

Exploring management accounting change processes

A case study of a Swedish MNC

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This study aims at providing insight into the complexities of management accounting change. The empirical findings are based on a qualitative case study of two management accounting change initiatives in a Swedish multinational corporation. A total of 21 interviews were conducted with 26 unique individuals to ensure a broad picture of the change processes. We find that management accounting change is path-dependent as the existing routines and institutions in the company shape the change process. We also find that small change initiatives, in terms of content, can have a disruptive effect on existing patterns of behaviours and institutionalised values, and therefore can have a large contribution on the re-definition of organisational culture. Guided by Burns and Scapens (2000) together with Busco and Scapens' (2011) institutional frameworks, we contribute to the literature with additional understanding of what happens when new management accounting techniques are introduced in organisations through formal top-down change initiatives. More specifically, we show the importance of specific organisational contexts, histories and individuals for management accounting change and the complexity of management accounting change with the intention to change the existing institutions and what is embedded in the organisational culture.

Key words: Accounting systems, Management accounting change, Organisational culture, Institutional framework, Resistance to change

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LIST OF ABBREVIATIONS

CFO	Chief Financial Officer
BU	Business Unit
BUP	Business Unit President
EBIT	Earnings Before Interest and Taxes
HQ	Headquarter
KPI	Key Performance Indicator
LTF	Long Term Forecasting
ONFAL	Operating Net Financial Assets and Liabilities
P&L	Profit and Loss
PMS	Performance Management Systems
ROCE	Return On Capital Employed
SET	Senior Executive Team

1 INTRODUCTION

“We are now changing the approach and the main challenge is to change the way project managers are thinking. Now, we do not want to see the conservatism. We want them to see and report what they believe will be their most probable outcome. It is difficult and the idea have to go from the top to the bottom. [...] Of course, on the financial side we know what it means, we know what the tools are and we know how to aggregate and present those figures. But then, behind those figures you have to have all the 150 project managers who have to change their way of thinking. It is a part of the culture.” (Controller of Alpha Poland)

The implementation of a new management accounting system is described by one controller in the company Atlantis. She recognises that a change initiative which might be small in terms of content can be difficult to implement as it opposes the current way of thinking in the organisation. Furthermore, she points out that the change is not just about reporting, the culture of the company has to change as well. In this paper, we study two company-wide change initiatives that take place in the decentralised multinational company Atlantis; the introduction of a limit on Capital Employed and the introduction of a redesigned budgeting and forecasting process called LTF. With these two change initiatives, Atlantis wanted to change both the capital management- and the forecasting processes. However, the company also wanted to mitigate the conservatism which have plagued the budgeting and forecasting process and consequently made it an inadequate tool for business planning. In essence, Atlantis used the introduction of new management accounting systems not only for changing the formal routines, but also for changing the culture within the organisation.

Our interest in management accounting change in Atlantis follows from a more general interest of management accounting information's role in supporting decision making and strategic monitoring within increasingly uncertain environments. In the last few decades, increased access to new markets has brought intensified competition and more rapid change in technology. Companies that operate in this environment with increased market uncertainty and complexity need to continuously re-engineer themselves in order to secure their competitive advantage (Kloot, 1997). Management accounting systems are important in the process of adapting to the uncertain business environment as “organisational resources and processes have to be organised and monitored to achieve the goals individuated by corporate vision of the business” (Busco and Scapens, 2011). It is important that the management accounting systems meet the information requirements of business managers and today's business environment requires new “advanced” management accounting techniques (Burns and Vaivo, 2001). Hence, the management accounting systems need to change in order to support managers' changing requirements (Baines and Langfield-Smith, 2003). The introduction of new management accounting systems consists of a complex web of social processes according to Scapens and Roberts (1993). They argue that resistance to change may arise because “the process of accounting change is unlikely to be uncontested, but the conditions of possibility for accounting change are likely to be subject to various organisational pressures and rationales.” Furthermore, Burns and Scapens (2000) argue that resistance to change in management accounting if it means that the employees must change the way they think. Busco and Scapens (2011) study how the introduction of new management accounting systems serves as an engine for organisational culture transformation. They show that these events also can act as points of disruption that threaten path-dependent and routine-based processes of change and contribute to cultural transformation through a process of cognitive and behavioural definition and re-definition.

1.1 AIM, RESEARCH QUESTIONS AND OPERATIONALISATION

We approached this case study as an opportunity to understand management accounting change in a particular organisation. Consequently, we try to *explain* the process, rather than the outcome, of

management accounting change in Atlantis by using Burns and Scapens (2000) institutional framework. The authors argue that management accounting change is path-dependent as the existing routines and institutions in the company will shape the change process. We explore the importance of the specific contexts¹, histories and individuals for the implementation and how these factors affect the two different change initiatives differently by studying our first research question:

1. *What are the implications of specific contexts, history and individuals of the organisation for the process of management accounting change?*

We also apply Busco and Scapens' (2011) extended institutional framework which combines both "cognitive" and "behavioural" dimensions of change in order to "interpret how accounting practices evolve across time and space, and contribute to the ongoing creation and re-definition of organisational culture." As Atlantis wanted to change the institutionalised behaviour of being conservative with the change of the management accounting systems, we explore the cultural transformation process in Atlantis by studying our second research question:

2. *How do the new accounting practices and the change process contribute to the re-definition of organisational culture?*

In order to answer our research questions, we have performed a qualitative study based on 21 semi-structured in-depth interviews with 26 individuals from Atlantis that either have been involved in or been affected by the introduction of the two change initiatives. The interviewees have been representatives from Group Controlling and two different business areas in three different countries. By including individuals from both the headquarter and the business units, we get the perspective from both the preparers and the users. Also, by studying two business areas in three different countries, we get an understanding of how the change initiatives have affected different parts of the organisation.

We contribute with additional understanding of the processes of management accounting change. More specifically we show the importance of the organisational context for the implementation of new management accounting systems and the complexity of management accounting change with the intention to directly change the existing institutions and what is embedded in the organisational culture.

The paper is structured as follows. As a starting point, Section 2 reviews previous research on the management control systems and management control change. In Section 3 we present our theoretical framework. This is followed by a discussion of methodological issues in Section 4. Then, in Section 5 we present our empirical findings. Next, we employ our theoretical framework and interpret our case findings theoretically in Section 6. Finally, Section 7 summarises our key findings and we also address the limitations of this study and provide suggestions for future research.

¹ By context we mean e.g. organisational structure, geographic location, nationality, business type etc.

2 PREVIOUS RESEARCH

In this section we present previous research that is relevant for answering our research questions. We begin by explaining the importance of coordination within large MNCs and how performance management system (PMS) have an important role in this. We then explain that the changing conditions in the global market arena has increased the pressure on MNCs to adapt to more complex and more competitive environment. We continue by explaining that in order for the management control system to stay relevant in this environment, the management control system also has to adapt which means that management accounting change has to take place. Finally, we also elaborate on the role of organisational culture in the management accounting change processes.

2.1 THE IMPORTANCE OF COORDINATION IN LARGE MNCs

Multinational companies (MNC) are defined as groups of wholly or partially owned affiliates located in different countries. MNCs are characterised by substantial complexity and heterogeneity as they operate in different countries, the different subsidiaries are different in many aspects and the organisation consists of individuals with a lot of different backgrounds (Busco et al., 2008). As a consequence of their complex and heterogeneous nature, MNCs have always faced the issues of coordination and integration (Busco et al. 2008). MNCs confront the tension between the need for global integration and the need for local adaption (Kostova and Roth, 2002; Busco et al., 2008). Kostova and Roth (2002) argue that it is “vital for an MNC to achieve and maintain legitimacy in all its environments, it will experience the pressure to adopt local practices and become isomorphic with the local institutional context.” At the same time, coordination becomes important for the organisation in order to utilise the organisation’s capabilities which are an important source of competitive advantage for the MNC.

Performance management systems (PMS) play an important role in achieving a high degree of global coordination. PMS can be seen as a set of practices used to support managers in the process of strategic decision making, planning and control (Busco et al, 2008). More specifically, PMS provide managers with financial and non-financial data from all parts of the organisation (Busco et al, 2008). Financial data include for example financial statements or budgets. Examples of non-financial data include customer satisfaction or market development. Ferreira and Otley (2009) define PMS as a set of “[...]formal and informal mechanisms, processes, systems, and networks used by organisations for conveying the key objectives and goals elicited by management, for assisting the strategic process and ongoing management through analysis, planning, measurement, control, rewarding, and broadly managing performance, and for supporting and facilitating organisational learning and change.”

The use of management control systems has developed from only encompassing economic aspects² to also include social aspects such as “things, people and organisations that symbolise organisations’ activities as a social-based system which interacts with the human behaviour” (Hared et al., 2013). Moreover, Hared et al. (2013) states that there are three types of cultural controls recognised in the management control systems literature that takes social aspects into account: clan control (Ouchi, 1979), belief and values (Simons, 1995; Herath, 2007), and symbols (Tsamenyi et al., 2008). The inclusion of cultural control factors is important in the fast moving environment that MNCs are active in. A study by Kanter (2008) examines how multinational businesses have transformed from being slow moving hierarchal structures to become both flexible and agile. She concludes that common platforms, standardised processes and the most important aspect, shared values have made this transition possible. Common values are important because they help companies to find new business opportunities and motivate employees. She further states that shared values are the key success factor for the most successful MNCs. In the Simons (1995)

² Economic aspects concerns financial control through budgets, performance measurement and motivational management. The financial information provided information to managers for decisions making.

framework of management control, shared values and beliefs are encompassed in belief systems - one of the four “levers of control”. He has a similar view as Kanter (2008) that shared values and beliefs play an important role in inspiring the organisation to search for new ways of creating value.

The last decades have brought a growing level of global competition. The globalisation has paved the way for multinational companies (MNC) to expand their global presence and reach. As the world is shrinking and accessing new markets becomes easier, companies face increased competition and a business environment that is constantly changing. Baines and Langfield-Smith (2003) argue managers in this environment need to use more effective ways of achieving competitive advantage and improving organisational performance. In this new global reality, the tension between global integration and local adaption have become increasingly important. To survive on this global market arena it has become increasingly important to be both flexible and agile in order to quickly adapt to changes in the environment (Busco et al., 2008). At the same time, globalisation has encouraged MNCs to seek competitive advantage through greater standardisation and coordination (Ezzamel et al., 1999). Busco argues that MCS plays an important role in managing trade-offs in this tension.

Kloot (1997) argue that organisations have to adapt to environment changes and modify its behaviour to meet both internal and external demands as “organisations are doomed to failure unless they are able to re-engineer themselves in response to change, to adapt themselves to shifting demands and situations.” Organisations that are not responding or able to respond to the changes in their surrounding environment can encounter difficulties in preserving their competitive advantage. Otley (1994) argue that “only those organisations which match their capabilities to the changing needs of the marketplace and other stakeholders will survive.” Kloot (1997) further argues that management control systems have an important role in this adaption as they provide the managers with information about the environment they help the managers to find a fit between the company’s strategy and markets they are active on.

2.2 MANAGEMENT ACCOUNTING CHANGE

As the conditions on the global market arena changes, management control system must as well. Baines and Langfield-Smith (2003) point out, by referring to Atkinson et al. (1997) and Nanni, Dixon & Volleman (1992), that a common theme in normative management accounting research is that changes in an organisation’s external environment will lead to change in an organisation’s management accounting systems. Management accounting systems need to be updated in order to meet the information requirements of today’s business managers. As an example, Burns and Vaivio (2001) point out that Johnson and Kaplan (1987) “kick-started a new agenda for management accounting research and practice, built on an assertion that its subject was failing to provide business managers with the information that they demanded – management accounting was ‘in crisis’.” Traditional management accounting techniques, such as budgets, were no longer seen as sufficient providers of information that managers could act upon. The authors demanded improvements in information technology together with new management accounting techniques and accounting systems in order to take back the relevancy lost. Since then, the information technology has dramatically improved along with the emergence of new “advanced” management accounting techniques such as rolling forecast, activity based costing and balanced scorecard (Burns and Vaivio, 2001). However, it is also important to point out that the more traditional accounting techniques have not disappeared, they remain popular and are instead used alongside the new techniques according to Burns and Vaivio (2001) who refers to (Drury et al., 1993; Ezzamel et al., 1995; Burns and Yazdifar, 2001). Furthermore, Burns and Vaivio (2001) argue that a “crisis” still exists in modern organisations. Instead of radical design and innovation that Johnson and Kaplan focused on, their definition of this crisis concern how management accounting techniques can stay relevant and be aligned to broader changes that continually (re-) mould the context in which management accounting operates.

The need for management accounting systems to change in order to support managers' new information requirements is an underlying assumption of much of the empirical contingency-style management accounting research according to Baines and Langfield-Smith (2003). Changing the accounting information that is available to managers is, according to Sulaiman and Mitchell (2005), not an uniform phenomenon as "its nature and form may vary across multiple dimensions." Management accounting change may appear in many different ways. Sulaiman and Mitchell (2005) lists five generalised components of technical level change in management accounting: (1) the introduction of new techniques which are extensions of existing management accounting systems, (2) the replacement of (the whole or part of) the system, (3) the modification of the information output, (4) the modification of the technical operation of the system and (5) the removal of management accounting techniques, without replacement." This implies that management accounting change is not only concerned with replacing one technique with a new technique, it also comprises modifications of already existing systems. It is also important to note that management accounting change can not only be seen as a centrally driven effort in which the organisation's HQ plays a key role (Burns and Vaivio, 2001). Change can also originate from the subsidiaries as they often have better knowledge and understanding of which changes are necessary to take. The change that takes place at a local subsidiary can also, over time, spread across the whole organisation (Burns and Vaivio, 2001).

