports the firm's decision of letting employees participate in the process. However, it also opens up for sub-optimal decision making, where employees set targets which benefit them, rather than the organization (Bhimani et al., 2012). A project manager believes that participation in the target setting process would turn out well:

"I believe that if we had sat down and set targets, that we would do it very well. I'm completely certain of that." -04

On the other hand, one manager believes that the process of setting targets is best done by starting at the top with strategy and define targets and sub-targets from that, throughout the organization. This is, as we have mentioned, more in line with the theories by Odiorne (1965).

"To me, the process of setting targets, employee appraisals and everything, is a top-down approach. That is how it needs to be, as I understand it. You have the main targets and these you break up" -03

He further elaborates:

"A goal must be achievable and measurable, or else it becomes an ambition. We can have ambitions, but we need to differentiate between them. We are talking about a strategic goal. A strategic goal must be oriented around the direction of the firm, what

we will achieve with the goal, and what is the use of the goals. I have difficulty seeing how that is a bottom-up approach." -03

He also says that it is hard for him to set targets, when he does not get any targets from his leaders.

"Last year, the upper management worked a whole year without any goals. They've just been working. How can I then give strategic targets to my department? In their defence, we have been through a sales-process, and [strategic targets] have not been at the top of the agenda." -03

This points out the importance of cooperation between leaders and employees. Communicating strategy efficiently throughout the organization is crucial to guide employees and determine suitable targets.

In conclusion, the firm is currently following a top-down approach, were employees are given tasks based on the overarching firm targets. Different opinions were observed regarding whether employees should determine their own targets or not. The theory suggest that the firm would benefit from involving employees more, which the management has already decided on. This follows the data, which highlights that communication and cooperation were valued across participants, regardless of target setting-approach. Therefore, a suitable solution could be to set targets in cooperation with both managers and employees. This way employees are able to participate, while managers can receive feedback and serve a control function.

5.1.4 The use of targets to evaluate performance

As we have seen in the theory, targets should be used to evaluate performance (Lunenburg, 2011). This is to emphasize the importance of reaching the targets by increasing the stake for employees. From our understanding, this is something both managers and employees want to improve in our case firm. When asked how the employees get evaluated, one manager says:

"Not good enough. There is no system for it. What you actually want to achieve is often very unclear" -03

On the other hand, one project employee is happy with how the employees get evaluated:

"So far I'm happy with it, but then again, I have a management group I'm reporting to. And that works very well because there we are able to share information. The result is that decisions are made where I need them to be made, so that I can move on. We get plenty of positive feedback on how that process is done." -06

To have be an effective foundation for evaluations, targets should be measurable, and employees should only be accountable for factors they can control (Lunenburg, 2011). The employees need to know what is expected from them, and how their success is measured (Merchant & Van der Stede, 2017, p. 301). This in accordance with how O5 want to design targets:

"I'm thinking that if these targets are going to have a value, then they need to initially be something measurable. This goes a bit back to Winning Team, were measurability is essential. And then it needs to be targets which each person feels they're able to affect themselves. The intention of going all the way down to the level of individuals is that [employees] feel the effort pays off. And since people work with so many different things, the targets can be vastly different. ... If you take some of the programmers, how will you measure whether they've done a job beyond what you would normally expect." -05

For the targets to have their desired effect it is crucial that the performance evaluation process is functional (Lunenburg, 2011). If the targets are not evaluated, they are often viewed as less important and consequently lose some of their value. Evaluations lets managers know the degree of which targets are achieved throughout the organization (Lazear & Gibbs, 2017, p. 215). This way a formal system helps maintain fairness and detail through a holistic perspective (Bogsnes, 2016c).

In the case firm it seems the evaluation systems deviate from the theory, in that they are not extensively used. However, the informal evaluations between colleagues and project workers was observed to be very well regarded. Here, the lack of a precise evaluating system and other administrative work was seen as positive, as stated by one project employee.:

"We have the responsibility of evaluating our employees, through a yearly system. We work a lot in this company, but we do not use a lot of time on administration, and I think that is quite positive. But we have very good daily communication. That is essential. We sit in an open office and we joke across the desks and have a light tone. You can really feel that." -04

As O4 mentions, it is essential to enjoy the work to perform at ones best. Here autonomy and decision-making authority are important factors, enable through decentralization (Bogsnes, 2016b). As Bogsnes (2018) state, performance measurement should not solely revolve around hitting a quantified target, but involve a holistic approach (Bogsnes, 2018). This is especially important when soft targets used extensively. O2 explain this further:

"Soft elements are hard to measure. Those who have seen the light know that you almost need more attention on those, because then the money comes by itself. As long as the business-side is sensible, then people will cooperate more effectively, be smarter and innovative, if there is a good environment." – O2

The fact that these targets are hard to measure seems to be part of the reason why the case firm do not have a specific system for target evaluation. From the theory of Beyond Budgeting, we know that evaluation need to take several factors into account. This includes values, how the results were achieved, hindsight or insight in what was unknown when the targets were established. (Bogsnes, 2016c). To support this approach, O2 believe it is important to have more defined targets, for example regarding people development. He also points out that bonuses can aid in changing the focus:

"You need to have some people-development goals. ... I'm not certain if you should connect a bonus to them. If you skip having bonuses on sales, and apply bonuses to internal development instead, I'm certain it gets better." -02

This statement is supported by the theory, as incentives can be used to guide and motivate (Dess et al., 2016, p. 284). It is also interesting to know how employees are informed of organizational strategy and direction. One manager explains outline the communication process, were strategy is conveyed throughout the organization.

"We have joint meetings, a kind of main forum where all this is communicated. Then everybody meets up here, and typically the CEO recount what is happening in the company, which aspects are important, strategic process and so on. We also have regular updates, and that is normally quite informal. After a leader-meeting I quickly gather everyone and say: "listen here, these are the most important points"." – O3.

The Beyond budgeting theory clarifies the importance of linking target to its overall purpose or strategy (Röösli, 2016a). According to the employees, this is something the case firm needs to work with. One manager says:

"In the work on strategy within in this firm we need to start over again, with our vision and mission. To start all the way at the top." -03

A project manager also has an input to management:

"I feel there is a need for strategy and such. And I hope it is something that can become better than it was since I started here. I would see it as an advantage if we had got a strategy and could tie some KPI's and bonuses to that. That would be my suggestion to management." – O4

In conclusion, it seems like the employees of the firm wish for more focus on a formal evaluation process. This follows what the theory deems beneficial and could be a good solution for the firm. The management is also observed to recognize a need for such a system and consider implementing it after the restructuring is finalized. This would enable the management to more effectively communicate strategies and targets to all employees.

5.1.5 Feedback to targets

Lunenburg (2011) argue that feedback is important for two reasons. Firstly, feedback helps employees determine their own progress. Secondly, feedback helps employees decide on adjustments that are required to improve performance. O5 explain factors they consider in their feedback process:

"Initially, you want to have the possibility of, at any time, correct one's direction to achieve the target. Or to get instruction on how to correct in order to achieve it. In the outmost consequence, the targets can be changed, however I do not think the board will allow for that. But that means that every second month you have a chance to receive feedback on one's progress, and a good opportunity to adjust and get a reminder on where some extra effort is needed. Or that we as leaders need to adjust our direction to reach the goals. Then I think it's important in the leader team that we don't have personal targets, but team targets. That lets everyone know where to prioritize focus, because we state which areas are important, and needs to be solved." – 05

The feedback system among upper management is well established and every second month they receive feedback from the board on their progress. A formal feedback system in the rest of the organization is, as far as we have observed, lacking. However, as mentioned the daily communication is well established. This makes it easier to ask for help, and to help others. Hence employees receive unformal feedback through daily information flow. As O5 confirms, there is a plan for the implementation of a feedback system throughout the organization:

"As of now, I don't imagine there will be the kind of follow-up every second month, but again I'm thinking that as a manager you need to have a constant line of communication with employees. And if you have what is called an appraisal interview, what is being said in the interview can't come as a surprise. There need to be a constant running dialog. And then I'm thinking that each department manager needs to have an overview over each individual's targets, in order to help that person. Or to identify if that person is dependent on someone else to achieve their target, who then hasn't done their job." – O5

In conclusion, it might be a good idea for the firm to implement a formal system to support continuous improvement. These aspects of evaluation and feedback are often tied together, as with Beyond Budgeting (Bogsnes, 2016c). Hence a formal system here could compliment the evaluation system suggested above. The benefits from feedback loops were pointed out by one participant.

"I don't know what exist regarding knowledge databases or lessons learned feedback after deliveries are finished. ... So, I do hope we can get that working here. The whole internal feedback loop, but it also needs to be implemented externally of course. That way you get a feedback loop when you are out in operations, which we can lead back into the firm." – 06

At the same time, as pointed out by O5, it is essential to have a continual line of communication with employees. This enables employees to determine their own progress and make necessary adjustments to improve performance (Lunenburg, 2011). It seems like the firm is planning on introducing a system which provide formal feedback but retain the open and informal dialog.

5.1.6 Deadlines

As we know from the theory, having a concrete deadline to reach, cause employees to exert more effort (Lunenburg, 2011). Considering some of the target theory, the case company should implement more deadlines. We could not observe an extensive use of deadlines within the firm. However, the theory emphasizes the importance of their implementation, and they could be beneficial for the firm. One reason for the lack of use could be the disconnection between the rolling forecast and the overarching targets. As interview object number 5 points out:

"We have Beyond Budgeting with rolling forecasts, but we have targets tied to the financial year. And that doesn't make that much sense." -05

The observations indicate that the target-setting process is less influenced by the Beyond Budgeting system, than the rolling forecast is. Ideally, the management processes would be organized dynamically and not around the calendar year (Table 1). This should also be true for the targets. By tying targets to the rolling forecast, the firm could implement quarterly deadlines, which can be updated alongside the rolling forecast.

As pointed out earlier, having the targets disconnected from the rolling forecast can have detrimental effects. This is because the targets remain unchanged throughout the financial year, while the forecasts are adjusted. The result is that, as external and internal factors change, the

targets become outdated and often either too easy or impossible. Consequently, adjusting target is essential for employees, especially when tying bonuses to the targets, as we will explore later in the analysis.

When asked if the manager wanted a refocus on forecast-based targets rather than yearly targets, he pointed out that the key point of the forecasts is their flexibility. Therefore, in order to use targets for motivation, they should also adjust with the outlook.

"I think we must try to get there. Again, if you go back to traditional budgeting, you plan that in September and then you set KPI's and bonuses in relation to that. When you then get to the spring, the outlook has changed. Then it is unrealistic that you'll reach your target, and then people lose motivation. Or, in the opposite case, it could be so positive that it is impossible to go any higher." – O5.

In conclusion the theory suggests the use of deadlines can have positive effects on employee's effort (Lunenburg, 2011). However, since the firm's targets and rolling forecast are disconnected, it would be difficult to set deadlines tied to targets. If the outlook changes the deadlines would be based on outdated information and may become irrelevant. Hence implementing deadlines which adjust with rolling forecasts could benefit the firm.

5.1.7 Learning orientation

According to Bjarte Bogsnes, learning and development should be the main purpose of performance evaluation, rather than rewards (Bogsnes, 2016c). O5 agrees that this is important and that there will be increased focus on learning and development in the case firm in the future.

"We haven't had too much focus on it lately, because we've had so much to do. But there is an intention that we will be a learning organization. Developing organization. We have some sub-targets under Winning Team on what is needed to reach that." – 05

Arranging for employees to learn both from their own experiences and other co-workers, is increasingly prioritized within the theory (Bogsnes, 2016c). This suggest that learning ought to be focused to develop the workforce. O2 emphasize the importance of employees taking part

in and valuing their personal development. Even though educating people is not what mainly is meant by learning orientation, it shows that the firm has a focus on learning and development. This was shown by O2 in the empirical analysis as they gave the employees the opportunity to take expensive courses and certifications.

Many studies support that learning and development has a positive impact on work-related behaviours and performance (VandeWalle, 2001). However, even though the O2 says that the evaluation of employees is connected to strategic development, not everyone is of the same opinion. When one manager and one employee were asked if there were focus on learning and development they elaborated on the topic.

"Not strategic development, and not a development plan. There is talk about it, but we don't have it. I was part of a corporate "High-potential" program in a firm. There we had access to certain courses and education. You were also more visible in the system, you were invited to certain development programs, and that was very exciting. These things do not exist here." -03.

It seems like the upper management value learning and development, but that during the restructuring period the focus has been less prioritized. A trend suggesting a bigger focus on this area was observed among the participants. This is support by Bogsnes (2016c) who state that learning and development should be the main purpose of performance evaluations (Bogsnes, 2016c). It seems, however, that the firm will increase their focus on this area after the restructuring is finished.

5.1.8 Team targets

In the theory there is a discussion of having team targets or individual targets (Bogsnes, 2018; Lunenburg, 2011). The case firm apply both systems in different situations. It is observed that sellers have individual targets and management have team targets. This also means that sellers have individual bonuses, while management have shared bonus. This will be further explained in the analysis of incentives. Two managers explain:

"For the first time in my carrier the whole management team will share the same targets. We haven't concluded on this, but that is my position. In the situation we're in the leader team must become coordinated first of all. Then it is suitable to have the same targets." – O3

"We have had our own [targets]. But I think that this year we'll have the same ones. It could be a good idea this year, because we are unifying and becoming coordinated. Then next year we can have individual targets again." – O2

The theory assumes that team targets will increase the productivity, and often increase the feeling of belonging, which in turn improve the organizational culture. In order to strengthen this aspect, the Beyond Budgeting framework advice letting teams set their own targets (Röösli, 2016a). The theory supports the firm's decision of moving to team targets at the management level. Given the choice, one project employee confirmed the recommendation of team targets:

"I would base it on teams. That is a part of the Norwegian culture I think." -04

A combination is often a solution, as the most effective targets are often the combination of the two systems (Lunenburg, 2011). If you find a balance between groups targets and individual targets, studies have found that employees get more satisfied and contribute more to the team (Kristof-Brown & Stevens, 2001). However, O2 explains why the sellers mostly have individual targets:

"The sales personnel have individual targets. Because we have sales people on [one segment], and they work only on that. And then you have [all the other segments]. So, it is very concrete. There are specific customers on their lists, and we know how many [projects] they have, and so on. Much of this is integrated in the forecast. You must win that." – O2

What is interesting is that the firm has concluded with using team targets for some departments, and individual for others. The reasoning is well justified and seem to be supported by the general theory. Since the sale personnel work more individually, with relatively measurable outputs, they could benefit from individual targets (Prendergast, 1999). Furthermore, since the rest of the organization have a wider range of tasks, which are more difficult to measure,

cooperation and teamwork become crucial for success. Therefore team-based rewards are sensible (Röösli, 2016b).

O5 explains that it is disagreement among the upper management whether team targets are a good idea. He also explains the reasoning behind moving over to team targets this year:

"There is a discussion in the upper management whether it is appropriate that we have the same targets. That is because you need to separate between being a part of the leader team and being the leader of a department. Some managers are of the opinion that they ought to be measured based on their department. But now we have agreed on being measured as a team of leaders, independently of field of study or what discipline you manage. That is some of the point with upper management." – 05

Even though we observed some disagreement whether targets should be team-based or individual, it seems the firm has found a suitable solution. The use of individual targets appears to be a nice fit for the sale personnel. At the same time, team targets seem to be a suitable approach for the management. It is interesting that the firm has changed to implement team-target for upper management, which has previously only been using individual targets. Now they will have the same targets and be collectively measured.

5.1.9 Conclusion targets

We have now been analysing the case firms use of targets and what impact the target setting process have. As we know, targets seem to be most effective when goals are specific, challenging, accepted by employees, used to evaluate performance, and feedback is provided (Lunenburg, 2011). The case company have both specific and challenging targets. This seems to yield great results as all participants emphasized how well the overall strategy was communicated throughout the firm. On the other hand, they do not, as of now, let employees take part in the target setting process. In addition, they lack a systemized evaluation and feedback system.

The theory underlines the importance of implementing participation as well as evaluation and feedback systems (Lunenburg, 2011; Bogsnes, 2016c). The firm has a large focus on enabling employees through autonomy and decision-making authority. However, the lack of focus on participation could make it harder for employees to realize how to reach their goals in a decentralized structure. Moreover, the low focus on systemized evaluation and feedback could lead to less optimized learning from previous targets.

Most of the employees interviewed seems to agree on these points. Some managers point to the restructuring process as a cause for the lack of employee participation and evaluation. The goal appears to be that these elements will be implemented in the target setting process after the restructuring period. We think they overall will benefit from doing so and are excited to find out if they are able to do it as they are planning.

In addition to these points, the effectiveness of targets can be improved by focusing on deadlines, learning orientation and team targets (Lunenburg, 2011). In the case firm, deadlines could be enhanced by tying the targets and goals to the rolling forecasts, rather than the financial year. This would enable them to be adjusted according to the outlook.

In addition, there the firms use of targets could be more included in the firms learning and development processes. Currently within the firm, learning and development revolves around education and certification through an incentive structure. However, targets were not observed to be tied to feedback loops with the purpose of learning from past periods. This is an area where the firm has potential for improvement, as well as concrete plans for implementation. If these types of systems are implemented, the firm would have access to much more information, which can be used as a basis for setting future targets.

The focus on team targets is also very interesting. Even though some disagreement was observed, the management group have decided to have shared targets this year. The argument is that they want to become coordinated, which is supported by the Beyond Budgeting theory (Röösli, 2016a). However, keeping the targets of the sales personnel as individual seem to fit their tasks. The observations indicate this is a suitable decision, despite of the recommendations of the Beyond Budgeting model (Bogsnes, 2018).

According to the Beyond Budgeting theory fixed targets should be avoided (Table 1). The firm do employee fixed targets, especially for the financial aspects. However, as mentioned, they have few comparable competitors. This limits the value of any benchmarking or relative targets. However, a key challenge is observed as targets are based on the financial year. The Beyond Budgeting system emphasize that management processes should be organized around key events (Table 1). This approach seems appropriate for the case firm, since tying targets to the rolling forecasts would enable them to be continuously adjusted.

5.2 Performance Measurement

In this chapter the implementation of performance measurement will be discussed, as these systems are used to estimate target achievement and effort exerted (Lazear & Gibbs, 2017, p. 215). This in turn, serve as the basis for incentive systems (Lazear & Gibbs, 2017, p. 203). The discussion will cover whether the system has a formulaic or subjective design, and if the purpose of the result is summative or formulaic (Ferreira & Otley, 2009; Merchant & Van der Stede, 2017; Taras, 2009).

There are two instance of performance measurement observed in the firm. The first is the measurement of management performance, by measuring the achievement of overall firm targets. These are the targets outlined in the empirical section and analysed in the previous subchapter. The second performance measurement tied to the rewards systems for the sales personnel. As shown in the empirical section, this system is currently being changed from being based on overall firm targets to new specific sales goals.

The first performance measurement evaluate the performance of the firm itself in the given time-period and is used to assess the upper management. The system forms the basis for the upper management bonus structure (Merchant & Van der Stede, 2017, p. 363). This system is formulaic with some subjective rules, as explained by one manager. Hence the formulaic aspect provides a concrete answer to the degree of target achievement. At the same time there is a subjective element in place, to ensure a more holistic approach.

"Yes, there are some given criteria that you need to fulfil, and rules on where you land, if you get anything in the first place. And then there are some subjective rules. So, everything is more or less governed, and that is done by the board and the CEO for us." – O2.

The system also seems to be summative, as performance is evaluated by assessing target achievement. This show how well the managers performed in the given time-period, but result is not used for further development. There are no observations indicating the evaluation was used for a formative purpose. Hence, results are not used for learning purposes but rather serve as a summative base for the bonus structure.

In sum, the performance measurement method seems to go towards the beyond budgeting system by having holistic aspects and including more than just formative factors (Bogsnes, 2016c). By including the CEO in the review process there is also a form of peer evaluation. However, the results are used purely summative, as far as the data show. Here the theory on performance measurement suggest that a formative use is very benefitial (Kuvaas & Dysvik, 2016).

However, both performance measurement theory and Beyond Budgeting theory suggest a form of formative purpose would increase system effectiveness. Taras (2009) suggest combining a summative system with a formative one, to both know where you stand, and how you can improve from that point. The Beyond Budgeting system emphasize using performance measurement for learning and development (Bogsnes, 2016c). It states that performance should be evaluated holistically, and be based on peer feedback (Bogsnes, 2016c). This seems to be partly the case, as there is a combination of formulaic and summative evaluation, with the CEO being able to review fellow managers. It is, however, not a true peer evaluation, as the other managers do not seem to be involved in the process.

The second performance measurement system is the evaluation tied to the new incentive structure for the sales personnel. The former incentive structure had the same performance measurement as the upper management. The only difference was that it involved the sales managers discussing with the CHRO, instead if the CEO and the board. However, in the new system effort is measured by the completion of defined sales goals.

"What we decided in January, with a green light from the board, was to make a new bonus system for the salesmen. And then we will connect that directly to what they are working with, which again of course is connected to targets. They will get pure sales goals, and not a lot of other [targets]." – O2

This would be a formulaic process, as there is a yes or no answer to whether the contract is fulfilled. In addition, the targets remain the same until they reach it, which also qualifies as a formulaic structure (Merchant and Van der Stede, 2017, p. 363).

"Now we agree that if they already by April achieve their target, then they'll get their bonus in April. If they haven't gotten it until January next year, then they'll get it January next year. The bonus will never disappear, as long as they actually achieve their target. ... They won't get a new bonus system until the first one is accomplished. Then they can hunt for it, and when we tell them which clients are important, then they hunt for those." – O2

Whether the measurement involves a summative or formative purpose was not observed. However, it seems the measurement has a summative use, as it's the basis for the bonus system. Afterwards the sales person gets a new target. Consequently, there are no official formative purpose as far as the data show. This is again not in accordance with the Beyond Budgeting system (Bogsnes, 2016c). The theory covered suggest a formative use of performance measurement. As shown, the Beyond Budgeting system state that development should be the goal of performance measurement (Table 1). It could be combined with the current summative process, as outlined by Taras (2009). This would allow the sales personnel to learn from previous performance.