Burns and Vaivio (2001) point out that research on management accounting change should acknowledge different perspectives on the logic of change. They argue that change is usually presented as a *managed* and *formal* organisational event or process directed by the HQ or other motivated actors that take responsibility for the change. However, the opposition logic is that change is not a consciously planned and rationally executed part of reality. They argue that management accounting change is, to a considerable extent, an *unmanaged* phenomenon that also contains *informal* events. Burns and Scapens (2000) make a similar distinction when they explain that management accounting change takes place either intentionally or unintentionally. Intentional change is the result of, for example, a conscious decision taken to introduce a new management accounting system. Unintentional change, on the other hand, occurs on a more tacit level and takes place more incrementally. The term unintentional change highlights that change is not specifically directed even though it may evolve out of the intended actions of the users of the management accounting systems. However, Burns and Scapens (2000) highlight that the process of management accounting change often contains a mixture of both intentional and unintentional change. For example, a new forecasting tool is implemented (intentional change) but over time the procedures of how preparers use the system will change (unintentional). The authors explain that both forms of change need to be researched, although they also highlight that formal change and intentional change are comparatively easy to study while unintentional change is much more difficult to study.

The relative success and failure of management accounting change is an interesting part of the research literature related to accounting change. Hopwood (1987) argue that the majority of conventional discussions regarding accounting change view it in terms of organisational reform and improvement. Accounting change is therefore seen as synonymous with progress as accounting is changed in order to improve. However, it is difficult to assess whether management accounting change has been successful or not. Malmi (1997) study the success and failure of ABC system implementation, and question whether such distinction is possible as the managers at the top and at the local level have divergent perspectives on change success and failure. The author suggests that "managers at both levels basically conceive success and failure with respect to their own needs and aspirations, whatever they are." Consequently, it is difficult to unambiguously say whether the change has been successful or not. Several studies show that management accounting changes do not always succeed and that change could also involve difficulties due to various barriers to change (Scapens and Roberts, 1993; Argyris and Kaplan, 1994; Ezzamel, 1994; Malmi, 1997; Granlund, 2001; Burns and Vaivio, 2001; Kasurinen, 2002; Siti-Nabiha and Scapens, 2005;

Scapens, 2006; Jansen, 2011). Malmi (1997) highlight that there are several reasons for why management accounting change is met with resistance; economic, political and cultural factors are pointed out as examples of reasons for resistance to change. Kasurinen (2002) examines barriers to management accounting change and review, in his opinion, the rather fragmented literature of barriers to change (Argyris & Kaplan, 1994; Shields, 1995; Roberts and Silvester, 1996; Markus and Pfeffer, 1983; Brooks and Bate, 1994; Scapens and Roberts, 1993; Strebel, 1996). The author structures these barriers into three subcategories in order to make the recognition of their role in the change process easier. These are: (1) confusers, uncertainties about the project's future role in the organisation, and (2) frustrators, existing reporting systems and organisational culture, and (3) delayers, difficulties in specifying the BU strategy. Kasurinen (2002) also argues that change in organisations will probably become an increasingly unsystematic endeavour in the future.

2.3 THE ROLE OF CULTURE IN MANAGEMENT ACCOUNTING CHANGE

With this examination of barriers to change, Kasurinen (2002) conclude that there exists a wide-variety of potential problems related to change implementation in practice. He argues that it is increasingly difficult in this turbulent environment to guide the change process in advance. The role organisational beliefs and culture will be increasingly important in the change process. According to Bhimani (2003), how the culture in an organisation is aligned with value assumptions factored in the design of a management accounting system have an influence of the perceived implementation success. Furthermore, Bhimani (2003) refers to Henning and Lindahl (1995) who stress the importance of new systems having a fit with the current culture of the organisation. This view is in line with Burns and Scapens (2000) who argue that it is more uncomplicated to implement change that is aligned with current organisational routines and institutions. The authors define institutions as 'taken-for-granted' ways of thinking and doing in a particular organisation; they use institutions as another word for culture in their study.

Management accounting can also take an *active* part in shaping the organisational culture. Dent (1991) demonstrates how new management accounting systems can be involved in the transformation of a company's organisational culture. He argues that the culture in a company vests organisational activities, such as accounting, with symbolic meanings. He also shows "how accounting can enter into organisational settings to constitute cultural knowledge in particular ways, creating particular rationalities for organisational action; and in turn how this can lead to new patterns of organisation, of authority and influence, new concepts of time and legitimate action." Dent (1991) conceptualise cultural change as the uncoupling of organisational action from one culture and its recoupling to another. He explains that "It is a process of fundamental reinterpretation of organisational activities." Busco and Scapens (2011) explains that "Dent's contribution conceptualises organisations as cultures, and points to the central role of symbols and artefacts in uncovering corporate culture and its multifaceted interplay with accounting systems." The concept of culture will further be elaborated on by presenting Schein's (2010) description of culture.

Schein (2010) is one of the leading researchers within the field of organisational culture and he defines culture as "[...] a pattern of *shared basic assumptions* learned *by a group* as it solved its problems of external adaption and internal integration, which has worked well enough to be considered valid and, therefore, to the taught to new members as the correct way to perceive, think, and feel in relation to those problems." In short, organisational culture is the shared basic assumptions which guide the behaviour of a group of individuals. A group of individuals is, for example, a whole organisation or different functions within the organisation. The composition of the group can also vary between geographic locations, both national and international (Järvenpää, 2007).

Culture is divided by Schein (2010) into three different levels of hierarchies: artefacts, espoused beliefs and values, and basic underlying assumptions. The breakdown of culture is based on the stability and

tangibility of the elements comprising organisational culture. *Artefacts* are tangible elements which comprise things that someone can hear, see, and feel when encountering a new group. As Schein (2010) highlights, the most important point is that artefacts are easy to observe but difficult to decipher. For example, it is easy to observe players' behaviour in a cricket game but difficult to understand what the behaviour means if someone does not understand the rules of the game. *Espoused beliefs and values* are based on values and beliefs promulgated by leaders or managers to a group of individuals. These values and beliefs are not valid for the group until they have been tested and proven successful. If they turn out to be successful they will gradually transform into shared values and beliefs. Schein (2010) uses the example of a manager that wants to increase sales by increasing advertising. This is something that has not been done before in the organisation. As it has not been done before, the message conveyed by the manager cannot be seen valid until it has been tested. If sales increases, increased advertising become the perception of success within the organisation. This perception then becomes transformed into a shared value and belief. These values and beliefs often only explain parts of the observable behaviour in an organisation. In order to fully understand the culture of an organisation one must understand the basic underlining assumptions. *Basic underlying assumptions*, the most stable level, are the shared taken for granted assumptions of a group of individuals. This stage is reached by repeatedly perform tasks that, in the end, turns into a shared taken for granted assumption of how things are done and should be done. Schein (2010) states that "[...] the essence of a culture lie in the patterns of basic underlying assumptions, and after you have understood those, you can easily understand the other more surface levels and deals appropriately with them."

3 THEORETICAL FRAMEWORK

In this section we present our theoretical framework which we will use for analysing our findings in the research company. This section is divided into two sub-sections. In the first section, we present the institutional framework developed by Burns and Scapens (2000) which describe and explain analytical concepts which can be used for interpretive case studies of management accounting change. In the second section, we present Busco and Scapens' (2011) extended institutional framework which can be used for studying cultural change, more specifically how and why organisational culture evolves across time and space.

3.1 AN INSTITUTIONAL FRAMEWORK

Much of the previous research regarding management accounting change has focused around the outcome of change. Burns and Scapens (2000), in contrast, focuses on the change process in their institutional framework, i.e. how and why it becomes what it is, or is not, over time. Thus, they provide a framework for conceptualising management accounting *change*. By recognising that management accounting systems and practices are organisational rules and routines, we can start to explore management accounting change as a process rather than as an outcome. The framework is largely based on old institutional economics theory (OIE) which focuses on organisational routines and their institutionalisation. Burns and Scapens (2000) assume that management accounting systems and practices in many organisations consists of stable rules and routines but also that these rules and routines can change. Change of organisational routines is what drives the change process of management accounting. OIE is particularly well suited for studying organisational change because it focuses on organisational routines and their institutionalisation. Hence, by studying how rules and routines evolve we can better understand management accounting change. An economics-based approach will not explain the process through which new techniques come to be used in some organisation, but not in others. Nor will it anticipate the potential problems and difficulties to be faced in the implementation process. Instead, an economics-based approach may be able to suggest new techniques as it focuses on the rational or "optimal" outcome. In the following sections we will define the core concepts: institution, rules and routines, the process when rules and routines become institutionalised through reproduction.

3.1.1 INSTITUTION AS A CONCEPT

The framework outlined by Burns and Scapens (2000) is based on the institutional perspective presented by Scapens (1994). The authors begin with recognising that management accounting practices can both shape and be shaped by the institutions which govern organisational activity. The concept institution has no universal definition, although it is commonly defined within OIE as "a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of people" (Hamilton 1932, p. 84). Burns and Scapens (2000) interpret it as: "imposing form of social coherence upon human activity, through the production and reproduction of *settled habits of thought and action*", where habits are defined by Hodgson (1993b) as: "more or less self-actualisation dispositions or tendencies to engage in previously adopted or acquired forms of action." Institutions comprise the ways of thinking and the underlying assumptions that condition how people behave (Scapens, 2006). Siti-Nabiha and Scapens (2005) highlight that other researchers (Schein, 1992; Hassard and Sharifi, 1989; Buchanan and Badham, 1999; Nicholson, 1993; Bhimani, 2003) have, when studying organisational transformation, used the concept of culture which is similar to the notion of institutions in OIE. We will use the concept of institutions when studying management accounting change as well as cultural change. Institutions evolve through the process of routinisation of human activity and this process will be explained below.

3.1.2 RULES AND ROUTINES

In the institutional framework presented by Burns and Scapens (2000), the relationship between formal rules and informal routines is very important. A rule can be defined as the formalised and recognised way in which “*things should be done*” (Burns and Scapens, 2000). When humans repeatedly follow rules, their behaviour may become programmatic and based on tacit knowledge, which are acquired through reflexive monitoring of day-to-day behaviour. Such programmatic rule-based behaviour can be described as routines. Routines could be defined as the way “*things are actually done*” (Burns and Scapens, 2000). In short, rules are formalised statements of procedures, and routines are the actual procedurals in use. In the context of management accounting, rules represent for example the manual for budgeting while the routines represent the actual procedure for budgeting. Thus, the management accounting practices may not actually replicate the systems set out in the procedure manuals.

Rules are necessary to coordinate and give social coherence to the actions of groups of individuals while routines are representing the thoughts and actions which are habitually adopted by groups of individuals, they play an important role between actions and institution (Burns and Scapens, 2000). Organisational rules and routines, management accounting systems and practices stand between the structuring properties of institutions and the day-to-day actions and thoughts of organisational members. The rules and routines encode the institutions, i.e. they reflect the taken-for-granted assumptions of people in the organisation. They also shape the actions that people in the organisation take (Scapens, 2006). In the quote below, Scapens (2006) explain how institutions affect people in the organisation through the rules and routines:

“Over time individuals will leave the organisation and new individuals will replace them. These new individuals have to learn how things are done in the organisation. Thus, the organisational know-how is not bound up in the individuals per se, they come and go, but it is comprised in the organisation’s rules and routines”

3.1.3 INSTITUTIONALISATION OF RULES AND ROUTINES

As stated above, management accounting can be viewed as organisational rules and routines. Routines can over time become widely accepted within an organisation such that they become the unquestionable form of management control, i.e. the “taken-for-granted” ways of thinking and doing. At that point, they can be said to be institutionalised which means that they are more than just routines required by senior management; they are an inherent feature of the management control process and represent the expected form of behaviour in the particular social group. Burns and Scapens (2000) have explicitly modelled how the interdependence between action and structure may lead to institutional change. This framework is described below.

The framework in Figure 1, taken from Burns and Scapens (2000), combines institutions which constrain and shape actions at a specific point in time (synchronic, represented by encoding and enacting) and actions which produce and reproduce institutions through their cumulative influence over time (diachronic, represented by reproduction and institutionalisation). The lines in the figure represent the cumulative change process across time. The boxes illustrate the introduction of new rules (and routines) where rules and routines act as modalities which link the institutional realm and the realm of action.

Burns and Scapens (2000) argue that institutions are encoded in rules and routines (arrow a), i.e. the existing routines within an organisation are the prevailing institutional principles. These rules and routines are enacted (arrow b) and reproduced (arrow c) through actions undertaken by the individual actors. This process may involve both conscious and unconscious change of the initially established rules. Conscious change is likely to occur only if the actors could assemble resources and rationales necessary to question the existing rules and routines. Unconscious change may occur if existing rules give room for interpretation, and there is no monitoring system that captures that routines which do not follow the rules

established are forming. On an ongoing basis, the actions follow the rules and routines; although these actions may lead to changes in these rules and routines. This means that both rules and routines can change as people adapt to new situations (Scapens, 2006). Yet, through this ongoing enacting and reproduction (routinisation), changes to rules and routines emerge that, under specific conditions, can become institutionalised (arrow d). This involves a disassociation of the patterns of behaviour from their particular historical circumstances, so that the rules and routines take on a normative and factual quality, which obscures their relationship with the interests of the different actors. In this way, the routines themselves are institutionalised (Burns and Scapens, 2000).

As there is a direct linkage between the rules and routines and the day-to-day actions, the linkages are indicated by solid lines. Institutions connection to rules and routines are more abstract and therefore they are portrayed by a dotted line which is thicker as the institutions can have a significant effect on the rules and routines (Scapens, 2006). Furthermore, because the rules and routines are repeated quite quickly through day-to-day actions, they are represented by several lines whereas the institutions takes much more time to be modified as they are abstracted from day-to-day activity and therefore the institutions are only represented by two lines.