Finally, there is the performance-based salary system. This system seems to be awarded subjectively, by the need for certification and salary raise, not based on performance from a certain period. Hence it does not involve a performance measurement system, other than whether the course was completed or not.

The firm is currently lacking a system for learning from previous performance. However, as described by another manager, their goal is to implement such systems in due time. The goal

seems to include appraisal models with the focus of learning, which is in line with the observations of Budworth & Mann (2011). This would be especially true for the management performance measurement, which is currently team-based.

"We haven't had too much focus on it lately, because we've had so much to do. But there is an intention that we will be a learning organization. Developing organization. We have some sub-targets under Winning Team on what is needed to reach that." – 05

Another participant noted, however, that a less official system had a positive aspect, as there was less internal bureaucracy. This allowed him and his colleagues to focus purely on their work. He also notes that what he values is the daily communication. This would suggest the organizational culture has supported a form of unofficial peer feedback.

"I haven't been here so long, but I do know that one of my responsibilities are to evaluate colleagues yearly, through a system. ... But we work a lot in this company. We put in effort and work and deliver one product after the other. We don't use too much time on administration, and I think that is a bit positive. I'm fine with that. ... But we have excellent daily communication. That is essential. We sit in an open office, and joke across the desks. There is a light tone, and you really feel that." – O4

In conclusion there is little performance evaluation in the firm, and the systems in place are mostly used as a basis for the incentive structures. However, the theory highly values the learning and developing aspects of performance evaluation (Kuvaas & Dysvik, 2016; Taras, 2009). This is also shown in the data, several managers value learning and want to implement such systems. In addition, the firm has already focused on developing employees and confirmed the benefits this provides, as shown in the empirical analysis of performance-based salary systems.

The Beyond Budgeting system supports this, as it focuses on holistic evaluation, preferable done by peers, with the goal of learning from target achievement (Bogsnes, 2016c). Budworth & Mann (2011) observe a shift in appraisal models towards team orientation with the goal of employee development. Such systems match the firms work profile. However, as one employee state, the low level of administrative work is positive and since the firm has relatively few

employees this needs to be maintained. Therefore, a partly automated system could be used to lessen the bureaucratic strain, but still enable information sharing with a focus on improvement.

5.3 Incentive Systems

This chapter will discuss and analyse the incentive systems in place within the target firm. As outlined in the empirical chapter this includes two short-term systems, as well as one performance-based salary system. In addition, the potential use of long-term systems will be considered The systems identified will initially be confirmed to involve a performance measurement in accordance with the model by Lazear and Gibbs (2017). Then they will be analysed using the incentive system requirements proposed by Merchant and Van der Stede (2017), as shown in Table 3.

5.3.1 Current incentive systems

This section will discuss the external incentive system in place at the firm studied. This includes all incentive systems which involve a form of monetary reward. As shown in the empirical analysis, this includes two forms of short-term systems and one performance-based salary systems (Merchant & Van der Stede, 2017, p. 357). We will use the models and criteria from the theoretical framework to analyse these in turn. They will be presented in the same order as in the empirical analysis. Therefore, we start with the two short-term systems, followed by discussing long-term systems and the performance-base salary increase.

5.3.2 Short term incentives

There were observed two instances of established short-term systems in the case firm. As outline in the empirical analysis, this includes a bonus system for the management group and for the sales personnel. These two bonus structures were based on the same targets, up to this point.

"50 percent on financial targets and 50 percent on operational. This is the bonus structure chosen on a firm-basis in [the conglomerate], and form the framework for the short-term incentive, STI-targets, which is the incentive system" – 01

Consequently, these incentive systems are closely tied to both financial and operational targets. However, the sale personnel incentive system is being changed to have personalized targets, with immediate pay-out at the point of completion. First the analysis will cover how this system function for upper management. Afterwards, both the old and the new sales personnel system will be discussed. The reason for discussing both systems is to identify why the firm decided to replace the system, and what factors they deem important for the new one.

Reward system for upper management.

The system for management is as stated based on 50 percent financial and 50 percent operational targets. To function as an incentive system, we first need to identify a performance measurement used to assess effort. This is the case, as shown in the performance measurement analysis. The data indicate that the firm's main targets are used to evaluate management effort, through a mix of formulaic and subjective conditions. This system seems to be an appropriate effort measurement for the following incentive systems, as no observations indicated otherwise (Lazear & Gibbs, 2017, p. 203).

As the performance measurement is observed to be suitable the next section will identify how the system match the framework of Merchant and Van der Stede (2017). Initially we see that the reward system is comprised of a bonus. That means it is monetary and it is assumed to be accepted as valuable.

The reward seems impactful in itself, by its potential size. However, there seem to be a problem with the reward system rooted in the targets it is tied to. As discussed in the target analysis the targets have been experienced as too challenging. By having the targets being impossible to reach, only a portion of the bonus will be paid out. This would limit the impact of the bonus structure. One manager reflects on the importance of achievable targets.

"When you agree to have a bonus system, you need to have targets that are achievable. Of course, I understand the impulse to complain some about targets being impossible to reach, and so on. But the targets should not be set that high, just because you need targets. And then in reality even those who set the targets know they are impossible to achieve." – O3

Here the manager points out that targets must have a concrete purpose. They need to be based on what is achievable, and within the range of the possible, given a normal distribution of events. This follows incentive theory, in that the system must be based on factors the employee is able to affect (Dess et al., 2016, p. 285). He moves on to explain how the impact becomes limited, because the targets are set so high.

"You stop relating to it, as you cannot reach it anyway. Since I started here, the best I result I achieved was half of my bonus. I mean, come on. That is not me, I have a completely different level of ambition. My ambition is to at least beat the target or better, in order to achieve. If I regularly only reach half, then I do not take it seriously for my own sake. It is a consequence of my personality." – 03.

This shows how the motivational effects are limited for high-achieving individuals. In conclusion the impact is not reduced by size, but by the demotivational effect of knowing you cannot complete the target. This show how the bonus system is closely connected to target setting (Merchant & Van der Stede, 2017; Prendergast, 1999). If the targets are unachievable, it reduces the motivational effect of the incentive system as a consequence.

The next criteria, understandability, include that rewards should be recognized as having value, and attaining them should be done through a logical process (Merchant & Van der Stede, 2017, p. 366). Regarding this system the reward itself is monetary, so its value is assumed to be understood. Regarding attainment, the bonus is connected to quite specific targets, as shown in the target analysis. However, the challenge lies in whether the process of reaching them is comprehensible. In this case, there seems to be an agreement that the combination of financial and operational targets is a useful measurement. The financial targets are specific, and while another manager defines the organizational targets as "soft" and hard to measure, he points out the importance of these targets.

"Soft elements are hard to measure. Those who have seen the light know that you almost need more attention on those, because then the money comes by itself. As long as the business-side is sensible, then people will cooperate more effectively, be smarter and innovative, if there is a good environment." – O2

In conclusion, the basis of the reward system is well established and how the bonus is achieved is therefore understandable. This supports the motivational effects of the bonus system, as the bonus itself is understandable, and tied to important strategic targets, with specific plans of action (Merchant & Van der Stede, 2017).

The timeliness of the system is end-of-period, which follows the target period and financial year (Merchant & Van der Stede, 2017). This means the system is not connected to the forecast, but to the yearly financial report. Being based on the organizational targets, rewards are issued based on the financial year.

"And that has been once a year. The system for everyone is that you might get the bonus in May the year after." -02

This can create a timeliness problem, not because the effects are late, but because the outlook changes. When the forecast change throughout the year the targets, and in turn the bonus system, are still based on the original targets. This can make the bonus much easier to reach, or completely impossible as the targets they are based on remain unadjusted. Either way the motivational effect of the system suffers. This is confirmed by another manager, who recognize this potential mismatch.

"The 5-quarters forecast is supposed to be a "best-estimate" of the future given the normal probability of events. The point is that whatever we think is probably to occur, we should build into the forecast. Everything which is outside of that, you keep out of the forecast. This way it becomes an unbiased estimate of the outlook. In reality, you should have equal probability of hitting over as under [the target] on what you deliver on the forecast. You should not buffer up or down." – O1

This problem could be fixed by either adjusting the overall targets with the new forecast throughout the year, or by awarding bonuses quarterly. However, a quarterly bonus reduces the size of each individual pay-out, which might affect overall impact.

When it comes to durability and reversibility, these is not observed to be concerns within this system. Durability would be equal to other monetary bonuses, and shorter than alternative rewards such as promotions or salary increases (Merchant & Van der Stede, 2017). Reversibility, however, would be higher than more permanent systems (Merchant & Van der Stede, 2017). Hence system mistakes can be rectified on the same note, it is hard to measure cost-efficiency without a deeper study.

Reward system for sales personnel

The next short-term incentive system is the one designed for the sales personnel. But before applying the framework of Merchant and Van der Stede (2017), we use the mode of Lazear and Gibbs (2017). As the model illustrates, incentive pay is based on a performance measurement with an error variable equal to ϵ (Lazear & Gibbs, 2017, p. 204). In this case the performance measurement for the sales personnel is the achievement of the organizational targets.

Here we see that while the organisational targets correctly represent management performance, they do not seem to have a connection to the effort of the sales personnel. In this case, the daily tasks of the sales personnel are directly related to these targets. The consequence is that ϵ becomes huge, as the performance measurement is unrelated to the effort exerted. This would create a conflict, as it causes to employees have little relation to how their work is connected to the bonus system (Lazear & Gibbs, 2017, p. 207). This disconnection would limit any motivational effect, which is confirmed by one interview object.

"It's clear that for the salesmen, this hasn't been an incentive system. When you know you can't achieve [the target] there is no incentive." – O2

The result of this disconnection is that the incentive system becomes ignored, and therefore has minimal impact. Being disconnected from the targets also limits the achievability of the bonus (Merchant & Van der Stede, 2017). This is further illustrated by the O2.

"The salesmen, they can't affect the targets, and when they know we won't reach the targets by Easter. What incentive is there then? We can live with it. We're responsible after all as we're members of the upper management. But they're salesmen, they can work somewhere else and get a bonus, or they can work here and not get their bonus. It's almost that simple. If we want to keep them, they need to at least be able to achieve their bonus." – O2

Here the manager also points out the retention problem a faulty incentive system can cause. Effectively, a part of the employee's salary is locked away by a compensation structure they are unable to affect. Then a logical response would be to look for work where this compensation is paid, based actual effort and results.

"In an ideal world, you're happy going to work because you have interesting tasks, and you like the people you work with, you get challenged, and the salary is good enough for you to not look for other work. But if the firm has chosen to put the [salary] a bit low and offer a bonus reward system, then that will compensate you enough to not go job-hunting. But you have to choose, you can't then remove the reward system, and not implement an alternative." – O2

The manager identifies another problem with the existing system. As mentioned, the disconnection of effort causes a reduction of impact, as the system becomes ignored (Merchant & Van der Stede, 2017). In addition, the targets depend on the financial cycle and are unaffected by the rolling forecasts, as shown in the target analysis. This creates the same problem as with the management system, where targets risk becoming too challenging. Consequently, the bonus size become miniscule, especially when based on the sales personnel salary level. This would again reduce impact.