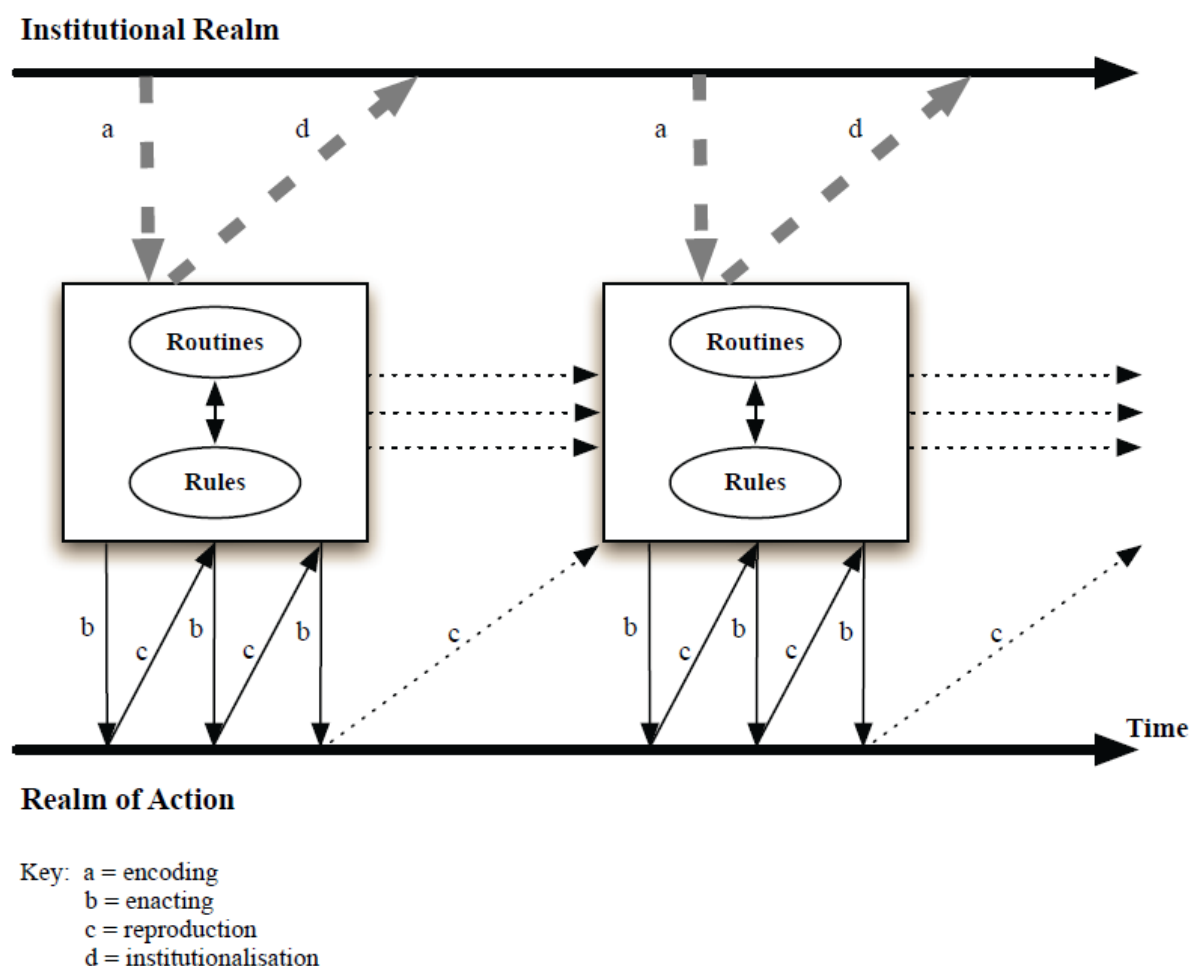


Figure 1 - The process of institutionalisation (Burns and Scapens, 2000)

3.1.4 MANAGEMENT ACCOUNTING CHANGE

The institutional framework presented by Burns and Scapens (2000) can be used for interpretive case studies of management accounting change. The change, in this framework, can be conceptualised as change in organisational rules and routines. Accordingly, in order to achieve management accounting

change, new rules may be introduced in the organisation and become implemented through the establishment of routines. New rules can also emerge out of the established routines. The change of rules occurs at specific point, whereas routines changes in a cumulative process. With other words, rules are enacted from which routines will emerge. The routines will be reproduced within the organisation and passed on to new members. In the process of routinisation, rules may become modified. There is often a clear relationship between rules and routines, but routines do not always follow the enacted rules. For example if rules are not clearly stated they will give room for interpretation, the routines formed may not replicate the initial intention of the rule and will become modified. Routines may emerge which have either deviated from the original rules or were never explicitly set out in the form of rules.

The change process of management accounting constitutes of both formal and informal change (Burns and Scapens, 2000). Formal (intentional change) is characterised by conscious decisions and the change usually takes place through the introduction of new rules and/or through the actions of powerful individuals/groups such as corporate headquarters. Informal (unintentional) change evolves from a more subconscious level but it often has its roots from intentional actions. For example, through the adoption of new routines over time that changes the operating conditions within the organisation. Most processes of management accounting change are likely to incorporate a mixture of both intended and unintended elements. “Management accounting change is a complex process, both conceptually and practically” (Burns and Scapens, 2000).

The implementation of the new rules and the emergence of new routines will be influenced by both the encoding of the structural properties of ongoing institutions and the reproduction of existing routines. For example, new rules will be interpreted in the context of the existing rules and routines, and the reproduction of the previous routines will influence the implementation of the new rules and the emergence of the new routines. Most importantly, the whole process will be shaped by the prevailing institutions. This means that the change process is path-dependent, that already existing routines and institutions will have an influence on the change process (Burns and Scapens, 2000). Institutions always exist prior to any attempt by the actors to introduce change, and will therefore shape the process of change. Additionally, Burns and Scapens (2000) emphasise that although institutions shape behaviour, institutions are themselves the outcome of the actions of individual members of the organisation. When studying specific intentional change it is important to examine the existing institutions. In order to understand complex processes of management accounting change their institutional character has to be recognised (Burns and Scapens, 2000).

3.1.5 RESISTANCE TO MANAGEMENT ACCOUNTING CHANGE

According to Burns and Scapens (2000), the enactment of new rules and routines may be subject to resistance, especially if the rules and routines challenge existing meanings and values, and actors have sufficient resources of power to intervene in this process. Furthermore, the authors argue that management accounting change which is consistent with existing routines and institutions will be easier than change challenging those routines and institutions. Burns and Scapens (2000) stress the importance of balancing the use of both formal and informal mechanisms in the implementation. For a formal implementation to be successful, it may require new ways of thinking and if formal change is not accompanied with informal change, it could face resistance and create tensions which could lead to failure. For example if the implementation of new rules are incompatible with the current ways of thinking and norms within the organisation. Burns and Scapens (2000) divide resistance to change into three separate but interrelated elements:

1. formal and overt resistance due to competing interests;
2. resistance due to lack of capability (knowledge and experience) to cope with such change; and

3. resistance due to a 'mental allegiance' to established ways of thinking and doing, embodied in existing routines and institutions.

Burns and Scapens (2000) point out that that management accounting change that is not widely accepted and is subject to resistance can result in ceremonial adoption of the new accounting rules. Burns and Scapens (2000) suggest that management accounting change can be implemented in either a "ceremonial" or an "instrumental" way. "Ceremonially institutionalised accounting routines are organisational rituals, which are used to preserve the status quo and the power or interests of specific groups or individuals, rather than to aid decision-making" (Siti-Nabiha and Scapens, 2005). Instrumental behaviour, on the other hand, emerges from a value system which applies the best available knowledge and technology to problems and seeks to enhance relationships (Burns and Scapens, 2000). I.e., they are used to make informed decisions (Siti-Nabiha and Scapens, 2005). Nor-Aziah and Scapens (2007) point out that the "ceremonial use of accounting is a façade, which is intended to give an appearance of conformity to the new accounting procedures. But it is merely a ritual that has no impact on day-to-day activities, or on the values, meanings and practices within the organisation." Nor-Aziah and Scapens (2007) further highlight that organisational actors can affect whether the change become used in a ceremonial way or not. As such, certain actors may actively shape the process of management accounting change if it is in their interest and if they have the power to mobilise resistance to change. Therefore, managers as a particular stakeholder group can act as change agents.

With this notion, Burns and Scapens (2000) institutional framework highlights the fact that formal changes do not necessarily lead to changes in individuals' behaviour and Nor-Aziah and Scapens (2007) express it as "an accounting change may not necessarily achieve what was desired in terms of decision-making, control and accountability:"

3.2 MANAGEMENT ACCOUNTING SYSTEMS AND ORGANISATIONAL CULTURE

The institutional framework presented by Burns and Scapens (2000) is extended by Busco and Scapens (2011) in order to be used "for interpreting the ways in which routinised systems of accountability bind the ongoing processes of cultural transformation across time and space." The authors try to develop an institutional framework which is capable of explaining *how* and *why* organisational culture evolves across time and space. We use this framework for understanding process of cultural transformation; one of the objectives with the introduction of the LTF in Atlantis.

Busco and Scapens (2011) see organisational change as the ongoing (continuous) process of cognitive and behavioural definition and re-definition which influences individuals' motivation for action. When studying management accounting change, it is important to make a distinction between revolutionary and evolutionary change (Burns and Scapens, 2000; Busco and Scapens, 2011). Revolutionary changes involves a fundamental disruption to existing patterns of behaviours (routines) and institutionalised values which characterise the organisational culture; while evolutionary change is incremental with only minor disruption to existing routines and institutions (Burns and Scapens, 2000). When defining change as an ongoing process of cognitive and behavioural re-definition, revolutionary and evolutionary change can be conceptualised as the contingent momentum of the same ongoing process which differ only in intensity as the distinction is grounded in the extent of the actors' consciousness/unconsciousness. Consequently, even though revolutionary change can be regarded as points of discontinuity, the process of change can still be conceptualised as continuous and uninterrupted (Busco and Scapens, 2011). Recognising the institutional context of management accounting change is essential if potential difficulties and consequences are to be anticipated (Burns and Scapens, 2000). "Attempts to introduce new management accounting systems and techniques, without careful consideration of the prevailing institutions within the organisation, is likely to encounter resistance" (Scapens, 2006).

3.2.1 EVOLUTIONARY PROCESSES OF CHANGE

In contrast to revolutionary change, evolutionary change is incremental and involves only minor and, sometimes, unconscious adjustment to the take-for-granted assumptions (institutions) (Burns and Scapens, 2000). The evolutionary process of change consists of the same four moments of change as in the institutional framework presented by Burns and Scapens (2000): encoding, enacting, reproducing and institutionalisation. However, when studying cultural change these processes have slightly different implications. This recognition of the ongoing and cumulative evolutionary path is crucial for understanding processes of cultural change in organisations according to Busco and Scapens (2011).

In the *first* moment, “encoding”, the rules, roles and routines (which characterise management accounting systems) are informed by the values and beliefs embodied in the institutionalised cognitive assumptions. In the *second* moment, patterns of behaviour that are informed by encoded cognitive assumptions become “enacted” through day-to-day activities of specific actors within the organisation (“position-practice” incumbents). By this enactment of rules, roles and routines, the essence of organisational culture demonstrates itself in organisational interactions. Although people in the organisation might perform this enactment consciously, it is generally the outcome of reflexive monitoring informed by the individuals’ tacit knowledge. In the *third* moment, the routinised activities are “reproduced”. It is through this recursive process of enacting and reproduction that management accounting systems, conceptualised as both repositories and carriers of organisational culture, evolves across time and space. The continuous enactment of repeated patterns of behaviour lead to a social reproduction of the values embedded in these routinised activities. In some cases, this shared process of learning and social validation might end up with a deeper cognitive transformation in shared taken-for-granted assumptions. This takes place in the *fourth* and final moment where values and assumptions become disassociated from the management accounting systems and become “institutionalised”. Hence, they become the shared taken-for-granted assumptions which provide the unquestioned (i.e. trusted) basis for social interaction.

3.2.2 REVOLUTIONARY PROCESSES OF CHANGE

Change that creates discontinuity in the path-dependent process can be said to be “Revolutionary”. The term revolutionary is not related to the particular content of the change (i.e. the particular techniques, systems, etc.) being introduced, but rather to its potential impact on existing institutions. Thus, a small management accounting change can bring a major institutional change, and the opposite around. When this type of change takes place, “the institutionalised (cognitive) schemes will no longer help the actors within the organisation, who must now assemble new rational and resources, thereby leading to a collective questioning of the existing rules, roles and routines” (Busco and Scapens, 2011). This process can be seen as the unfreezing of the institutionalised values which inform the organisational culture, and as a result, cultural change becomes possible. Busco and Scapens (2011) refer to Schein (1992, p. 312) who argue that change “occurs through cognitive redefinition of key concepts, and the resulting behavioural changes become refrozen in the personalities of the individuals and in the norms and routines of the group”. The phase of cognitive and behavioural redefinition can be synthesised as gradual progress from a “rational know-what” to a “tacit know-how”. Cultural change is a process of unfreezing and refreezing of institutionalised values and Busco et al. (2006) refers to Schein’s (1992, 1993, 1999) description of this process. At the individual level, it comprises four important steps: 1) mechanisms of disconfirmation, 2) the emergence of guilt or *survival anxiety*, 3) the creation of psychological safety and the overcoming of learning anxiety and finally, once new solutions have been successfully experienced and validated, by 4) a cognitive redefinition and sedimentation of the new experiences. This process will be described more in depth below.

The process is initiated with disconfirmation which could be information from the CEO, training programmes or similar information. Information is disconfirming when it challenges institutionalised

cognitive schemas (taken-for-granted assumptions) and routinised patterns of behaviour within the organisation. In order to motivate individuals to change, the disconfirmation must stimulate what Schein defines as *survival anxiety* which is “the fear, shame or guilt associated with not learning anything new” (Schein, 1993). This reaction may arise when disconfirming information is considered to be valid and relevant (Busco et al., 2006). At the same time, *learning anxiety* may arise which can create defensive reactions and resistance to change. Busco et al. (2006) refers to Schein (1993) who describes learning anxiety as “the feeling that is associated with an inability or unwillingness to learn something new because it appears too difficult or disruptive.” Busco et al. (2006) argue that “MAS may be used intentionally to challenge existing ways of thinking; to unfreeze old cognitive schemes, and to enact a new set of roles, rules and routines.”

In order to cope with the anxiety, members of the organisation are constantly looking for some level of psychological safety. Busco and Scapens (2011) argue that actors have the ability to “behave reflexively”, i.e. they have the potential to develop a mental dialogue at the individual level through which the agents exercise their reflexive ability to make sense of organisational life. They refer to Macintosh and Scapens (1990, p. 458) who points out that “individuals are not just social dupes, but existential beings who reflexively monitor and provide rationales for the character of the ongoing flow of their social life.”

Busco and Scapens (2011) argue that in these “new” situations, created by the change, “the unconscious need for psychological safety ‘forces’ knowledgeable actors towards a rational elaboration, manipulation and reconciliation of their frames of meaning.” Disconfirming information thereby stimulate a re-evaluation of the organisational reality through the reflexive efforts of each organisational member in their search for psychological safety. Therefore, when organisational members try to understand the new organisational reality after the change has been initiated, they perform a conscious re-evaluation in which their cognitive schemas, defined as mental maps which emerge from one’s experience about how the social world operates, become redesigned (Busco and Scapens, 2011). The redesigned cognitive schemas have an impact on the organisational members’ patterns of behaviour (routines).

When these new routines repeatedly prove to work in the new organisational reality, they provide a sense of psychological safety. “...for the change to be enduring, accumulated successful experiences must be re-frozen and become part of the shared organisational knowledge” (Busco et al., 2006). Later on, “when the routines become socially validated, they become institutionalised, and the schema becomes part of the agents’ stock of mutual knowledge” (Busco and Scapens, 2011).

Busco et al. (2006) highlight the importance of trust in the process of unfreezing and refreezing. They argue that in situations “where trust is undermined, individuals (and social groups) will be unable to rely on the anticipated behaviours and responses[...]”. This means that organisational members will not overcome survival and learning anxiety to experience psychological safety if they do not have trust for the change. Busco et al. (2006) defines two forms of trust as “a confidence in the reliability of: 1) specific individuals (*personal trust*) and 2) abstract systems (*system trust*).” Furthermore, they argue that these two forms of trust are interdependent “as individuals are usually the access points for the systems, and through face-to-face contacts such individuals can absorb risk by assuring potential users that these systems are trustworthy (Bachmann, 2001)”. The authors propose that *trust for change* is necessary for implementing management accounting systems, and accounting is needed to sustain *trust for change in practice*.

4 METHODOLOGY

In this section, we present the methodology used in our study to answer the research questions. The section is structured as follows. Firstly, we describe why a qualitative single in-depth case study approach is used, and why we have chosen to use systematic combination as our research approach. Secondly, we describe the selection process of the case company and the interviewees. Thirdly, we describe how we have conducted the interviews and why we have done it in such manner. Fourthly, we describe how we collected our empirical data and the process of collecting these data. Lastly, we describe the limitations of the case study approach and how we have tried to achieve a high degree of validity and reliability in our study.

4.1 RESEARCH DESIGN

4.1.1 THE CASE STUDY APPROACH

In order to be able answer this study's research questions in our specific area of interest, management accounting change, a qualitative single in-depth case study was used as our research approach. Within management accounting, case studies are commonly used as research method according to Ryan et al. (2002). This is something that we also experienced when conducting our review of previous literature. The case study method is commonly used within management accounting because it "offers [...] the possibility of understanding the nature of accounting in practice; both in terms of the techniques, procedures, systems, etc. which are used and the way in which they are used" (Ryan et al., 2002).

A case study approach is seen an appropriate research method according to Yin (2009) if the following three criteria are met. Firstly, the research question must be based on "how" or "why." Secondly, the researcher(s) cannot control or influence any of the event(s) researched. Thirdly, the researcher(s) focus on a contemporary phenomenon in a real-life situation. As our aim is to study *how* and *why* formal management accounting change affects accounting practices and the organisational culture, it seems appropriate to use a case study as our research method. It must be mentioned that none of the researchers have influenced or controlled any of the events at the case company.

Further, we have chosen to conduct a single in-depth case study. Where in-depth means that our primary empirical data is gathered through interviews. According to Dubois and Gadde (2002), "the interactions between a phenomena and its context are best understood through in-depth case studies," which supports our choice of method as we aim to understand management accounting change processes and how this affect organisations. The study that we have conducted is done in a single organisation. Dubois and Gadde (2002) argue by referring to Easton (1995) that a single case study often provide greater depth than multiple case studies. Because we aim to in-depth examine the multidimensional complexities of management accounting change and we had only limited time for our thesis, a single case study was seen as an appropriate approach.

4.1.2 THE RESEARCH APPROACH

As our research approach, we chose to apply systematic combination. Systematic combination is an abductive approach where established theoretical frameworks and new concepts derived from the confrontation with reality are combined (Dubois and Gadde, 2002). Abduction means that the researcher successively modifies the original framework, most often as a "result of unanticipated empirical findings, but also of theoretical insights gained during the process" (Dubois and Gadde, 2002). Systematic combinations, according to Dubois and Gadde (2002), are particularly useful when conducting case studies. A case study is seldom, as portrayed in most textbooks, a linear process. Instead, most often when conducting a case study, the researchers encounter new information "[...] of unanticipated yet related

issues that may be further explained in interviews or by other means of data collection” (Dubois and Gadde, 2002). For example, we started off by studying the process of management accounting change and later added frameworks related to organisational culture change. As we have been using an abductive approach, we updated our theoretical framework as we encountered new information.

4.2 CASE COMPANY SELECTION AND IDENTIFICATION OF INTERVIEWEES

The access to and the choice of the case company was influenced by one of the researcher's prior work experience at the company. His time spent at one of the European subsidiaries provided him with connections that helped us to come in contact with the Head of Group Controlling and Group Controller 1 for whom we presented our thesis proposal. Both accepted the idea and they have also been our main point of contact during the entire study. The researcher's prior experience has also helped us to come in contact with some of the interviewees.

The case company, from now on referred to as Atlantis, is a multinational company with operations on several continents. The company's HQ is located in Sweden. Many of the support functions are located in the company's BUs. The CFO of Alpha Sweden describes the HQ as a holding company as the value is created far out in the BUs by local projects. He also describes the organisation as decentralised in which the BUs earn a high degree of decision making rights.

The main factor determining our choice of the case company was that the company during the past year had implemented two new management control system and was in the process (at the time of the study) of calibrating these systems. As our field of interest is to understand the process of management accounting change, we believed that the company in question was a suitable candidate for conducting our study at. Another factor that is important to take into account when selecting case company is that the size of organisation is large enough. As our case company is a multinational company with operations on several continents, we concluded that the case company was large enough to conduct our study at.

4.2.1 SELECTION OF BUSINESS AREAS AND GEOGRAPHIC LOCATION

As our research questions states, we want to study *how* and *why* formal management accounting change affects the accounting practices and the organisational culture. Moreover, we also want to examine if geographic location and type of business could explain *why* the change initiative have been adopted differently within the organisation.

We have chosen to focus our study on three countries: Norway, Poland and Sweden. As the size of the Beta Nordic division in Norway was too small, we included Denmark instead. We do not believe that the inclusion of Denmark instead of Norway had any noticeable negative impact regarding validity of the comparison because both divisions belong to the same BU while conducting the same business activities. There were two factors that determined the choice of countries: (1) prior to the study we received information from the Head of Group Controlling that the countries of choice had adopted the changes differently, and (2) due to the limited amount of time available for this thesis would the inclusion of more countries not been possible in order to assure the quality of the thesis.

The two business areas of interest in the geographic locations mentioned above are structured as follows. Alpha, is organised by country, Alpha BA Norway, Alpha Poland and Alpha Sweden, etc. Beta, on the other hand, is organised by region, Beta Europe and Beta Nordic. Each Beta BU is further broken down into divisions based on the country they are operating in. A comparable study between the two business areas are of interest because (1) both are affected by the change process, and (2) the business activity conducted by the two business areas are very different in nature.

In order to get a clear picture of the whole change process, from idea to implementation, we included representatives from the headquarters, more specifically from Group Controlling. To summarise: we focus our study on two business areas (Alpha and Beta) in three different countries (Norway, Poland and Sweden). The structure of the business areas and geographic regions included in the study is illustrated in the Figure 2 below.

		Geographic location		
		Poland	Sweden	Norway
Business Area	Alpha			
	Beta			

Figure 2 - Business areas structured by geographic region

4.2.2 SELECTION OF INTERVIEWEES

As we aim to study the implementation and the subsequent reactions of two management accounting systems, we need to interview employees from different types of layers within the organisation. We have identified three layers that both have been affected by, and have affected the change process. Interviewees were selected from these three different layers within the organisation. Firstly, the top layer, consisting of Head of Group Controlling, LTF Project Manager and Group Controllers, represents the headquarters. The LTF Project Manager is responsible for the implementation process of the LTF. He had prior experience within in the organisation as the CFO for Alpha US. Secondly, the middle layer, consisting of BU CFOs, Controllers and Reporting Managers, represents the regional headquarters. Thirdly, the last layer, consisting of divisional CEOs and CFOs, represents individual divisions. We have chosen not to include operating managers because we firstly were limited by the amount of time available for this thesis, and secondly, operating managers are at the current state of the implementation barely affected by the new management accounting system. Selection of the individual interviewees was made together with both Head of Group Controlling and BU CFOs. The choice process could have led to a biased selection of the interviewees, but our impression is that none of the managers that help us with the selection process wanted to steer us in a certain direction when choosing the interviewees.

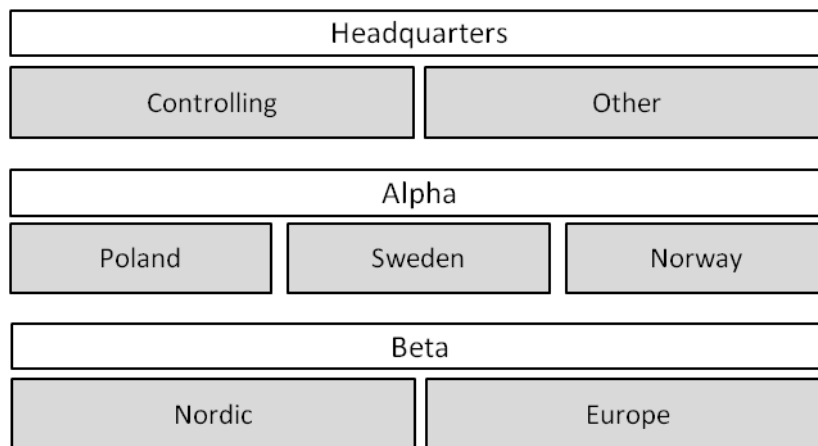


Figure 3 - Organisational structure of the case company

4.3 DATA COLLECTION

Our primary source of empirical data was collected through in-depth interviews. In addition to the primary data, we have also used secondary data such as internal documents describing the different change initiatives. We have conducted 21 interview sessions with 26 unique individuals. No more than two individuals participated at the same interview session. We prefer individual interviews because interviewees are then less likely to be cautious in their answers. However, it was not always possible to conduct individual interviews due to lack of time from interviewees side. The numbers of interviews are seen as sufficient as we at the end of the interviewing process received the same type of answers to our questions. Additional interview would most probably not have added any significantly new information. The length of the interviews varied between 45 minutes to 90 minutes, where the average length was approximately one hour. The interviews were conducted during the time frame end of February 2014 to the middle of April 2014.

4.3.1 THE INTERVIEW PROCESS

Our collection of primary data started with a pre-study where we conducted two contextual interviews at the case company. The aim of the interviews was to get a better understanding of the company as such and to get background information of the two management accounting change initiatives that we wanted to study. The data collected from the contextual interviews helped us when designing the interview guide used later at the interviews. It was also useful to conduct a pre-study because, in the actual interviews, less time was spent on the interviewee explaining the fundamentals of the management accounting systems. In addition to the contextual interviews, we used public information such as annual reports and internal documents in order to gain a better understating of the change initiatives and the case company's history, strategy and structure.

Our primary data source of empirical data was gathered through in-depth semi-structured interviews. The interviews were either conducted in the form of face-to-face meetings or through videoconferences. We preferred face-to-face meetings because it is easier to establish a connection with the interviewee and also to apprehend nuances in the statements made by the interviewee. However, due to the geographic distance to some of the interviewees, face-to-face meetings were not always possible. The interviews conducted at the two Polish subsidiaries were however, carried out in Poland as we wanted to minimise the potential negative effect of the language barrier created by the differences in our native languages.

The structure and process of how we conducted the interviews were the same throughout the interview process. We started each interview with presenting ourselves, the purpose of the case study and a brief description of the questions we wanted to ask. One of the two researchers (the same person for all

interviews) was responsible for asking questions, and the other researcher was responsible for taking notes and asking additional follow up questions. By having one person responsible for asking the questions, the interviewee can to greater extent focus on answering the questions instead of focusing on the researchers interviewing. Each interview had the form of a conversation. During the interviews we had an interview guide which served as a check-list, rather than a strict list of questions that had to be answered in a particular order. This is desirable because by letting the interview guide govern the conversation, the interview gives “[...]little room for learning new things, for seeing new connections for pursuing new ideas, and for thinking original thoughts” according to Kreiner and Mouritsen (2005). The core of the questions in the interview guide used during the interviews was the same for all interviewees. But smaller changes to the interview guide were needed two reasons. Firstly, questions had to be modified in order to better fit the specific interviewee. For example, different types of questions were required when interviewing people at the headquarters contra the BUs. Secondly, during the interviews we were provided with new information that was of interest for our case study and in order to dig deeper into those new areas of interest we had to modify our interview guide.