"They might have gotten nothing, or 10 percent of a month's wage. ... Well they can get 15 percent of one month's wages, which is maybe 50.000. 15 percent of 50.000

minus tax, that's not an incentive, and they can't affect the other targets. ... I think it has been a misunderstood use of the incentive system. Yes, they have a bonus, but is it thought through? Does it give any effect? No, but they have a bonus so cross that of [the checklist]. ... Give [them] higher salary then, do something else, because that is just annoying." – O2

This illustrates the frustrations caused by an ineffective incentive system. Moreover, as with the management system timeliness becomes a problem. This is because rewards are given after the revision of the yearly financial report, not when the targets are achieved. In conclusion, the old system has little impact and poor timeliness (Merchant & Van der Stede, 2017). These two problems make the incentive system irrelevant at best, and motivationally detrimental at worst.

However, the system is under development. One participant continues to explain how a new system will be tested this year. The new system depends on pure sales targets and should enable the salesmen to influence the bonus achievement. This should solve the issue of disconnection.

"What we decided in January, with a green light from the board, was to make a new bonus system for the salesmen. And then we will connect that directly to what they are working with, which again of course is connected to targets. They will get pure sales goals, and not a lot of other [targets]." – O2

As shown above, the targets the bonus is based on is tied to the financial year. The result is that the bonus is rewarded independently of the any sales achievements. However, the new system attempts to remedy this, as shown when a manager describes the changes being done.

"The system was equal for everyone, where you get the bonus around May the subsequent year. ... Now we agree that if they already by April achieve their target, then they'll get their bonus in April. But if they haven't gotten it until January next year, then they'll get it January next year. The bonus will never disappear, as long as they actually achieve their target. ... But they won't get a new bonus system until the first one is accomplished. Then they can hunt for it, and when we tell them which clients are important, then they hunt for those." – O2

This suggestion builds on the changes outlined in the empirical section. The new system should also help with the impact problem and timeliness issue, as the bonus becomes closely tied to target achievement. This should maximize the value perceived from the bonus system (Merchant & Van der Stede, 2017, p. 366). However, another manager highlights the design challenges of the new system.

"They have themselves sketched they want almost named contract they should land, but we say we want a target which reflect impact. Because it is no problem for a salesman to land a contract if it's just the income, or just for the sake of landing a contract. But it needs to be profitable. And then there is always the dilemma of when should the salesmen get their bonus? When the contract is written, or when the system is online? That is a challenge we have, because if you think of a traditional production company you see the result immediately after an item is sold. You have gotten the money, and maybe some additional sales. But for us, we deliver a service. And it takes time before you can verify a return on investment, after six month or nine months. What do you do then if you've already paid the bonus?" – O5

Here the manager illustrates the difficulty with the new system, both in choice of performance indicator and pay-out timing. For now, it seems the sales goal involve specific contracts with pay out at the point of signing, but the system is in development. The manager does outline an alternative set of targets, where the bonus depends on the return on investment of a contract. Outlining the contract as a business case allows for accurate bonus estimates. However, the manager points out a timeliness issue when the bonus is not paid out until long after the sale is made (Merchant & Van der Stede, 2017, p. 366).

"Another way is to say that you make an offer, and then you create a business case regarding what the offer should give us in the end. When will ROI be achieved and how much should we earn going forwards? Then you can define a framework of what you should get as a minimum, and if you land a better deal than the business case you get a higher bonus." – 05

In sum, the new system has applied a performance measurement which reflects effort better. The result is that the reward should be valued, understandable and timely. Moreover, the impact

seems to be in focus and improved. The durability would be the same as any other monetary bonus, however, the cost-efficiency is unknown (Merchant & Van der Stede, 2017, p. 366). The only challenge with the new system, is the potential of never being able to achieve the target as external factors change. If a potential target becomes unachievable, the system would need a "safety valve" and the target should be changed. This could be solved by implementing a periodical review. Regarding behavioural responses, the use of clear customer goals should limit multi-tasking effects. The only case would be if the targets used incentivize a pursuit of suboptimal contracts (Holmstrom & Milgrom, 1991). However, the formulaic performance measurement design should limit any rent-seeking activities or compressed ratings (Milgrom, 1988; Milgrom & Roberts, 1988; Tirole, 1992).

In conclusion, the system in place was not well designed. But it is being changed to more closely provide impact through a better performance measurement system. This new incentive system seems to match the criteria of the Merchant and Van der Stede (2017) framework. At the same time, its design should limit any detrimental behavioural responses.

5.3.2 Long-term incentives

As outline in the empirical analysis, the firm has no long-term incentives, aside from conglomerate benefits for upper management. And while a manager reflected on its uses, no concrete plans for implementation was observed. Interview objective 2 illustrate what he would look for in a long-term incentive system.

"We need something connected to our operation. And then you have the element of how hard it is to replace someone. Is there any point in having long-term incentives? Because these are usually there to retain employees. Or focus on a certain element over a long period. So, if it's not too difficult to replace people, there's usually little reason for using these systems. But do I believe replacing employees is difficult, as [our product] is quite specialized." – O2

Here the manager reflects on the degree of which such systems would be applicable to the firm. It seems that the main concern is not long-term focus on certain tasks, but that employees are specialised and knowledgeable. Hence retention is viewed as important.

"It may be possible that we should have something more long-term than an annual bonus system, but we've never had the time to sit down and discuss such things with the previous leader group. I hope we will have time for it now." -02

The manager is point out the potential of long-term system, highlighting many of the same factors as the incentive system theory (Merchant & Van der Stede, 2017). However, since the firm is wholly owned by the concern, any equity based long term systems will be ruled out as explained in the empirical analysis. These would have to depend on conglomerate decisions or conglomerate equity and would not be internal systems within the firm. However other long-term systems could be considered to emphasize long-term value creation (Merchant & Van der Stede, 2017). This could be relevant as the manager points out the retention and task focus benefits, and could be done by tying rewards to service period requirements (Merchant & Van der Stede, 2017, p. 359). Such a system could fit very well with the operational department of the firm, as the goal is to minimize system down-time.

It should be noted that the conglomerate does have a long-term equity system in place. This is an equity option-plan, which opens for the purchase of stock-options. However, this is conglomerate stock and not stock of the case firm. However, this system is only available to the CEO. Therefore, the system will not be considered in the analysis, as we are looking at the effects of systems applied by the firm, within the firm.

5.3.3 Performance-based salary system

The final system identified within the firm is the use of equalizing tasks used to adjust salaries. This is effectively a performance-based salary, as the tasks involve education resulting in specialized skill and certifications. This is in turn assumed to increase future performance, leading to long-term value creation. The reason for the systems implementation was explained by interview objective 2 as a salary problem when he entered the firm.

"Many had quite low salary, in it was a big issue. ... But in the big picture it didn't involve large amounts of money. When you have NOK 500 mill in revenue and a question if NOK 120.000 should be divided between a group of employees, it puts it in a perspective. That shouldn't be the reason why people are annoyed." – O2

This presents the initial problem the system was designed to alleviate. What was introduced was an educational system designed to increase skill within the workforce and smooth salary levels. As outlines in the empirical analysis, this system involves the use of equalizing tasks, which gives a form of certification in addition to the salary raise.

These tasks were reported to be individual and seemed to have a significant impact. This was cause by the personal development, which was perceived as valuable, and the durability of the reward as the skill is permanent. In addition, the salary increases in generally irreversible. This is great for durability, but means the system is permanent and irreversible (Merchant & Van der Stede, 2017, p. 367).

"They're personal. Personal deals. ... This year we've lifted [the system] up a bit so this year, and partly last year as well, we're going to give [the employees] quite a lot of expensive courses. Then we're talking about expensive courses ... were it costs NOK 150.000 to take the course. Then you get certified, and they like that. It's a value to them, right. A combination of those two elements, without us knowing exactly what we will continue with." – O2

However, the incentive program is not officially systemized. There seem to be two reasons for this. The first is that the manager interviewed initiated the system himself, to certify employees and smooth out salaries. The second could be due to the low number of employees in the firm. This makes it simpler to establish an overview over existing knowledge and salary levels, without a formalized system.

This means the system is subjective in nature in terms of deciding which employees get to participate. This could cause related behavioural problems, like rent-seeking activities (Milgrom, 1988; Milgrom & Roberts, 1988). However, no such problems were observed in the

interview data. It rather seemed that employees were selected by need, and that the use was extensive enough to smooth salary at the firm level.

5.3.4 Incentive systems and Beyond Budgeting

The concept of rewards is covered by principle nr. 12 in Beyond Budgeting. It states simply that rewards should be given based on shared success against competitors (Röösli, 2016b). This is interpreted as team rewards based on relative targets. As shown, there are three incentive systems in the case firm. This sub-chapter will compare each of these to Beyond Budgeting principle nr. 12, in the same order as presented above. It should be noted that this does not determine the functionality and effects of these systems, just whether the Beyond Budgeting philosophy is represented.

Out of these the system for upper management is the most in line with the Beyond Budgeting values, as it is team based and based on a mix of fixed and relative targets (Röösli, 2016a). These targets are, however, only partly relative, as shown in the target analysis section. What is interesting is that the firm is shifting from individually based bonuses to team-based bonuses, as mentioned in the targets chapter. One manager reflect that the firm needs to foster unity to properly communicate strategy throughout the organization.

"This year [the bonus system] is team based. We have the exact same targets, so we need to be a team. We haven't done this before, so it's a trial now. I do believe in this, because I see the need to be even stronger as a team. As our CEO said, we need to move away from being a group of leaders and become a leader-group. That is a very good point, because we are a bit individualistic. But we need to be a team, and realize we have another role when sit in the management-team than when we're department leaders. We can't sit and advocate for our departments in the leader-team, there it needs to be cooperation. ... But changing role like that is not so easy." – O2

Here the manager explains the need to cooperating as a team, instead of each member of upper management advocated for their respective area. This would be in line with the Beyond Budgeting model, where the focus is on teams working towards a united purpose. The Beyond Budgeting theory suggest this change is beneficial, as principle 4 recommend organizing in accountable teams (Table 1). Another manager explains that there has been a discussion of whether this is an appropriate approach. But he greatly supports the move towards a more unified organization.

"And some managers are of the opinion that they ought to be measured based on their department. But now we have agreed on being measured as a team of leaders, independently of field of study or what discipline you manage. And that is some of the point with upper management. The upper management are not supposed to be a collection of leaders from different disciplines who only report on their fields. The upper management is a collective, in other words the firm's advisors, independent of the circumstance." – 05

A third manager confirms this system is a big change but believes this is the right direction for the firm. He then moves on to explain that, rewards are based on targets and targets change. So, at this point team-targets are appropriate, and later this will to be reconsidered to see if that is still the case. As discussed in the target-setting analysis, this move is generally supported by the Beyond Budgeting theory (Röösli, 2016a).

A key challenge with team-based incentive systems is the risk of free-riding problems (Holmstrom, 1982). However, in this case individual output is identifiable, due to the transparency of department results. This should effectively prevent any free-rider effects. This is shown by the requirements place on the upper management in general.

"A typical requirement that you place on members of the leader team is that they must have an opinion on the other disciplines. The idea is that there is room for, and a goal that, a leader of a discipline asks for advice from all the others. Otherwise you are just a group of leaders amassed, reporting every fortnight or every week on their own status." – 05

However, the system for sales personnel is both individual and based in fixed contracts. Consequently, it does not follow the Beyond Budgeting system (Table 1). So, while the firm recognise the need for a change in the incentive systems for sales personnel, the new one is not

any closer to the Beyond Budgeting system. It rather seems the system is designed to be closely based on individual targets, but which the sales personnel can affect directly. As the system is new, there are no observations of its effect yet. However, it matches general incentive system theory, with rewards being tied to related targets and an appropriate performance measurement process (Lazear & Gibbs, 2017, p. 207).

The firm seems to value these points higher than following the Beyond Budgeting principles, as the new targets are fixed and based on individual effort. This is interesting as the system go against the general observations made by Bogsnes (2018). In his paper he does state that individual reward systems can fit tasks which have few dimensions and with an easily measured output. He mentions that sales jobs can fit under this category.

However, in this case the sales process involves extensive negotiation and the signing of long-term contracts. Consequently, this would not be included in the definition of simple jobs (Bogsnes, 2018; Prendergast, 1999). Hence it is interesting that the firm prioritize individual rewards tied to specific and fixed contract targets. In conclusion, the system goes against Beyond Budgeting theory, but follows general incentive system theory closer than the previous framework. This should result in improved system performance.

The performance-based salary system is slightly different than the other incentive systems. As shown, it is assigned more than rewarded in order to smooth salaries and certify the workforce. This way, the reward system does not follow Beyond Budgeting in the sense that it is not based on joint results against competitors (Röösli, 2016b; Table 1). However, the firm does focus on development and education, which is central ideas in the Beyond Budgeting philosophy.

5.3.5 Conclusions incentives

This chapter has analysed the three incentive systems currently implemented in the firm, and their effects. The first system identified is the team-based bonus system for upper management. As discussed in the analysis, the system loses some of its impact because it is disconnected from the rolling forecast. The result is that the bonus size ends up being based on unpredictable

external factors managers are unable to affect, which the theory generally view as negative (Dess et al., 2016; Lazear & Gibbs, 2017; Merchant & Van der Stede, 2017)

However, the system is actively used to promote strategy, as well as uniting the managerial group through team targets. This way the system is used for a concrete purpose, as managers are guided towards what the goals of the principles (Prendergast, 1999). This is very much in line with the theory, which state that incentive system should be used to guide employees and match the goals of agents and principles (Merchant & Van der Stede, 2017; Prendergast, 1999).

The next systems identified were the old and new bonus system for the sales personnel. This system has recently been changed from being based on disconnected targets, to pure sales goals. Here the old targets caused a disconnection between effort exerted and the targets set. Consequently, the incentive systems were based on factors the sales personnel could not affect. The theory emphasizes how problematic incentive systems become when employee effort has no effect (Dess et al., 2016; Lazear & Gibbs, 2017; Merchant & Van der Stede 2017). This was confirmed in the case firm, as the systems was caused detrimental motivational effects for the sales personnel. However, the new system follows the theoretical framework much closer, by being based on concrete output through sales targets (Merchant & Van der Stede, 2017; Prendergast, 1999)

Finally, there is the performance-based salary system, which is awarded to smooth salaries and increase performance and engagement. This system was observed to be very beneficial in that it educates and certify the workforce. At the same time, it has been used to balance salaries within the firm. The result was observed to be highly impactful (Merchant & Van der Stede, 2017). However, the system is not based on targets, and is not used as a reward. This way it does not follow the basic structure of incentive systems (Lazear & Gibbs 2017; Merchant & Van der Stede, 2017). The system it was observed to motivate employees but did not necessarily have the guidance effect the theory emphasize, by aligning the goals of principals and agents (Merchant & Van der Stede; Prendergast, 1999).

Overall the incentive systems of the firm, does not strictly follow the Beyond Budgeting system (Table 1). Some Beyond Budgeting proponents criticise the use of reward systems, especially individual ones (Bogsnes, 2018). However, the firm choose to design their new incentive

system based on factors and targets which are relevant for the employees they are designed for. And while there discussions and challenges tied to the new systems, these seem to fit nicely. They seem to be both impactfull and serve a strategic purpose (Merchant & van der Stede, 2017).

Chapter 6: Conclusions

This chapter will discuss our conclusions based on the analysis in chapter 5. This is in order to answer our problem statement:

What is the impact of targets and incentive systems in a Beyond Budgeting setting?

This problem statement will be answered through the two research questions:

How are targets applied in a firm applying Beyond Budgeting principles?

How are incentive systems designed in in a firm applying Beyond Budgeting principles?

As illustrated these systems are interconnected and dependent on performance measurement systems (Ferreira & Otley, 2009; Lazear & Gibbs, 2017; Merchant & Van der Stede, 2017).

6.1 Main findings

Our findings on the firm's target setting process confirms that target setting is an important factor in a firm's management control systems. Correct use of targets can influence both employee performance and behaviour, promoting work towards the strategic goals of the firm. However, the observations of the sales personnel, indicate that an incorrect use of targets can have detrimental effects. These findings are generally supported by target-setting theory (Locke & Latham, 2002).

As the findings confirm, the target setting process is difficult and complicated. Targets and goals need to be customized for every organization, as well as every section of an organization. However, theoretical frameworks can be applied to aid the target-setting process, such as Lunenburg (2011). The framework applied in this thesis specify that targets are effective when they are specific, challenging, accepted by employees, used to evaluate performance, and feedback is provided (Table 2). In addition, the Beyond Budgeting system specify that targets should be determined through a holistic approach, and be directional, ambitious and relative (Bogsnes 2016a). Based on the theoretical framework and research conducted we have identified how the firm applies targets, as well as their impact within the organization.

The case company was observed to have both specific and challenging targets. This seems to yield great results as all participants emphasized how well the overall strategy was communicated throughout the firm. However, they do not as of now, let employees take part in the target setting process. This would limit awareness and acceptance of overall targets, as shown in the analysis (Lunenburg, 2011). The result is that the guidance effect of the targets is limited to the management. In comparison, project level employees do not currently have targets tied to their work tasks. In this aspect the firm has considerable potential for improvement, which they were observed to recognize. By including employees in setting their own targets and implementing action-plans detailing how to reach those targets, target impact could be enhanced. This was recognized by the managers of the firm, but a final system was still in development.

Another key challenge with the targets is that they are based on the financial year, and not adjusted with the rolling forecasts. This can potentially have large consequences for target impact. As observed the target has been experienced to become impossible as the outlook changes throughout the year. These aspects could be fixed by having targets adjust with the rolling forecasts. This will enhance the effects of both deadlines and target-based incentive systems.

In addition, they lack a systemized evaluation and feedback system. Such systems would allow targets to be more included in the firms learning and development processes. Currently within the firm, learning and development revolves around education and certification through an incentive structure. However, targets were not observed to be tied to feedback loops with the purpose of learning from past periods.

An interesting aspect of the firm's target application is their focus on team targets. Although some disagreement was observed, the management group have decided to have shared targets this year. The argument is that they want to become coordinated, which is strongly supported by the Beyond Budgeting theory (Röösli, 2016a). An interesting alternative would be to implement the same structure further down in the organization. If the firm start developing personal goals and action-plans, they could be combined with team-based target at the project level.

We did observe varying opinions on whether employees should participate in target-setting, and if team-targets were the appropriate measurement system for management. This support our findings in that there is no recipe on how to implement targets. Our observation indicates that they need to be designed to fit the work tasks they are designed for. This is consistent with the result control system outlined by Merchant & Van der Stede (2017). It also seems the firm is implementing a more customized system for personal targets, which is supported by the framework applied in this study.

We find that the changes managers and employees wish to implement are in line with the framework by Lunenberg (2011) as well as the Beyond Budgeting theory. This indicates that the theory matches the case firms setting. However, the target-setting system only partly follow the Beyond Budgeting system. The use of fixed targets which are set for the whole financial year may send ambiguous signals on which system to follow; the forecasts or the targets. Consequently, targets can have reduced impact on fulfilment of strategic goals and employee motivation.

Our findings on incentive system design in the firm generally show that incentive systems appear to be difficult to implement. As illustrated throughout the thesis the firm is knowledge based, with currently large amount of work being done across departments and teams. Knowledge-based firm typically involve multifaceted task environments, making it difficult to measure effort (Prendergast, 1999). There was observed a general tendency to work were needed, regardless of department. This escalates the measurement problems further. However, this is what several employees reported they enjoyed. This autonomous and free structure seem to enrich intrinsic motivation. This follows the Beyond Budgeting theory very closely (Bogsnes, 2018).

Hence our observations do not determine whether incentive systems should be team-based or individual, or based on relative or fixed targets. The main issue seems to be how well the system fits. In the cases were incentive systems are used, which is for management and sales personnel, following Beyond Budgeting principles does not seem to offer a perfect template. This is seen as moving towards individual and fixed targets were a much better solution for the sales personnel.

But for some tasks incentive systems are easier to implement. It becomes natural for upper management as their effort directly affects overhanging targets. And for the sales personnel you now have pure sales targets. But these are still not straight forward. As shown by O5, they pay-out timing is still not perfect for the sales personnel bonus system.

At the same time there was broad agreement that the management group should move towards team-based targets to facilitate unity. What seems to be the key is understanding the factors of each bonus system. Whether individual or team-based the system must be based on the relevant tasks, and the targets the bonus are based on must define these tasks. In addition, were timeliness and impact seem to be critical factors, as rewards needed to be large enough to be relevant and be awarded when a target is reached.

Another potential implementation would be feedback loops which uses performance measurements formatively. This could be combined with the summative process they currently have (Taras, 2009). The resulting system should then strengthen the learning and development (Tara, 2009). This could help the firm in their progress of standardising their projects, aid in the development from an entrepreneurial firm to operating on a larger scale. This way a higher degree of organizational systematization is observed to be needed. However, these should not limit autonomy, but to enable effective project development and implementation through feedback and learning.

6.2 Suggestion for further research

This study represent research on the impact of targets and incentive systems in a Beyond Budgeting setting. Suggestions for further research build upon the findings presented here, or aspects the study did not cover.

The case firm studied was in the process of restructuring the organization. In this case further research could be done on the effects of the changes being made. While this thesis reflects on several of these changes, and how the theoretical framework supports them, we cannot know their effects without further study. This could be shaped as a before and after study, comparing the new systems to the old ones, in order to see the difference in effects.

Another suggestion for further research would be to analyses the impact of rolling forecast and decentralization in a Beyond Budgeting setting. These are other control systems tied to resource allocation in addition to strategic guidance and motivation. Research on the concrete effects of these aspects could reveal other settings were the Beyond Budgeting system is applicable.

In addition, further research could be done to analyse the need for external incentive systems in the firm. While the scope of our study concentrates on the impact of external incentive systems, our observations revealed that internal incentive were highly valued. At the same time, several participants pointed out the potential for envy and internal conflict when inequal reward systems are implemented. Hence, an interesting study would be the guidance and motivational effects of internal incentives, and if these are able to replace the wide implementation of external rewards.