All of the interviews were recorded to avoid the risk of misinterpreting information. All of the recordings were later transcribed. In addition to recording the interviews, we also took notes. After each interview, we first discussed our overall impression and what we regarded as new findings. These impressions were summarised and written down. As mentioned earlier, we recorded each interview and later transcribed the whole interview as suggested by Merriam (1988) and Brinkmann and Kvale (2009). The summarised impressions, transcriptions and notes from the interviews were later combined into one document, one document per interview session. The document is divided into three separate sections so that the reader clearly knows the type of information he or she is reading. These documents were later used when writing the empirics and doing the analysis.

4.4 DATA ANALYSIS

“Analysing data is the heart of building theory from case studies, but it is both the most difficult and the least codified part of the process” (Eisenhart, 1989). The process of data analysis has been carried out continually during the whole process as it is not possible to distinguish between the different phase of data collection and data analysis from each other (Folkestad, 2008). In order to analyse the data gathered we have followed Miles and Huberman’s (1994) six step procedure for how to analyse qualitative data: (1) notes from the interviews should be coded, (2) reflections from the interviews should be continually be written down, (3) patterns and discrepancies in the data should be searched for, (4) isolation of patterns, commonalities and differences should be done in order to facilitate further data collection, (5) generalisations found in the data should be further elaborate on, and (6) generalisations should be contrasted with established theories and knowledge. The data gathered from each interview was first coded into the two management accounting change processes, LTF and limit on Capital Employed. Each change process was later split into different subcategories. The subcategories differed with regard to the change process and type of interviewee. The two change processes of interest in the case study are slightly different and require therefore different subcategories. The data codification process, was done in the same way for all interviews, this enabled us to compare and contrast the information between the different regions and business areas.

4.5 THE QUALITY OF THE STUDY

Case studies as a research method are criticised by some researchers for lacking “academic rigour and cannot be generalised” (Ryan et al., 2002). One of the main arguments against the case study method is “that case studies provide little basis for scientific generalisation” because they are too situation specific (Dubois and Gadde, 2002). Even though the critique is valid to some degree, there are advocates of the method as well. Otley and Berry (1994) argue the central role of the case study is that of exploration and

that the interaction between phenomenon and its context is best understood through in-depth case studies. Further, Ryan et al. (2002) write “[...]case studies offers the possibility of understanding the nature of accounting in practice; both in terms of the techniques, procedures, systems, etc. which are used and the way in which they are used.” For us to be able to answer our research questions we have used the case study method as discussed earlier. Although, we acknowledge that there are limitations and that if replicating our case study the same findings and conclusions will most probably not be found. We have chosen to not enclose the name, size and industry of the company. This was done because anonymity could have an effect on the openness and honest, in the answers. The drawback with this approach is that they study can be difficult to generalise as some industry and company specific characteristics can have an effect on the findings and conclusions. We believe though that even some company and industry specific factors can have an influence, it will not have any major effect on the ability to apply our findings onto other organisations. Below we describe how we have tried to minimise the weaknesses of the study with regard to reliability and validity. Where reliability stands for the ability to replicate a case study and reach the same conclusion and validity stands for to what extent our conclusions reflects the reality.

4.5.1 VALIDITY

Yin (2009) divides validity into three separate tests: (1) construct validity, (2) external validity, and (3) internal validity. Internal validity is mainly used within experimental and quasi-research; we have chosen not to consider this test. The other two tests will be further described and elaborated on below.

Construct validity means “identifying the right operational measures for the concepts that are being studied” (Yin, 2009). Further Yin (2009) divides construct validity into three steps in order to improve the construct validity. Firstly, we need to use multiple sources of evidence. In addition to in-depth interviews, we used secondary data such as internal documents describing the two different management accounting systems. We have also conducted interviews with employees that have the same position in all BUs to ensure that we got a clear picture and that we understood the change initiatives discussed correctly. Secondly, establish a chain of evidence, which means that we have clearly to show how we have reached our conclusions. We have done this in our thesis by clearly stating which sources we have used throughout the whole thesis. The empirical data gathered have been clearly structured into files and documents stating the date and place where the data was gathered. This has been done to easy find and search for a particular type of evidence. Thirdly, and lastly, have key informants to review our drafts. Before the hand in of the thesis we have let the interviewees review our empirical findings and come with feedback if we had misinterpreted any of the empirical data. This is done to minimise the risk of misinterpretation of the empirical data gathered.

External validity deals with the problem of knowing whether the case study findings are generalisable beyond the immediate study (Yin, 2009). One of the most common critiques, as mentioned at the beginning of the section, is that single case studies cannot be generalised and applied to other contexts (Ryan et al., 2002). There are two types of generalisation, statistical and analytical. Analytical generalisation is used for case studies. In order to strengthen the external validity Yin (2009) suggests the researchers to use theory in single case studies. We have used our theoretical framework as a guide when analysing our empirical data which to some extent has increased our external validation of the study.

4.5.2 RELIABILITY

Reliability is to ensure that if the study would be repeated (on the same case company) by another researcher, who follows the same procedures, would get the same findings and the same conclusions should be reached (Yin, 2009). The goal of reliability is to minimize the errors and biases in the study (Yin, 2009). As our study is a single in-depth case study where almost all of the empirical data are gathered through interviews we see it as unlikely that the same conclusions would be reached if someone tries to replicate our study. During the interview process we can have influenced the interviewees to answer in a

particular way, we have tried as far as possible not to ask leading questions. Some of the interviews were conducted through videoconference and not face-to-face. That could have had an impact on how we interpreted and understood the answers which could have an impact if someone else conducts the interview face-to-face. We have though tried to ask clarifying questions during all the interviews if we not fully understood any answer. All of the interviewees encouraged us to come back to them after the interview if we had any questions regarding the information we had received that had to be clarified. A prerequisite for achieving high reliability is to document the procedures used in the case study. We have, as mentioned above, established a filing system where all the empirics and interview guides are stored in a systematic manner, based on date and interview participant(s).

5 EMPIRICS

In this section, we present our empirical findings of the implementation of the limit on Capital Employed and the new forecast process LTF. We begin by describing our case company with its background and its organisational structure. We then describe the two initiatives common background. This is followed by a detailed description of each initiative individually in two separate sections. For each change initiative, we describe the purpose, how it was implemented and the interviewees' opinion about the implementation. More specifically, in order to be able to do a comparison of the different groups in Atlantis, we cluster the interviewees into the three groups Controlling, Alpha and Beta, and present their opinions in the same order.

5.1 ATLANTIS – A DECENTRALISED MNC

Atlantis is a multinational company headquartered in Sweden and with operations on several continents. The business is operated with a relatively small overhead compared to other companies in the same industry (Controller of Alpha Norway). The CFO of Alpha Sweden describes the HQ as a holding company as the value is created far out in the BUs by local projects. He also describes the organisation as decentralised since many of the support functions are located in the company's BU. Furthermore, the BUs have a high degree of decision making rights. The Head of Group Controlling explains that the level of decentralisation varies over time but that the company currently is experiencing a trend of increased centralisation, integration and coordination.

The company is divided into a number of BUs based on regions and/or business areas. A BU can cover everything from one country to a whole continent and include one or more business areas. As a result, the various BUs can be very different in many aspects. To begin with, as already noted, the size of the business in terms of total revenue can differ to a great extent. The complexity also increases with the number of business areas represented in the BU. Finally, the project structure can look very different in the various BUs. A business can either have many small projects with shorter durations or they can have a few very large projects with longer durations. For example, the BUs with the most projects have several thousand active projects at the same time while others only have a handful active projects at the same time. As the CFO of Alpha Sweden points out, there is no average BU within Atlantis and, therefore, it is difficult to find a common need and design that works for all the BUs. Alpha is Atlantis largest business area in terms of revenue and number of employees. Alpha is also the company's oldest business area. Beta is Atlantis' investment division, a relatively new business area. Atlantis business areas collaborate to a great extent in order to realise synergies and benefit from the organisation's financial situation (Head of Group Controlling).

To make it easy to understand which part of the company we are referring to, we will briefly describe the organisational structure of Atlantis. Atlantis AB is the part of the group which will refer to as the HQ and includes the Senior Executive Team (SET), Group Controlling and other support functions. The organisation is then divided into a number BUs as described above. Each BU is then divided into divisions that could either be a business area or a region. This structure is common for all BUs. However, large BUs can further be divided into regions and districts. We will refer to the hierarchical level responsible for the projects as the operating units.

5.2 A STRESSED FINANCIAL SITUATION CALLED FOR NEW MANAGEMENT ACCOUNTING SYSTEMS

"In hindsight, one could say that the investments were a bit too aggressive, and we ended up in a situation where we quickly consumed capital and simultaneously the competition in the cash flow generating activities increased." (LTF Project Manager)

In the early twenty-first century, Atlantis had a very strong financial position which made it possible for the group to finance all their investment with internally generated funds. In 2010, they created a new business plan that extends until 2015 and has "Profitable Growth" as its focus, i.e. Atlantis wanted to grow and invest after a period of consolidation (LTF Project Manager). As a result of the more aggressive business plan, the company suddenly had a more stressed financial position, and it became much more important to have more long-term planning in terms of profitability and cash flow (LTF Project Manager).

At the end of 2012, the board of Atlantis decided that the risk profile of the company had to be lowered by reducing the company's leverage from an already low level (CFO of Beta Nordic). The "order" that came from the board gave the Group CFO and Group Controlling a target of how much Operating Net Financial Assets and Liabilities (ONFAL) they could have on their balance sheet. Because Atlantis is a decentralised organisation, SET and Group Controlling had to come up with a measure that could be distributed to the BUs. ONFAL is, according to Group Controller 4, not an appropriate measure for governing the BUs as it is difficult to understand and communicate. Instead, SET decided to use the measure Capital Employed³ and to distribute a limit for each BU at the beginning of January 2013.

Subsequently, the Group CEO believed that the budget and forecasting process used by Atlantis was not useful as a base for making long-term assessments (Divisional CFO of Alpha Sweden). It was a blunt tool for decision making as you had to guess too much (LTF Project Manager Assistant). To begin with, the forecasting horizon was too short as the budget for the upcoming year was finalised between Q3 and Q4; consequently you sometimes only had a budget and forecast horizon of two months. Furthermore, the budgets and forecasts were too inaccurate to use as capital planning tools because Atlantis has had a long tradition of conservatism which is reflected in the budgeting (Group Controller 4). They have, consistently, budgeted 20-30% below the actual results because "the worst thing you can do, according to the culture and tradition within Atlantis, is to not reach your budget" (LTF Project Manager). As a result of these circumstances, SET decided to create and implement the new budget and forecast process "Long Term Forecast" (LTF). The LTF had two main objectives: 1) to extend the forecasting horizon in order to obtain a more long-term view of the operations, and 2) to improve the quality of the reports, i.e. increase transparency in how the individual BUs come up with the figures and what they actually mean (Group Controller 3).

The two initiatives are interconnected even though they have been implemented separately according to the CFO of Beta Nordic. SET needs the LTF in order to know how Atlantis is performing and thus be able to allocate limits on Capital Employed appropriately. Below, we first describe the implementation of Capital Employed and then we continue with a description of the implementation of the LTF. Figure 4 provides a chronological overview of the implementation process of Capital Employed and the LTF.

³ Calculated as: Total Assets – (Cash + Tax receivables + Account payables)

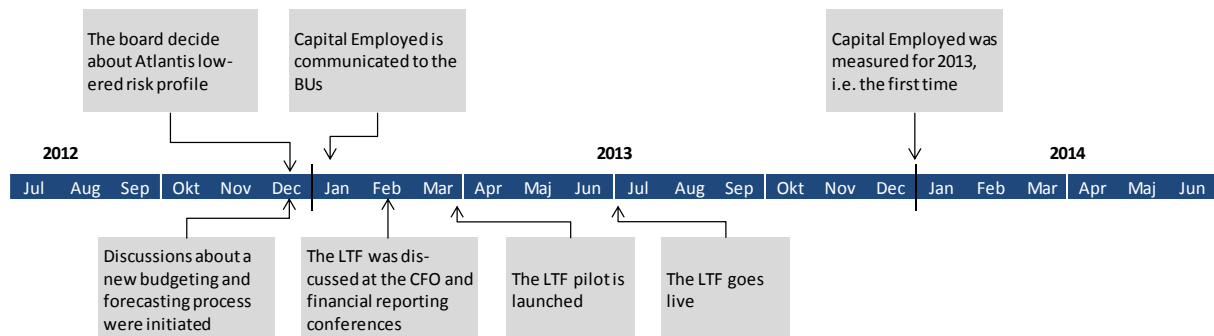


Figure 4 - Timeline

5.3 MANAGING SCARCE RESOURCES - THE INTRODUCTION OF CAPITAL EMPLOYED

“Introducing a limit on Capital Employed creates awareness within the organisation that capital is a scarce resource and the fact that capital has a price.” (Group Controller 3)

According to all the interviewees, the underlying reason for introducing a limit on Capital Employed was that capital had become a scarce resource. Historically, Atlantis has had a strong cash position, and the BUs could accumulate assets on their balance sheets and still show strong results (Group Controller 3). “Those days are gone; now we have to allocate the money where we can get the highest return” he later adds. The CFO of Beta Europe describes the situation as “a battle for the money” as Atlantis has a limited ability to invest and that you have to compete with others BUs for the funds. Group Controller 3 also points out that they have to be capital efficient in Alpha so that they can make the necessary investments in Beta. Alpha is to a large degree the cash generating unit within Atlantis; they normally have a negative level of Capital Employed because of the clients often finances the projects up-front (Controller of Alpha Norway). Alpha, with their negative Capital Employed, finances the investments made by Beta as they do not generate cash on an ongoing basis or have clients who finance the projects up front. An important part of Atlantis’ strategy is to leverage this financial synergy which basically means that the free cash flow from Alpha is reinvested in Beta.