Bibliography

Abernethy, M., A. & Brownell, P. (1997). Management control systems in research and development organizations: the role of accounting, behaviour and personnel controls. *Accounting, Organizations and Society* 22 (3-4), 233-248. doi: 10.1016/S0361-3682(96)00038-4

Ahrens, T., & Chapman, C. S. (2006). Doing qualitative field research in management accounting: Positioning data to contribute to theory. *Accounting, Organization and Society*, 31(8), 819-841. doi: 10.1016/j.aos.2006.03.007

Banker, R., Lee, S. Y., & Potter, G. (1996). A Field Study of the Impact of a Performance-Based Incentive Plan. *Journal of Accounting and Economics*, 21(2), 195-226. doi: 10.1016/0165-4101(95)00418-1

Bergstrand, J., Bjørnenak, T., & Boye, K. (1999). *Budsjettering*. Oslo: Cappelen Akademisk Forlag.

Beyond Budgeting Round Table. (2014). *The Founders*. Retrieved from: (https://bbrt.org/founders/)

Beyond Budgeting Round Table. (2016). *The 12 principles of Beyond Budgeting* [image]. Retrieved from (https://bbrt.org/the-beyond-budgeting-principles/)

Bhimani, A., Horngren, C. T., Datar, S. M. & Rajan, M. V. (2012) *Management and cost accounting* (5th ed.) Essex: Pearson Education Limited

Bjørnenak, T. (2010) Økonomistyringens tapte relevans, de 1 og 2. *Magma - Tidsskrift for økonomi og ledelse*, 4. Retrieved from https://www.magma.no/oekonomistyringens-tapte-relevans-del-1-og-2

Bjørnenak, T., & Kaarbøe, K. (2011). Dynamiske styringssystemer - hva er det? *Magma - Tidsskrift for økonomi og ledelse*, *5*, 22-30. Retrieved from https://www.magma.no/dynamiske-styringssystemer-hva-er-det

Bleich, E., & Pekkanen, R. (2013). How to report interview data. *Interview research in political Science*, 1, 84-105.

Bogsnes, B. (2012). Beyond Budgeting - en styringsmodell som tar virkeligheten på alvor. *Praktisk økonomi & finans*, 20(4), 3-14.

Bogsnes, B. (2016a). *Implementing beyond budgeting: unlocking the performance potential* (2nd Ed.). Hoboken, N.J: John Wiley & Sons.

Bogsnes, B. (Producer). (2016b, 23. February). *The 12 Beyond Budgeting Principles* [Video clip]. Retrieved from https://www.youtube.com/watch?v=WdZg0yi_5kU

Bogsnes, B. (Producer). (2016c, 23. February). *Beyond Budgeting: Principle 11 – Performance evaluation* [Video clip]. Retrieved from https://www.youtube.com/watch?v=RfPVtG2B27E

Bogsnes, B. (2018). Hitting the target but missing the point. *Controlling & Management Review* 62(5), 8-13. doi: 10.1007/S12176-018-0029-7

Bourmistrov, A., Kaarbøe K. (2013) From comfort zones to stretch zones: A field study of two multinational companies applying "beyond budgeting ideas". *Management Accounting Research* 24, 196-211. doi: 10.1016/j.mar.2013.04.001

Bryman, A. (1988). Quantity and Quality in Social Research. London: Unwin Hyman.

Bryman, A. (2001). Social Research Methods, Oxford: Oxford University Press

Budworth, M. H., & Mann, S. L. (2011) Performance management: Where do we go from here? *Human Resource Management Review*, 21(2), 81-84. doi: 10.1016/j.hrmr.2010.09.014

Cameron, W. B. (1963). *Informal sociology: A causal introduction to sociological thinking*. New York: Random House.

Cheatham, C., & Davis, D. A. (1996). Hollywood profits: Gone with the wind? *The CPA Journal*, 66(2), 32.

Chenhall, R. (2003). Management control systems design within organizational context: findings from contingency-based research and directions for the future. *Accounting Organizations and Society*, 28(2-3), 127-168. doi: 10.1016/S0361-3682(01)00027-7

Daum, J. H. (2013). The origins of Beyond Budgeting and of the Beyond Budgeting Round Table (BBRT): An interview with Jeremy Hope, co-founder and research director of the BBRT. Beyond Budgeting: Impulse zur grundlegenden Neugestaltung der Unternehmensfürhung undsteuerung, 63-78.

Dess, G. G., McNamara, G. & Eisner, A. B. (2016). *Strategic Management: Creating Competitive Advantages* (8th ed.). McGraw-Hill Education.

Ekholm, B-G. og J.Wallin (2000). Is the annual budget really dead? *European Accounting Review*, 9(4), 519–539. doi: 10.1080/09638180020024007

Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263-282. doi: 10.1016/j.mar.2009.07.003

Golden-Biddle, K., Locke, K., & Reay, T. (2006). Using knowledge in management studies: An investigation of how we cite prior work. *Journal of Management Inquiry*, 15(3), 237-254. doi: 10.1177/1056492606291199

Hackman, R., & Oldham, G. R. (1976) Motivation through the Design of Work: Test of a Theory. *Organizational Behaviour and Human Performance* 16(2), 250-279. doi: 10.1016/0030-5073(76)90016-7

Hansen, S. C., Otley, D. T. & Van der Stede, W. A. (2003). Practice Developments in Budgeting: An Overview and Research Perspective, *Journal of Managemant Accounting Research*, 15(1), 95-116. doi: 10.2308/jmar.2003.15.1.95

Heinzelmann, R. (2012). Chapter 3 Methodology, in: *Diverging Identities and Professions in European Management Accounting*, unpublished doctoral thesis, University of Innsbruck, Austria.

Heinzelmann, R. (2015). Insights of using Beyond Budgeting ideas for performance management and control in Norwegian companies, *Controlling*, 27(2), 96-101. doi: 10.15358/0935-0381_2015_2_96

Hoff, K. G. (2004). Budsjettering - taktisk økonomistyring. Kongsberg: Universitetsforlaget.

Hoff, K. G. & Bjørnenak, T. (2010) Driftsregnskap og Budsjettering. Oslo: Universitetsforlaget

Holmstrom, B. (1982). Moral Hazard in Teams. *The Bell Journal of Economics*, *13*(2), 324-340. Retreived from: https://www.jstor.org/stable/3003457

Holmstrom, B., & Milgrom, P. (1991). Multitask Principal Agent Analyses: Incentive Contracts, Asset Ownership and Job Design. *Journal of Law, Economics and Organization*, 7, 24-52. Retrieved from: http://www.jstor.org/stable/764957

Hope, J., & Fraser, R. (1997). Beyond Budgeting... Breaking through the barrier to "the third wave". *Management Accounting* 75(11), 20-23.

Hope, J., & Fraser, R. (2003). *Beyond Budgeting – How Can Break Free from the Annual Performance Trap*. Boston, MA: Harvard Business School Press.

Horngren, Charles T. (2012). Cost accounting: a managerial emphasis. Essex: Pearson.

Jacobsen, D. I., & Thorsvik, J. (2013). *Hvordan organisasjoner fungerer*, (4th ed.). Bergen: Fagbokforlaget

Johansen, D., Madsen, D.Ø. (2013) Økonomisk styring i Norge. Oslo: Magma. [Internett] Tilgjengelig fra: http://www.magma.no/okonomisk-styring-i-norge

Knudsen, H., & Flåten, B. T. (2015). Strategisk Ledelse, Oslo: Cappelen Damm Akademisk.

Kristof-Brown, A. L., & Stevens, C. K. (2001). Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter? *Journal of Applied Psychology*, 86(6), 1083-1095. doi: 10.1037/0021-9010.86.6.1083

Kuvaas, B., & Dysvik, A. (2016) *Lønnsomhet gjennom menneskelige ressurser. Evidensbasert HRM* (3rd ed.). Bergen: Fagbokforlaget Vigmostad & Bjørke AS.

Landy, F., & Farr, J. (1980). Performance Rating. *Psychological Bulletin*, 87(1), 72-107. doi: 10.1037/0033-2909.87.1.72

Lazear, E. (2000) Performance Pay and Productivity, *American Economic Review*, 90(5), 1346-1361. doi: 10.1257/aer.90.5.1346

Lazear, E. P., & Gibbs, M. (2017). Personnel Economics in Practice. (3rd ed.). Wiley & Sons.

Libby, T. & Lindsay, R.M. (2009). Beyond budgeting or budgeting reconsidered? A survey of North American Practice. *Management Accounting Research*, 21(1), 56–75. doi: 10.1016/j.mar.2009.10.003

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic Inquiry. Beverly Hills, CA: Sage.

Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological Bulletin*, 90(1), 125-152. doi: 10.1037/0033-2909.90.1.125

Locke, E. A. & Latham, G. P. (1990). A theory of goal setting and task performance. Upper Saddle River, NJ: Prentice-Hall.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation. *American Psychologist*, *57*(9), 705-717. doi: 10.1037/0003-066X.57.9.705

Lukka, K., & Kasanen, E. (1995). Methodological themes: The problem of generalizability: Anecdotes and evidence in accounting research. *Accounting, Auditing and Accountability Journal*, 8(5), 71-90. doi: 10.1108/09513579510147733

Lukka, K., & Modell, S. (2010). Validation in interpretive management accounting research. *Accounting, Organization and Society, 35*(4). 462-477. doi: 10.1016/j.aos.2009.10.004

Lunenburg, F. C. (2011). Goal-Setting Theory of Motivation, *International Journal of management, Business and Administration, Vol. 15*(1). 1-6.

Malmi, T., Brown, D.A. (2008) Mangement control systems as a package - opportunities, challenges and research directions. *Management Accounting Research* 19(4), 287-300. doi: 10.1016/j.mar.2008.09.003

Merchant, K., Van der Stede, W.A. (2007) A review of the literature on control and accountability. In: Chapman, C.S., Hopwood, A.G., Shields, M.D. Handbook of Management Accounting Research, vol 2. Elsevier, Amsterdam, Nederland, 785-802.

Merchant, K. A., & Van der Stede, W. A. (2017) *Management Control Systems: Performance Measurement, Evaluation and Incentives.* (4th ed.). Harlow: Pearson Education Limited.

Messner, M., Moll, J. & Strömsten, T. (2017). Credibility and authenticity in qualitative accounting research. In Hoque, Z., Parker, L. D., & Covaleski, M. A. (Ed.), *The Routledge Companion to Qualitative Accounting Research Methods* (432-444). New York: Routledge

Milgrom, P. (1988). Employment Contracts, Influence Activity and Efficient Organization. *Journal of Political Economics*, 96(1), 42-60. Retrieved from: https://www.jstor.org/stable/1830709

Milgrom, P., & Roberts, J. (1988). An Economic Approach to Influence in Organizations. *American Journal of Sociology*, 94, 154-179. doi: 10.1016/j.aos.2009.10.004

Neely, A., Bourne, M., & Adams, C. (2003). "Better budgeting or beyond budgeting?", *Measuring Business Excellence*, (7)3, 22-28. doi: 10.1108/13683040310496471

Odiorne, G.S. (1965). Management by objectives. A system of managerial leadership. New York: Pitman Publisher.

Otley, D. (1999). Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), 363-382. doi: 10.1006/mare.1999.0115

Parker, L. D. (2012). Qualitative management accounting research: Assessing deliverables and relevance. *Critical Perspectives on Accounting*, 23(1), 54-70. doi: 10.1016/j.cpa.2011.06.002

Player, Steve. (2003). Why some organizations go "beyond budgeting". *Journal of Corporate Accounting & Finance*, 14(3), 3-9. doi: 10.1002/jcaf.10146

Porter, M. E., & Millar, V. E. (1985) How Information Gives You Competitive Advantage. *Harvard Business Review*. Retrieved from: https://hbr.org/1985/07/how-information-gives-you-competitive-advantage Pratt, G. P. (2009). From the Editors: For the Lack of a Broilerplate: Tips on Writing up (And Reviewing) Qualitative Research. *The Academy of Management Journal*, *52*(6). 856-862. doi: 10.5465/amj.2009.44632557

Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, 37(1), 7-63. doi: 10.1257/jel.37.1.7

Rickards, R. C. (2006). Beyond Budgeting: Boon or boondoggle? *Investment Management and Financial Innovations*, *3*(2), 62-77.

Ross, S. A. (1973). The Economic Theory of Agency: The principal's Problem. *The American Economic review*, 63(2), 134-139. https://www.jstor.org/stable/pdf/1817064.pdf

Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35(3/4), 260-271. doi: 10.1108/01409171211210154

Röösli. F. (Producer). (2016a, 23. February). *Beyond Budgeting: Principle 8 – Targets* [Video clip]. Retrieved from https://www.youtube.com/watch?v=up3mp7jN6XU

Röösli. F. (Producer). (2016b, 23. February). *Beyond Budgeting: Principle 12 – Rewards* [Video clip]. Retrieved from https://www.youtube.com/watch?v=ETU5TzNYiC0

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). United Kingdom: Pearson Education M.U.A

Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach* (6th ed.). United Kingdom: Wiley.

Silverman, D. (2010). *Doing Qualitative Research: A Practical Handbook*, 3rd ed., London: Sage.

Taras, M. (2009). Summative assessment: the missing link for formative assessment. *Journal of Further and Higher Education*, *33*(1), 57-69. doi: 10.1080/03098770802638671

Tirole, J. (1992). Collusion and the Theory of Organizations. In J. J. Laffont (Ed.), *Advances of Economic Theory: Sixth World Congress*, Vol. 2, (p. 151-206) Cambridge: Cambridge university press.

VandeWalle, D. (2001). Goal orientation: Why wanting to look successful doesn't always lead to success. *Organizational Dynamics*, 30(2), 162-171. doi: 10.1016/S0090-2616(01)00050-X

Wallander, J. (1999) Budgeting – An Unnecessary Evil. *Scandinavian Journal of Management*, *15*(4), 405-421. doi: 10.1016/S0956-5221(98)00032-3

Yin, R. K. (2009). Case Study Research: Design and Methods (4th ed.). Thousand Oaks, CA: Sage.

Reflection note

Johan Sten Gustavsen

Summary of Thesis

The aim of this master thesis has been to understand the impact performance management systems in a case firm which applies Beyond Budgeting principles. The thesis focuses on the management control systems tied to motivation and guidance of employee effort. This includes the use of targets, performance measurement, and incentive systems based on these evaluations. The aim of these systems is to align the goals of principals and agents. In a Beyond Budgeting this involves guiding autonomous employees with decision making power, which emphasize the importance of correctly designed control systems.

By using an inductive qualitative case study, were data were collected through semi-structured interviews we gained valuable insight into the case setting. We then applied a theoretical framework to the systems identified which let us analyse the effects of targets and incentive systems within the firm.

The targets applied in the firm were specific and used to communicate strategic direction and goals. Yet, while these targets were specific the general target setting processes within the firm faced two main challenges. They were not connected to the rolling forecasts, and there were little use of personal goals and targets. This was observed to be related to a lack of concrete plans for achievement of strategic goals. However, these problems were planned to be fixed through a restructuring process, were targets were to be designed individually, and allow for employees to participate in the process. And while the new system was not observed to strictly follow the Beyond Budgeting principles, it should help targets become directional and ambitious.

The firm's incentive systems were analysed using a framework which provide general criteria incentive systems need to function. The critical factors we observed were needed in the case firm were a clear connection to exerted effort, that the size of the reward was impactful, and that rewards were issued close to target achievement. However, these systems varied across the firm, and simply following the Beyond Budgeting principles did not seem to be effective.

Instead, our findings indicated that incentive systems should be customized for the setting they are applied to. In conclusion, both targets and incentive systems need to be closely related tasks and effort.

International trends

Both the topic of the thesis and the unit of analysis can be linked to international trends. The firm studied operate internationally by delivering supplementary systems to customers, which open new revenue streams for both. Consequently, they need to consider and analyse the outlook for each sector they deliver to. I would especially highly the importance of local political factors, as well as trade deals and trade conflicts. The trend of globalization is arguable questioned by increased instability within European union and trade conflicts between the United States of America and Republic of China. These circumstances have widespread effects, which include affecting the price of key commodities. This can create repercussions for the firm either directly through raw material price variations, or indirectly by affecting the profitability of customers. If a customer has to shut down a project due to increased cost, the case firm will lose all revenue the project was forecasted to generate that period.

These effects cannot be countered my management control systems, but they can be partly planned for, and efficiently reacted to. Applying future-oriented management control systems which enable the use of forecast and effective decision-making, can give the firm the ability to act quickly and be agile within a changing market. Beyond Budgeting could be such a system. Effective management control systems let the firm enable employees and effectively react to new market trends. The case firm is an international tech-firm which open new revenue sources for customers through implementation of equipment and continuous operations. Hence, they depend on customers to exist. However, they have a reasonably diversified customer base.

Innovation

The topics of this thesis is less related to market innovation. Moreover, the firm is anonymous so their market will not be specified. In addition, the firm employ highly specialized technology with complicated installation and maintenance. We do not have the technical knowledge to adequately identify new market segments without a deeper study of both the firm's products

and external market demands. Therefore, I will not attempt to define any gaps in the market place which are no sufficiently covered.

However, the thesis focuses on the application of management control systems, specifically the topics of strategic guidance and motivation within the Beyond Budgeting system. Innovation within these systems are highly relevant for the firm. They employ under 100 employees, and work within several countries in a wide range of segments. Hence it is essential to apply management control systems which enable autonomy and structure simultaneously. Within this section I would especially point to the use of big data and atomisation for the purpose of evaluation and feedback. By collecting data and apply data on project performance and target achievement.

Accountability and responsibility.

Finally, the thesis' relation to accountability and responsibility is discussed. The main ethical challenges related to our topic is the misuse of incentive systems. The implementation of these systems needs to control for misuse both by manager and employee. Such behavioural problems range from free-riding in teams, to misuse of rewards systems. From the managerial side they could also use creative accounting to maximize reward size, either by exaggerating revenues of underreporting costs. This is relevant for the case firm because they focus on autonomy through the Beyond Budgeting implementation.

A key competitive advantage related to responsible management practices would be enhancement of organizational culture. By acting with integrity managers can instil these values into the rest of the organization. As observed within the case firm, these softer targets were seen as highly important. Moreover, a participant of the study emphasized that softer targets and a unified culture would positively affect revenue and sustain competitive advantages.

A specific action which could strengthen accountability would therefore be to increase focus on softer goals. I would especially highlight organizational development and peer responsibility and evaluation. Systems which hinder autonomy and revoke decision-making will work against their intention within a knowledge-based company, such as the case firm. A better approach may be to increase peer pressure and strengthen focus on integrity.

Reflection note

Kristian Fredrik Hornnes

Summary

The main theme of our master thesis has been targets, incentive systems and Beyond Budgeting. More specifically, the impact of targets and incentive systems in a Beyond Budgeting setting. We have been doing a case study with semi-structured interviews of a firm to figure out how these themes work in the company. Specially how these systems are tied to motivation and employee effort. The thesis has been looking at targets and incentives theory comparing to existing systems in the company, to figure out if the company follows the theory and if the theory can help the company to improve its existing targets and incentives systems. In addition, we have observed the connection to Beyond Budgeting.

The main findings are that the firm have specific and challenging targets. This seems to have great impact on results as all participants emphasized how well the overall strategy was communicated throughout the firm. However, they do not let employees take part in the target setting process. Our findings on incentive system design are that it is difficult to implement incentives systems in a knowledge-based firm where employees work in several departments. This creates measurement problems.

International trends

Norwegian organizations are often influenced by international trends. Both targets and incentive systems are widely used internationally. It is almost universal for firms to have targets and incentives. The use of targets and incentives often depends on countries culture. The use of incentive systems is more important in United States than for instance in Norway. On the other hand, the use of Beyond Budgeting are not that much used outside of Scandinavia. This is pretty interesting and surely has several reasons. One of reasons could be the cultural differences, where Scandinavian countries are more decentralized than others. Our case company operates in several countries and international trends could therefore be international competition and for instance trade agreements and licensing laws. It is important for the company to know how the international market works. To know the rules and trends is also

important when trying to expand into new markets. It is also important to consider threats from other international companies trying to join the company's market.

Innovation

Innovation often creates the foundation for companies to stay competitive and is also an important factor for future existent. Beyond Budgeting are seen as an innovative way of managing organizations. With dynamic environments and rapidly changing markets it is essential for organizations to be able to adapt quickly. Beyond Budgeting is a relatively new trend challenging already established systems. Even though the budget still is the most used management control system, the use of Beyond Budgeting becomes more and more relevant as more firms implement the philosophy.

The firm itself is a part of a very innovative market where they have been operating almost as monopolists. Recently they have got a lot of competition, which have made the margins decrease. This makes it even more important to be innovative.

To create an environment of innovation it is important with a strong culture where the employees get the opportunity to be creative. Beyond Budgeting facilitates for innovation with its focus on decentralization.

Responsibility

As mentioned, Beyond Budgeting focus on giving employees greater responsibility through decentralized decision making. With extra responsibility it is important for the employees to behave ethically. Even though Beyond Budgeting does not have a lot of challenges with ethics, the increased responsibility can be abused.

Our thesis is also about incentives. Monetary incentives may create challenges with gaming and manipulation of results for employees to achieve bonuses. In addition, it is important that the system is as fair as possible with no discrimination of employees. This is important to minimize the risk of such behaviour.

Interview Table, illustrating each interview performed.

Interviewee	Status	Source	Format	Length	Recording	Transcript
Interview object 1, Manager	Conducted in person 21.03.2019	Sample frame	Semi-structured	1 hr 5 min	Audio recording	Confidentiality requested
Interview object 2, Manager	Conducted in person 21.03.2019	Sample frame	Semi-structured	1 hr	Audio recording	Confidentiality requested
Interview object 3, Manager	Conducted in person 21.03.2019	Sample frame	Semi-structured	55 min	Audio recording	Confidentiality requested
Interview object 4, Project Employee	Conducted in person 21.03.2019	Referred by CEO	Semi-structured	55 min	Audio recording	Confidentiality requested
Interview object 5, Manager	Conducted in person 13.05.2019	Sample frame	Semi-structured	40 min	Audio recording	Confidentiality requested
Interview object 6, Project Employee	Conducted in person 13.05.2019	Sample frame	Semi-structured	45 min	Audio recording	Confidentiality requested

The financial and operational targets of the case firm.