“They need to have their balance sheet under control; they cannot do all their planned acquisitions of land. Timing is crucial.” (Group Controller 3)

Using Capital Employed is an excellent way to trim the balance sheet according to Group Controller 3. He says that the BUs now have to examine what assets they actually need to conduct their business. “In the end, Capital Employed is about eliminating assets from the balance sheet that does not create any value” (Group Controller 1). Prior to the implementation of Capital Employed, EBIT was used as the main return measure and the Balance Sheet was not in focus (Group Controller 3). The increased focus on the balance sheet, brought by Capital Employed, has shifted the discussion towards how much capital is needed to generate a certain level of EBIT. It is after all not the first time that Atlantis has a restriction on Capital Employed. A similar financial ratio was used during the first half of the 2000s. The LTF Project Manager points out that the previous introduction of a Capital Employed limit had an enormous effect by saying “Several billion disappeared from the balance sheet and the cash balance was strengthened.”

“To really get an effect within Atlantis, one must make sure that it affects the bonus.” (LTF Project Manager)

The Head of Group Controlling emphasises that Capital Employed is a less complicated initiative than the LTF. Each BU received a limit on how much Capital Employed they could carry on their balance sheet. This “cap” is based on the LTF that each BU delivers to Group Controlling (Group Controller 3). After

receiving the limit, each unit had to make sure that they were on the correct side of the limit. If the closing balance of Capital Employed exceeds the set limit, then BU management put their entire bonus at risk (LTF Project Manager). The BU managers have received the information that they will not receive any bonus at all unless the Capital Employed target is fulfilled. Even though the limit is fixed for the year, the BUs still have the possibility to discuss the limit and get it adjusted according to the CFO of Alpha Sweden. Group Controller 3 highlights that even though they have a set limit on how much capital they can carry, it should not hamper them from accepting good business opportunities and therefore adjustments can be made if they have a good investment case. He also adds that determining the limits of Capital Employed for each BU is a balancing act.

All interviewees agree that the implementation of Capital Employed took place overnight, without any heads-up, at the beginning of 2013. Although managers had observed an increased focus by HQ on Capital Employed, they were not aware that a limit was to be imposed (CFO of Beta Nordic). The implementation was done much more drastically than with the LTF (LTF Project Manager). Also, the implementation of Capital Employed could be seen as a direct order from SET according to Group Controller 4. The CFO of Beta Nordic, who held the position as Head of Group Controlling when Capital Employed was implemented, says that they intentionally implemented the initiative in this way as speed was crucial.

The CFO of Alpha Sweden says that they only got a message with their limit and the instruction that no bonus would be paid out if they broke that limit. There were no further discussions about implications for the BUs (Group Controller 3). Managers in each BU were then responsible for informing the rest of the BU about the increased focus on Capital Employed and the actions needed to be taken. However, this had to be done without any support from the HQ (CFO of Beta Europe). Only after the implementation of Capital Employed were the underlying reasons for the implementation, i.e. that resources are not unlimited, discussed with the BUs. Group Controller 4 notes that this is something that maybe should have been done earlier.

5.3.1 A SUCCESSFUL INITIATIVE – THE VIEW OF HQ

The introduction of a limit on Capital Employed came initially as a shock for the BUs according to Group Controllers 3 and 4. It came as a brutal awakening for most BUs and the initial reactions were mostly negative. The BUs feared that they would no longer be able to reach their targets, carry out their planned investments and they felt that the limits were too strict (Group Controller 3). The negative reactions, however, did not come as a surprise as the limit put pressure on the BUs to reduce the size of their balance sheets and it significantly affected their bonus (Group Controller 3). The LTF Project Manager points out that many started to question the financial position of Atlantis and asked if the company was in a financial distress when, in fact, Atlantis implemented Capital Employed to become even stronger. The LTF Project Manager also explained that they actively tried to limit these reactions with extensive communication as they did not want to lose key personnel to the competitors.

“The balance sheet has never been discussed this much.” (Group Controller 1)

There is now an increased focus on delivering return to the shareholders and through the implementation of Capital Employed, the balance sheet has gotten a lot of attention according to Group Controller 1. The CFO of Beta Nordic supports this statement by explaining that Capital Employed has given them a reason to look into their balance sheet and she believes that they have eliminated a lot of assets that would not have been removed otherwise. It has been an awakening for some BUs when they now realise, for example, that they need to be more effective in dealing with accounts receivable and accounts payable according to Group Controller 3. He adds that he believes that also people further down in the organisation have started to think in terms capital efficiency.

The CFO of Beta Nordic believes that the effect is sustainable as long as the KPI Capital Employed exists in the organisation and the BUs are measured on it. When the former version of Capital Employed was replaced by a KPI that focused on Working Capital, assets started to accumulate on the balance sheet again (CFO of Beta Nordic). “What gets measured gets done within Atlantis,” says the CFO of Beta Nordic. Group Controller 3 presents the Czech Republic as a good example. Historically, capital had been a non-issue in the Czech Republic and consequently, the country had almost no attention to capital management. With the introduction of Capital Employed, however, it became an issue according to Group Controller 3. For example, the average number of outstanding days of accounts receivable decreased from 180 to 90 days.

5.3.2 A MANAGERIAL ISSUE – THE VIEW OF ALPHA

The implementation of Capital Employed in Alpha has not been as urgent as in Beta; much because of the difference in capital usage between the two business areas. As mentioned above, Alpha is the cash generating unit where a lot of the projects are financed by the clients up front. This means that Alpha receives more cash than they consume in the projects and as a result, generally have negative level of Capital Employed. Group Controller 3 points out that is difficult to find a balance for the Alpha units: “It is good with negative Capital Employed, the question is how much negative it should be?” The controller of Alpha Norway says that if you take it too far, you might end up with “code of conduct issues” as people stop to pay the suppliers.

The Divisional CFO of Alpha Sweden says that he has not been affected by the limit on Capital Employed. He says that Capital Employed is an issue for the managers higher up in the organisation, i.e. the BU managers. Other interviewees within Alpha confirm this and say that Capital Employed has not been distributed to the BUs; instead they use other controls with the intention to raise awareness around capital efficiency. In Poland, for example, they prefer tools that are easier for the operating managers to understand and therefore they measure, among others things, managers on how much working capital they are using. The CFO of Alpha Poland emphasises the need to use an easy language that everyone understands and therefore he explained to the projects managers how to do it by saying “You collect all the money from the client now, but you do not pay anyone.” Project managers understood that.

The controller of Alpha Poland explains that they have been working with working capital for a long time; they first introduced the KPI when Atlantis Value Added (AVA), the old Capital Employed measurement, was implemented and they have not changed it since. It works well because working capital is the largest part of Capital Employed. She further highlights that Capital Employed has not had any effect on how the project managers are thinking about and working with capital. However, BUs that did not have a focus on capital efficiency from before highlights that they have seen positive effects from the introduction of the KPI. The CFO of Alpha Norway says that they have increased their focus and priority on capital management. “There has been a positive change out in the projects; they focus more on favourable payment schedules in early stages and think more about how they handle their cash.” The introduction of Capital Employed has improved how they handle cash according to the CFO of Alpha Norway.

The CFO of Alpha Sweden says that they did not have any strong opinion about Capital Employed. “It is good that the group work with their capital allocation and that the BUs now know how much money they can use in their business” he adds. However, if the control becomes too strict, they will have to use a buffer and then, all the capital is not used efficiently as potentially profitable projects will be turned down. This is a risk with the introduction of Capital Employed. He also adds that they will not put themselves in a situation where they risk their bonus; they will use a buffer that ensure that they are on the right side of the limit even though it means sub-optimal usage of the capital. The CFO of Alpha Norway also adds that there is a risk that the BUs manipulates their forecasts in order to get a higher Capital Employed limit as the two initiatives are strongly interconnected.

5.3.3 INCREASED COMPETITION FOR CAPITAL – THE VIEW OF BETA

In the same manner as in Alpha, the CFO of Beta Europe says that he has not distributed any limits on Capital Employed to the divisions within the BU. He does not want to limit the managers in the divisions; instead he wants them to think without restrictions and be aggressive in their investments. “It is the responsibility of the BU CFO and Business Unit President (BUP) to ensure that the aggregated Capital Employed will not exceed the limit” (Divisional CFO 1 of Beta Europe). However, the divisions are aware of that there is a limit for the whole BU. Instead of making the divisions responsible, BU management monitors the use of capital within Beta Europe and make decisions about individual projects when a division seeks funding for a new project. This is possible within the business area Beta as they have few but large projects.

Instead of having an explicit limit on Capital Employed in each division, they are governed by the KPI Return on Capital Employed (ROCE)⁴. However, the ROCE-target is not new to the organisation. They have been governed this KPI for a long time (Divisional CFO 2 of Beta Nordic). This puts pressure on the organisation to increase EBIT, decrease Capital Employed or do a combination of both. The BUs have an explicit target from Atlantis of delivering a ROCE of 12 % over a two year time span (Divisional CEO 2 of Beta Nordic). A shared view among divisional managers is that the ROCE target is too high and not calibrated for the prevailing market situation. Both Divisional CFO 2 of Beta Europe and Divisional CFO 2 of Beta Nordic compare the 2% yield received at a savings account with the ROCE target of 12% and argue that the target is set too high. Additionally, they seek a more flexible target that varies with the life cycle of the economy. Almost all the interviewees within Beta highlight that a too high target can result in divestment of land that was initially not intended for sale or hesitance to acquire new land needed for taking on new investments in the future.

The increased focus on Capital Employed and ROCE has resulted in a greater focus on the balance sheet and the discussions are more focused on capital management (CFO of Beta Europe). The limit on Capital Employed signals to the divisions that capital is a scarce resource and that all projects cannot receive funding. Only the most profitable projects will receive funding, which has led to a “beauty contest” between the divisions (Divisional CEO 1 of Beta Nordic). This has increased the pressure on the divisions to find highly profitable projects (Divisional CFO 1 of Beta Europe). The Divisional CEO 1 of Beta Nordic explains that the ROCE-target has led to a thorough scrutiny of their balance sheet and they have therefore divested land that they know will not lead to any profitable future investments.

Even though the limit on Capital Employed is good for the organisation, the CFO of Beta Europe criticises the design of Capital Employed. It is a problem that they are measured on the closing balance of Capital Employed at the year end. It should be more flexible as it is now crucial to close a deal before the end of the year even though it would be better for Atlantis to make another agreement later. The CFO of Beta Europe suggests that they should measure average Capital Employed over two years instead. Group Controller 4 agrees with this as the fact that Capital Employed is measured at one given moment is in conflict with the aim of the LTF to become more long-term oriented.

5.4 BETTER BUSINESS PLANNING WITH LONG TERM FORECASTING

With the LTF, the Group CFO wanted to extend the forecasting horizon, improve the quality of the forecasts and to be able use the forecast as a basis for constructive discussions around the future of the company. The Group CFO initiated the project as Atlantis had poor predictability and the fluctuations in the results had become bigger because of the increased investments (Controller of Alpha Norway). One of the main functions of the headquarters is to allocate and distribute capital and in order to be able to do this, the ability to match cash in- and outflows are essential. The LTF was needed in order to be able to do

⁴ ROCE = EBIT/Capital Employed

this capital planning so that they could leverage their financial synergies. Many of the interviewees, mainly from the BUs, highlight that the Group CEO and CFO also wanted better figures that they could communicate to the stock exchange. In short, Atlantis wanted to achieve two things with the implementation of the LTF: 1) to obtain a more long-term view of the operations, and 2) to achieve a change in mentality and in this way get a greater transparency from the various BUs. How they wanted to achieve these two objectives will be described below before we describe how the LTF was implemented in Atlantis.

With the old budget and forecast, Atlantis forecasting horizon was limited to the current financial year but with the introduction of the LTF, Atlantis is able to look beyond year end. This is important for Atlantis as they have several thousands of projects that stretch across the year end. In order to be able to plan their capital need better and to be able to set limits on Capital Employed, the LTF was designed and introduced. The first objective of the LTF was therefore to extend the forecasting horizon and obtain a more long-term view of the operations. Before the LTF was introduced, the BUs were required to prepare both a budget and a forecast. The budget was first prepared somewhere in-between the third and fourth quarter. It was later revised at the end of January, primarily with updated figures from the annual financial statements. The revised version of the budget fixed for the whole year. In addition to the budget, the BUs prepared a three quarter forecast at the end of the first quarter for the rest of the year. The forecast was later revised at the end of the following two quarters. Figure 5 below, illustrates the old budgeting and forecasting process.

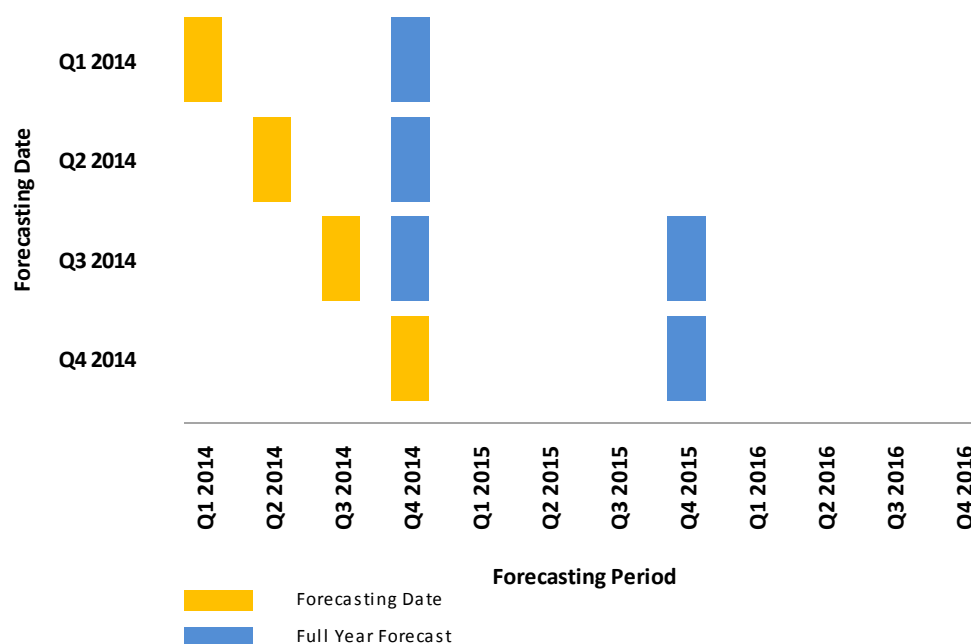


Figure 5 - Description of the previous budgeting process

The LTF, on the other hand, is prepared at the end of each quarter and includes a detailed forecast with full P&L, balance sheet and cash flow statement for each quarter for the coming 12 months and a less detailed forecast for the following full year after that. The first four quarters are more detailed because the BUs know to a greater extent which projects they will have the coming year. The second part of the forecast is more macro oriented as it is difficult to forecast projects which have not been ordered, the BUs are therefore focusing more on how external market drivers will affect the business. The length of the forecast varies between six and nine quarters, depending on which quarter they are doing the forecast. The BUs have to report the LTF at the end of each quarter, the same date as for all the other financial reports that have to be reported. Figure 6 below, illustrates the rolling forecast scheme.