Ор	eration	al Targ	ets	Financial targets					
Winning team & motivation	Industrialise product management	הואר מוואר וואוווואמוויא ממאר	Drive value from installed base	Baseline CAPEX	Operational Cash flow	EBITDA	Total revenues	Numbers in NOK million	
Improve Employee Enablement	Product Process Model to be developed and implemented	2. Improve Product B offerings	1. Improve Product A robustness and activation	Baseline includes approved Dynamic capex	Calculated as EBITDA – CAPEX (incl. Dynamic capex)	EBITDA calculated before other items	Calculated as total gross reported revenues	Description of goals	
15%	15%	20%			15%	15%	20%	Weight	
Improve p	Finalise 8\\ Increase Pra Launch P	Finalise 80 Increase Pro		7	76	490	Min		
Improve Enablement Score by X percentage points	Launch Product C according to action plan 2019	Launch Product B with 2 strategic partners	Finalise 80% of robustness actions & Increase Product A activation with >5%	69	11	80	500	Mid	Target
ore by X	ss actions & fron with >5% 2 strategic 1 to action plan		s actions & on with >5%		19	88	520	Max	

Interview guide used for the semi-structured interviews.

Intervjuguide

Introduksjon:

Presentasjon av oss

Formål med oppgaven og hvilke temaer den skal omhandle

- "Effekten av mål og insentiver i en bedrift med Beyond Budgeting"
- Beyond Budgeting
- Insentivsystemer
- Produktivitet
- Motivasjon

Hvorfor vi ønsker å studere bedriften

Praktisk informasjon

- Semi-strukturert intervju
- Tidsbruk, cirka en time
- Lydopptak av intervjuet
- Anonymisering

Forklaring av relevant teori

- Beyond Budgeting
- Insentivsystemer

Intervjuobjektets bakgrunn

- Hvor lenge har du vært ansatt i bedriften?
- Hvilken stilling har du?
- Hvor lenge har du jobbet i din nåværende stilling?
- Hva er ditt ansvarsområde?
- Kan du fortelle litt om dine arbeidsoppgaver?

Beyond Budgeting

Kan du fortelle litt om hvilke styringssystemer dere bruker i bedriften?

Kan du fortelle litt om hvordan Beyond Budgeting ble implementert i konsernet og deretter bedriften?

- Hva var grunnen til at man ønsket et nytt system?
- Hva er fordelene og ulempene (utfordringene) med det gamle og det nye systemet?
- Kan du utdype litt mer om Beyond Budgeting generelt og litt mer spesifikt hva som er de viktigste og avgjørende delene?

Hvordan er samarbeidet mellom de ulike selskapene i konsernet?

• Hvordan måler ledelsen i konsernet prestasjonen til bedriften?

Kan du utdype informasjonsgrunnlaget som blir brukt til å ta avgjørelser med tanke på strategi?

Bruker dere intern benchmarking?

- Ekstern benchmarking?
- Tar dere forbehold for å unngå negative effekter av intern-konkurranse?

Hvordan fordeler dere ressurser?

- Har bruken av ressurser endret seg etter implementeringen av Beyond Budgeting?
- Knyttes targets til ressursallokering og/eller motsatt?

Organisasjonskulturen i bedriften

- Kan du beskrive hierarkiet i bedriften?
- Hvem har beslutningsmakt?
- I hvilken grad samarbeider de ulike avdelingene?
- Kan du utdype opplæringen de ansatte får i deres (Beyond Budgeting) strategi?

Ansatte

Hvordan vil du karakterisere ledelsesstilen i bedriften?

Hvordan fordeles oppgavene mellom de forskjellige medlemmene av prosjekter/grupper?

• Vil du si at du blir mer motivert av å ha ansvar for egne arbeidsoppgaver?

Hvis du ønsker å ta en avgjørelse i et prosjekt, hvordan går du fram da?

- Kan du utdype hvilke avgjørelser du ville tatt selv, og hvilke du ville spurt ledelsen om?
- Vil du karakterisere bedriften som sentralisert eller desentralisert med tanke på beslutningstaking?
- I hvilken grad arbeider du etter regler og rutiner?

I hvilken grad er du involvert i å sette interne mål for din avdeling?

Kan du utdype hva du tenker er fordelene og ulempene med Beyond Budgeting sammenlignet med budsjettstyring?

Hvordan vil du beskrive samarbeidet mellom de forskjellige avdelingene med tanke på informasjons- og kunnskapsdeling?

Insentivsystemer

Benytter bedriften seg av belønningssystemer? Kan du utdype hvilke former? Det kan være individuelle eller team-baserte bonuser.

- Kan du utrede prosessen bak utdeling av belønning?
- Er disse belønningssystemene knyttet til ulike standarder? Et eksempel er produksjonsnivå.
- Hva vil du si er målet med disse insentivsystemene?
 - 1. Seleksjonseffekt av ansatte
 - 2. Atferds-påvirkning

Hvem i firmaet vil typisk gjennomføre en evaluering av ansatte?

- Vil du si at belønningssystemene deres tar høyde for indre insentiver, som motivasjon og lojalitet?
- Benytter dere andre former for insentivsystemer? Ett eksempel vil være forfremmelsessystemer.

Hvordan jobber bedriften spesifikt for å øke motivasjon til ansatte?

• Inkluderer dere psykologisk eierskap og ekstrainnsats som elementer i insentivsystemene deres?

Consent form given to interview participants. The form gives a general overview of the purpose of the research as well how data will be used. Relevant contact information is also included.

Forskningsprosjektet

"Effekten av targets og insentivsystemer i en Beyond Budgeting setting"

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å analysere effekten av targets og insentivsystemer når Beyond Budgeting blir brukt som styringssystem. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med prosjektet er å kartlegge bruken av targets og insentivsystemer i bedrifter som en form for Beyond Budgeting. Vi ønsker derfor å spørre om de systemene som benyttes i dag og prosessene rundt. I tillegg vil det bli kommer spørsmål om desentralisering og motivasjon. Prosjektet vil være basert på intervjuer fra nøkkelpersoner som har erfaringer innen bruk og implementering av forskjellige insentivsystemer.

Prosjektet er en masteroppgave innen økonomi og administrasjon ved Universitetet i Agder.

Hvem er ansvarlig for forskningsprosjektet?

Universitetet i Agder er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Du blir spurt om å delta i denne undersøkelsen, da du er ansatt i en bedrift som har implementert en form for Beyond Budgeting. Du har eller har hatt en form for bonusordning, enten individuell eller team-basert, og er mellom 20 og 65 år gammel.

Det vil også være et utvalg på 5 til 10 i din bedrift som får samme henvendelse.

Hva innebærer det for deg å delta?

Hvis du velger å ta del i prosjektet, innebærer det at du tar del i et dybdeintervju, med mål om å utrede dine erfaringer med forskjellige insentivsystemer. Det vil ta ca. 1 time. Intervjuet vil inneholde spørsmål om mål og insentivsystemer du har i dag, samt om du har hatt andre ordninger tidligere. I tillegg vil det bli stilt spørsmål om hvordan slike systemer påvirker motivasjon, og avdelingens produktivitet. Intervjuet vil bli registrert som lydopptak, i tillegg til at det tas notater underveis.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Alle opplysninger om deg vil da bli anonymisert. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. De som vil ha tilgang til registrerte data ved Universitetet i Agder vil være prosjektgruppen, ved Kristian Fredrik Hornnes og Johan Sten Gustavsen, samt veileder for prosjektet, Rafael Heinzelmann.

Tiltak for å sikre personopplysninger vil inkludere adgangsbegrensning med passord-beskyttelse, innlåsing av rådata, samt anonymisering ved databehandling. Navn og kontaktopplysninger vil ikke være tilgjengelig for andre personer enn de nevnt ovenfor. De som skal samle inn, bearbeide og lagre data vil være Kristian Fredrik Hornnes og Johan Sten Gustavsen.

Navn på bedrift vil ikke bli publisert, og deltakere vil ikke kunne gjenkjennes i den ferdige publikasjonen.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Prosjektet skal etter planen avsluttes 3. juni. Personopplysninger og opptak vil bli slettet ved prosjektslutt.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,
- få utlevert en kopi av dine personopplysninger (dataportabilitet), og
- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Agder har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- Universitetet i Agder ved Kristian Fredrik Hornnes (krisfh14@student.uia.no), Johan Sten Gustavsen (johang13@student.uia.no), Rafael Heinzelmann (rafael.heinzelmann@uia.no).
- Vårt personvernombud: Ina Danielsen (personvernombud@uia.no)
- NSD Norsk senter for forskningsdata AS, på epost (<u>personverntjenester@nsd.no</u>) eller telefon: 55 58 21 17.

Med vennlig hilsen	
Prosjektansvarlig	Kristian Fredrik Hornnes, Johan Sten Gustavsen
Prosjektveileder	Rafael Heinzelmann

130

Samtykkeerklæring

The certification from the Norwegian Centre or Research Data, permitting for the use and storage of personal data, within the scope defined in the certification.

6/3/2019

Meldeskjema for behandling av personopplysninger

NORSK SENTER FOR FORSKNINGSDATA

NSD sin vurdering

Prosjekttittel

Incentive structures within a Beyond Budgeting setting

Referansenummer

827508

Registrert

05.02.2019 av Johan Sten Gustavsen - johang13@student.uia.no

Behandlingsansvarlig institusjon

Universitetet i Agder / Handelshøyskolen ved UiA / Institutt for økonomi

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Rafael, rafael.heinzelmann@uia.no, tlf: 40043318

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Johan Sten Gustavsen, johang13@student.uia.no, tlf: 95168666

Prosjektperiode

07.01.2019 - 03.06.2019

Status

Vurdering (1)

06.02.2019 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 06.02.2019. Behandlingen kan starte.

MELD ENDRINGER

Dersom behandlingen av personopplysninger endrer seg, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. På våre nettsider informerer vi om hvilke endringer som må meldes. Vent på svar før endringer gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET

 $https://meldeskjema.nsd.no/vurdering/5c582f27-c619-498c-8586-5c796549e7c6 \ av\ personopplysninger$

1/2 6/3/2019

Meldeskjema for behandling

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 03.06.2019.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om ogsamtykker til behandlingen

formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke,

uttrykkelig angitte ogberettigede formål, og ikke behandles til nye, uforenlige formål

dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante

ognødvendige for formålet med prosjektet

lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn

nødvendig for åoppfylle formålet

DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art.

12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18),

underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav

til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig

institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art.

5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

Dersom du benytter en databehandler i prosjektet må behandlingen oppfylle kravene til bruk av

databehandler, jf. art 28 og 29.

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre

dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene

er avsluttet.

Lykke til med prosjektet!

Tlf. Personverntjenester: 55 58 21 17 (tast 1)

134