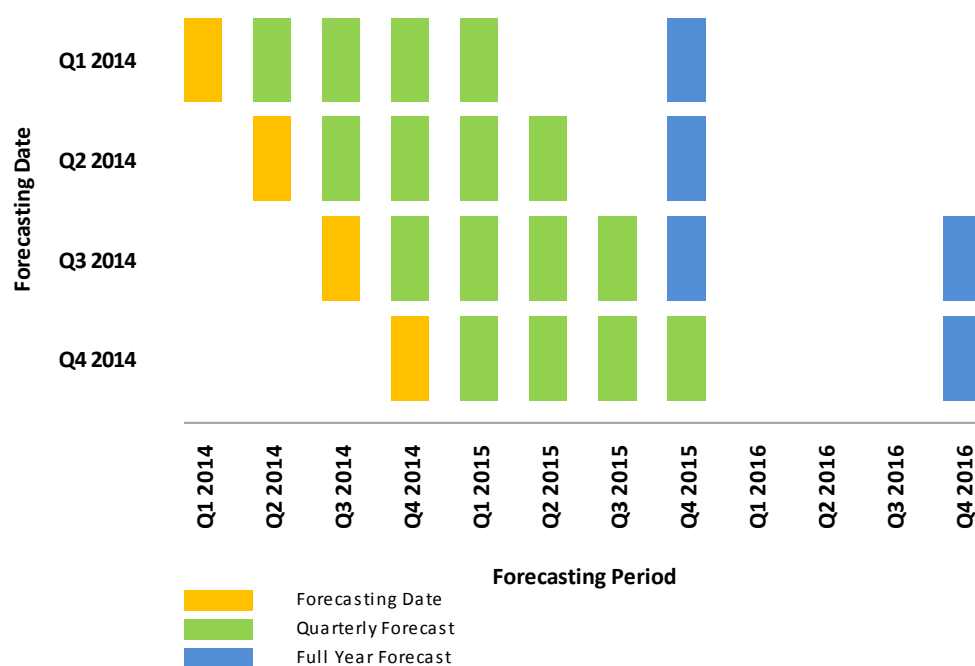


Figure 6 - Description of the LTF process

“All BUs can come up with a two year forecast by making more or less qualified assumptions. The challenges lie in getting quality in these assumptions and to convert these assumptions into financial numbers” (Group Controller 3)

The second objective of the LTF is to improve the quality of the reports, i.e. increase transparency on how the individual BUs come up with the figures and what they actually mean (Group Controller 3). There is a deep-rooted tradition within Atlantis to prepare conservative budgets. Over the past years, the BUs have consistently budgeted 20-30% below the actual results which makes it problematic to forecast the group’s funding need (CFO of Alpha Sweden). Because of this conservatism, most of the profits are realised at the end of each project when the certainty of the outcome is high. Managing the organisation becomes very difficult when budgets and forecasts are not reliable estimates of the future (Group Controller 4). When the budgets and forecasts are not reliable, it is difficult to plan their capital need and leverage their financial synergies. As a consequence, the group might have had to borrow more money than they in the end needed and, simultaneously, the Beta units might have to say no to profitable projects as they do not know what their investment capacity is (LTF Project Manager Assistant; CFO of Beta Nordic).

With the introduction of the LTF, HQ hopes to get a better discussion of how the business and the market are evolving. Furthermore, management hopes to be involved in managing the business further out in the organisation. The project has expanded over time and has now become much more than just reporting numbers on a longer time-horizon, it now also includes a cultural change (LTF Project Manager). With the introduction of the LTF, the HQ requires the BUs to be less conservative in their estimates and an important element of this change process is the introduction of the Bell Curve-concept which requires the BUs to report a forecast based on their “Most Likely” scenario. With this new type of reporting, described below, the HQ of Atlantis aims at eliminating conservatism in the organisation along with providing the HQ with a better understanding of which risks and opportunities are embedded in the BUs. The HQ wants the project managers to become more transparent in what risks and opportunities they have in their projects. Because they have the best knowledge of these aspects, it is important that the forecast come their level and in an ideal world the HQ should be able to just sum up the different forecasts in order to get an accurate forecast for the whole organisation. The BUs are after the

implementation of the LTF required to report according to the Bell Curve-concept which means that they have to provide three different scenarios; best case, worst case and Most Likely. Where Most Likely is at the centre of the bell curve and represents what the BU believe is their most likely outcome. Worst and best case scenario are at the opposite ends of the bell curve and indicate the BUs expected inherent risks and opportunities in their projects. In addition to the three scenarios, the BUs have to report an adjusted most likely scenario termed as the “Reported”-scenario. The “Reported”-scenario is adjusted to comply with the IFRS accounting standards. For example, future claims that have not been settled with any counterpart cannot be included in the “reported” scenario.. Figure 7 illustrates the above explained concept.

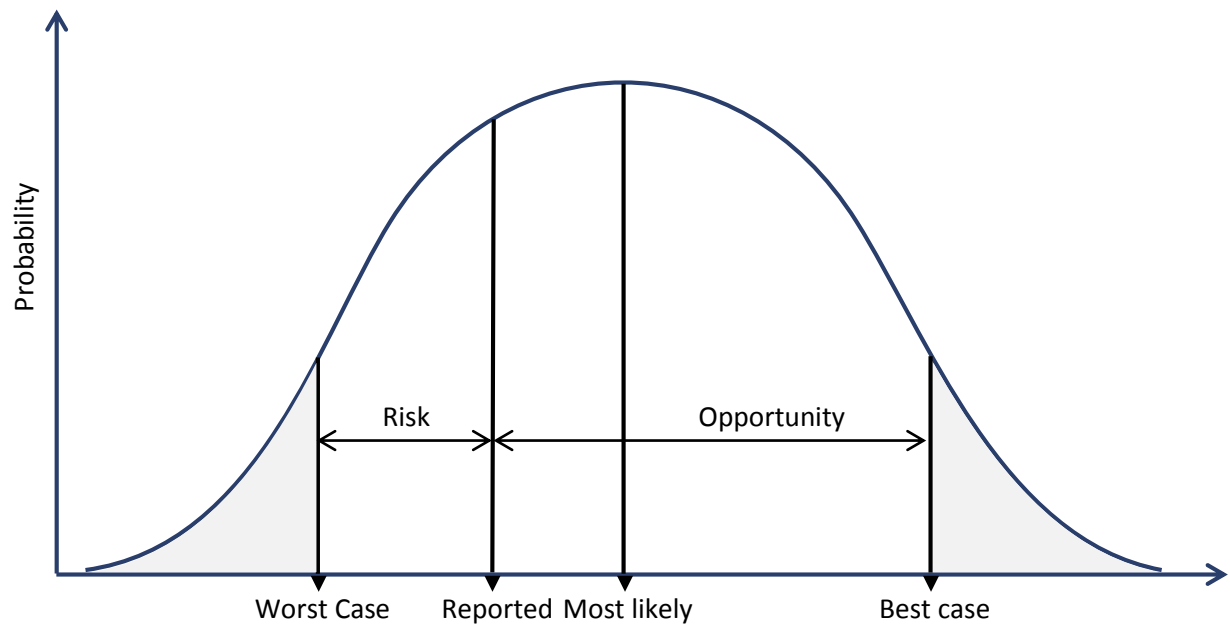


Figure 7 - The Bell Curve-concept

The discussions about a new system for budgeting were initiated in December 2012. It was important for both SET and Group Controlling to get started immediately with the implementation (Head of Group Controlling; LTF Project Manager). They hoped for an immediate effect that could break the trend with conservatism in the budgets. Although, they knew that the implementation would take several years before full effect could be achieved. As the Divisional CFO of Alpha Sweden expresses it, “the project will not be fully implemented until the end of 2016.” The design process started with the appointment of a project group that was supposed to ensure that the right priorities were made and that all the challenges of the implementation were predicted (LTF Project Manager). The group consisted of members from SET together with Controllers and Managers from four different BUs within business area Alpha. The initial project group included mainly people from the finance organisation and the focus of the work was almost exclusively on the technical details of the reporting processes. Even though not all BUs had a direct representation, people from the project group established connections with the BUs without representation in the group.

One risk that the project group anticipated was the extra work that the LTF could cause. Consequently, some of the existing routines were eliminated. The group decided that the BUs no longer had to report the forecast labelled as “F0” which was prepared at the end of January covering the rest of the year. Additionally, the scope of the LTF was reviewed and downsized. At first, SET and Group Controlling required eight quarters of forecasting but the project group found that it would require massive adjustments of the reporting systems and a lot of manual labour (LTF Project Manager). Instead, they

agreed on a shorter forecasting period and less detailed report in the later quarters. According to the LTF Project Manager, these adjustments would more or less offset the extra work caused by the LTF.

The implementation of the LTF was initiated in the spring of 2013 when the initiative was discussed during two conferences: one with the CFO-group and one with the financial reporting group. To emphasise the need for more transparency, the Group CFO used the slide “LTF First generation, breaking a tradition” in his presentation. The pilot of the LTF was launched in Q2 2013 and the BU had to produce the LTF at the same time as the regular reports. After receiving feedback from the pilot group, HQ decided that the LTF would go live in Q3 2013 and the decision to implement LTF was taken solely by SET. After the Business Units Presidents (BUP) had been informed about the LTF going live, each BUP was responsible for implementing the new process of forecasting in his or her organisation. SET and Group Controlling did not communicate with the organisation below BUPs and a lot of the responsibility was located to the BU management groups. The CFO of Alpha Sweden explains that he had to communicate with the divisional managers about the purpose, what had to be done and the process going forward. It was then the responsibility of the divisional managers to inform the regional managers, who in turn had to inform the project managers. Because it is the project managers that prepare the forecasts as they have the most knowledge about the projects and the market, it is important to give these managers the right information. The forecasts are then reported upwards, through the same chain of managers, to the central BU finance department where they are consolidated. The consolidation is done manually as the organisation lack systems that adequately can handle the process (CFO of Alpha Sweden).

“In hindsight you can say that it was not perfect, in Q3 there was a lot of things that did not work.” (LTF Project Manager)

According to the LTF Project Manager, the BUs did not get that much support initially as the focus was on the technical side of the reporting. Furthermore, there were a lot of technical details that did not work. Additionally, the BUs had a lot of theoretical questions about how to conduct the forecast. To respond to these questions, the LTF Project Manager and Group Controlling sent out different instructions and examples. One reflection from the LTF Project Manager was that they had underestimated the need for communication in the initial implementation phase.

5.4.1 THE IMPLEMENTATION GOING FORWARD – THE VIEW OF HQ

“The large part of the implementation is still ahead of us” (Head of Group Controlling)

The Head of Group Controlling explains that they have a long way to go before they can be confident that they have a sufficient number of people who have enough understanding of the concept. However, management has already been able to observe an effect from the implementation of the LTF, i.e. a break in the tradition. The forecast was actually higher than the result which is unusual as the budgets are usually 20-30% lower than the result (LTF Project Manager). However, they have noted that the knowledge about the LTF is not secured in the operating units. They also suspect that the forecast is not always prepared by the project managers, i.e. bottom-up. Instead, it is the BU managers that do the adjustments. The Head of Group Controlling highlights that the knowledge about the LTF have to reach the people in the operating units and in order to achieve this effect, they have to describe the initiative more. He also point out that they have not achieved this effect yet and therefore have to take measures going forward in order to achieve this change in the mindset of the people in the organisation.

“It is one thing what you are discussing on the top management level but the initiative must penetrate the organisation and reach those who are running the projects.” (LTF Project Manager)

The LTF Project Manager describes the agenda going forward when he explains that the attention of the project will change from being focused on reporting infrastructure to achieve an impact and a general understanding of what is being reported. The first the step in the process of achieving the cultural change is to create a new project group with representatives from the actual operations. The former project group consisted only of representatives from the finance departments and consequently the focus was on the infrastructure for the reporting-process. "It is essential that the project group includes influential representatives from the operating units if we are to achieve the impact we want" (LTF Project Manager). Group Controller 4 emphasise that it is important to include members with a non-financial background in order to gain acceptance from the whole organisation. Furthermore, the LTF Project Manager points out that the new terminology has to be defined and explained more in detail. When all that is done, new information material can be created and used in different settings. The new information material for the LTF is planned to be completed in June and at the same time they plan to have performed some of the planned workshops. "Workshops are going to be held in order to ensure that the whole organisation understands the new way of budgeting, and this have to be monitored on a quarterly basis" (LTF Project Manager). You have to reach the managers who are responsible for the projects because they are also responsible for the forecasts and budgets of the projects (LTF Project Manager).

One reason why much of the preparatory work still remain is the approach SET and Group Controlling has to these change initiatives. As Group Controller 1 expresses it, "We are doing it quickly, and we deal with the consequences later." She further explains that there is an engineering mentality in the organisation and people are problem solvers. Head of Group Controlling gives his view of their approach by saying "we cannot discuss the issues endlessly; we do not have time for it; there must be some action." It was an active choice not to do a thorough investigation and evaluation before the implementation according to the Head of Group Controlling. By using this first part of the implementation as a "test period," he argues that they get a chance to re-evaluate based on the feedback they receive. An opportunity they would not have if they would have finalised the concept and the implementation completely he later adds. However, at the same time, he adds that in order for the change process to be successful, you have to have very clear definitions and descriptions that are almost mathematical in its character.

5.4.2 QUESTIONS ABOUT THE EXPECTATIONS – THE VIEW OF ALPHA

All the interviewees declare their support to the implementation of the LTF. The Head of Group Controlling was almost a little surprised about the positive attitude towards the LTF. The CFO of Alpha Sweden argues that it is good for all businesses to look further into the future and to have more transparency in the organisation. He also adds that everyone understands why the LTF is implemented and, therefore, reports as requested even though it means extra work. This attitude is not just true for Alpha but also for Beta where many people point out that they do want the LTF. The organisation is also used to change, and the reporting package is constantly changing according to the CFO of Alpha Sweden. The CFO of Beta Nordic emphasise this by saying "If you do not feel comfortable with change, you should not work at Atlantis." Therefore, the organisation was not worried about the change in itself.

Although most people have been positive to the change, the implementation has not been entirely unproblematic. The introduction of the LTF in the business area Alpha affected existing routines and practices to a greater extent than in Beta. The BUs within Alpha, in contrast to Beta, have hundreds or even thousands of projects with short durations (Group Controller 3). Preparing a forecast for the second year is not a simple task as the BUs within Alpha normally only have 5-10% of the second year orders confirmed when the forecast is prepared (Divisional CFO of Alpha Sweden). The CFO of Alpha Norway highlight that the last quarters of the forecast is more based on management assessments of what is going on in the market than on projects in their backlog. Thus, project and regional managers need to have a good business sense and knowledge of the market. "The more you forecast into the future, the more you

describe hopes and dreams rather than facts” (CFO of Alpha Sweden). Beta has better prerequisites for making accurate forecasts further into the future than Alpha as they have larger projects with longer durations.

As mentioned in the background, Atlantis has a long tradition of conservatism. The CFO of Alpha Poland points out when the Polish organisation was acquired over ten years ago, Atlantis taught the new organisation to be conservative and to put all the risk into the forecast. “It is better with a positive surprise than a negative one.” Conservatism affects more than just the forecasts and budgets; the BUs also sandbags⁵ profits in the projects. The CFO of Alpha Poland describes the situation with conservatism in the quote below.

“Let’s say that we budget 5 in profits in a year, then they [HQ] expect us to reach 10 and if we do they pay us some money. [...] and then in year one, you produce 12 in profit in the project when you are expected to only deliver 10. Then you take a clever accountant like myself and takes this piece [2] and put it somewhere. So what Atlantis get is only 10. [...] We can do this, it is easy. Because of the nature of the project, we can say that it is a large risk in this project and hide the money [as provisions] for something else.” (CFO of Alpha Poland)

The Controller of Alpha Norway confirms that this type of behaviour takes place in other parts of the organisation as well. He says that there is an underlying tendency and incentive to only report what they have to report in order to reach the bonus targets and the excess profits stays as hidden reserves in the projects, i.e. they sandbag.

“To get at a company that has been reporting conservatively for 120 years to now report Most Likely is not done in a quarter. [...] In order to achieve this you need clear definitions and good leadership” (Controller of Alpha Norway)

As the second objective with the LTF is to increase transparency in the organisation, the implementation of the LTF aims at eliminating conservatism in the organisation by reporting Most Likely. The Controller of Alpha Norway describes the implementation of the Bell Curve-concept as a “cultural journey.” He argues that the concept in itself is not complex; it is the cultural change that is difficult to accomplish. It is difficult to get everyone in the organisation to think and report in the same way.

“You believe that what you say and send out is crystal clear and that everyone will understand.” (LTF Project Manager)

Several interviewees believe that it was good that HQ did not control how the LTF was implemented in each BU. For example, the CFO of Alpha Norway points out that the instructions should not be too detailed as each BU is unique, and each BU ought to come up with their own strategy on how to incorporate the LTF into their business. Nevertheless, he emphasises that the HQ could have been more detailed regarding the methodology and how to use the Bell Curve-concept. This is also true for Beta. All interviewees in Beta agree that the report per se is not complicated but that the instructions for how to prepare the LTF were inadequate. Atlantis did not clearly state what they expected of the BUs and no support was provided by the HQ on how to integrate the LTF into the business. LTF is a top down initiative which should imply that instructions, frameworks, coordination and guidance shall be provided by the headquarters (Divisional CFO 2 of Beta Europe; Reporting Manager of Beta Europe). The Divisional CFO 2 of Beta Europe points out that, in addition to weak instruction, they received excel-files with errors that they had to fix.

⁵ Sandbagging implies that the BU hides profits in one project and transfer them to other projects and therefore can they control their profits over time

Especially, the “Reported”-scenario in the Bell Curve-concept has created a lot of confusion. As previously described, the “Reported”-scenario should be a little bit less than Most Likely due to compliance to IFRS. The Controller of Alpha Norway believes that they do not alienate themselves enough from the culture they want to leave behind by using the “Reported”-scenario. According to the CFO of Alpha Poland, people understand what Most Likely is but it is difficult for them to understand what *almost* Most Likely is. The question that the CFO of Alpha Poland asks himself is “how much conservatism should the ‘Reported’-scenario include?” “I cannot get a clear view of what this [the Reported-figure] is. Either you want me to report Most Likely and in that case I will work towards that or you want me to be conservative” (CFO of Alpha Poland). Furthermore, he argues that it would have been much easier to implement the LTF if SET said that they only should report Most Likely (in addition to worst and best case scenarios); “Then Most Likely would have become “the thing” as EBIT is right now.” This view is supported by the Controller of Alpha Norway who argues that their implementation of the Bell Curve-concept has been affected by the fact that you also have to submit the “Reported”-scenario. He points out that the BU who has been the most successful with the implementation do not use the “Reported”-scenario on project level, instead the operating unit adjust the Most Likely scenario and in this way get the “Reported”-scenario. This figure is submitted to the BU who then reports the aggregated numbers to HQ. He also argues that as long as HQ have not specified what should be included in the “Reported”-scenario, people will include an extra “buffer” and therefore the conservatism will still be present. The CFO of Alpha Sweden stresses the importance of having a common definition of the terminology. However, he also highlights that it does not exist any group within Atlantis that agrees on a terminology. The new project group plays an important role in the work with the terminology.

“If you wipe-out bonuses from the picture, then you can probably get Most Likely. But if you factor in something else, like bonus, then you have a problem because then people react to the bonus. Then you start positioning yourselves.” (CFO of Alpha Poland)

Managers within Alpha have a shared understanding that bonuses have at least, if not being the reason for it, contributed to the conservatism that exists within the organisation. The Divisional CFO of Alpha Sweden explains that bonuses make up for 30-50% of the total remuneration that a project manager receives. He further argues “the link between remuneration and budget can incentivise project managers to set up conservative budgets so that the actual outcomes, under no circumstances, underperform the budget.” This might be the reason why the Polish organisation has outperformed their forecast for ten years straight according to the controller of Alpha Norway. The CFO of Alpha Poland acknowledges this by saying “Why am I conservative? Because you put a target on me, I am trying to look good and therefore I am trying to outsmart you.” He also says that “Getting rid of the bonuses schemes are probably the best way of achieving Most Likely, then it would be very easy.” According to the CFO of Alpha Sweden, you do not have to eliminate bonuses but you have to separate the forecasts from the bonus targets. “Management needs to show that the budget will not affect the level of the bonus targets” (CFO of Alpha Sweden). The LTF Project Manager emphasises that the preparers of the budgets need to feel secure in order to be able to provide a transparent and honest forecast. Because when you budget more aggressively, the risk of not reaching the budgeted level increases.

However, the different BUs do not feel that SET and Group Controlling has addressed this issue. The CFO of Alpha Poland feels that he gets punished for reporting according to Most Likely. According to the CFO of Alpha Poland, when they reported what they believed were their Most Likely outcome, they received a higher target from HQ than they had reported. This means that HQ still acted in the same way as before when people were conservative. The CFO of Alpha Poland says that he has lost trust in the HQ after being mistreated in the target setting. He expects that this behaviour will have two effects on the organisation: 1) it sends a message to the BUs that HQ does not trust their Most Likely scenario, and 2) it could result in a situation where BUs increase their conservatism in order to reach lower, more feasible,

targets. Furthermore, he explains that it is important that SET understands how to approach the target setting.

In addition to the issue with target setting, everyone expresses a concern of unclear expectation in the case of not reaching the forecast and targets. As reporting accordingly to the LTF statistically implies that the organisation should outperform and underperform the forecast the same number of times, BUs will underperform forecasts and targets to a much greater extent than before. It is important to show that the BUs will not get punished for not reaching their forecasts as these should reflect what they believe will happen and not what they promise will happen (Divisional CFO of Alpha Sweden). Historically, this has not been the case as “project managers are accustomed to being rewarded if they outperform the budget, but if they underperform, disproportionate attention is devoted towards them” (Divisional CFO of Alpha Sweden). Furthermore, “we are afraid to deliver a lower report as we do not know how top management of Atlantis will react” (Reporting Manager of Alpha Poland; Controller of Alpha Poland). The CFO of Alpha Poland requests a clear approach for SET that states how they should react if a BU delivers a figure below Most Likely.

“If not even SET agrees on a terminology within the group, the BUs will not agree either.” (CFO of Alpha Sweden)

Clear expectations go hand-in-hand with good leadership; something which many of the interviewees highlight as essential for achieving the desired change in mindset of the organisation, i.e. achieving an organisational cultural change. The Controller of Alpha Norway emphasises that the implementation is a cultural journey in which leadership is of outmost importance. He points out “SET must come to a common understanding about what Most Likely means, that they actually want the LTF and that the concept is important for Atlantis.” He also points out that everyone in SET have to believe in the LTF and communicate the same message; this project will never succeed as long as they are not in agreement. The project managers must believe that it is important to be more transparent; otherwise project managers will continue to prepare conservative budgets according to the Reporting Manager and the Controller of Alpha Poland. They present the BUP in Alpha Poland as a good example of leadership. He attends almost all forecasts meetings and talk about the concept. It signals the importance of the concept and, as a consequence, they have started to discuss risks and opportunities at the meetings which is something that they did not do before. The implementation of the LTF is a difficult task - the implementation must reach every level within the organisation. It is important to have clear definitions as the message has to go through four managerial levels before it reaches the project managers.

After the implementation of the LTF, the HQ receives forecasts that are more aggressive than before. This effect has been observed by the LTF Project Manager who points out that “the first forecast was higher than the result; this has almost never happen before.” However, this is not evidence for the implementation having the desired effect, i.e. that the project managers who prepare the forecast now report Most Likely. Instead, a lot of adjustments are done at the BU and operating-levels. The CFO of Alpha Poland explains that he reports what he believes to be Most Likely. However, the numbers are not coming from the project managers; instead he is doing adjustments based on his experience. “I told them about Most likely and I got the forecast from them, but it was conservative even though they told me it was Most likely” (CFO of Alpha Poland). A true Most Likely means that all the project managers report Most Likely.

“The ideal situation would be to add all the project managers’ pluses and minuses, and then we can say how much opportunity they have embedded in the total forecast and how they have come up with the body fat. However, I am not there with the organisation yet. It is not so easy to tell the organisation what they should do. In my opinion, if I would tell them without

this clear understanding of what their bonus targets will be, I will lose trust immediately in the same way as I lost trust in Sweden [HQ].” (CFO of Alpha Poland)

The Reporting Manager and the Controller of Alpha Poland shares this view and say that they have to adjustments to the numbers submitted by the project managers before they report to Sweden. Also, both of the Regional CFO 1 and 2 of Alpha Sweden says that they have to do adjustments to the numbers they receive from the district managers before they send the aggregated numbers to their manager. These adjustments were not something that they did before. The CFO of Poland says that he believes the real implementation of LTF will take place in 2016 so he plans to begin with this next year. He emphasises that he would love to have the Most Likely reporting, but first everything needs to be in place.

“The LTF is too aggregated; I have no use for it in the management of the districts. If they have to do a budget, the district managers will carefully think about how next year will look like. A district manager thinks almost exclusively on jobs and on acquiring new jobs, but a budget makes them reflect a little bit more on their business. They have to think through their business and to reflect over how much they can produce and how much staff they need. [...] They will better track their expenses with a budget.” (Regional CFO 1 of Alpha Sweden)

Even though budgets were supposed to be replaced by the LTF, the budgets are still present in several parts of the organisation. Consequently, in addition to not achieving “true Most Likely” in the organisation, the LTF have not been an appropriate tool for business planning. The Divisional CFO of Alpha Sweden explains that the old budget, in contrast to the LTF, was more detailed at the regional level and therefore could be used more for business planning. The regions only have to report a few figures⁶ and this is seen as too simplified by many regions. The Divisional CFO of Alpha Sweden explains that even though the budget is no longer requested by HQ, some regions in his division still use the budget for internal purposes. Regional CFO 2 of Alpha Sweden explains that they all agreed, in their region, that the budget was necessary so they prepared the budget in exactly the same way as before even though they did not report it. The budget is also prepared in Alpha Poland as it is used for setting the bonuses for the project managers (Controller of Alpha Poland). Regional CFO 1 of Alpha Sweden explains that they stopped preparing the budget, but she hopes that they will start doing it again and she also believes that they will start doing it again.

“A detailed forecast is not synonymous with an accurate forecast.” (Divisional CFO of Alpha Sweden)

While the LTF is seen as too simplified in the lower levels of the BUs, it is regarded as too detailed higher up in the organisation. The divisions and the BUs have to report a detailed LTF. The Divisional CFO of Alpha Sweden believed that HQ would request a simple and aggregated forecast; instead it is very detailed. The adjustments made by the Project Group were nowhere close to offsetting the level of workload imposed by the LTF he adds. He also believes that SET and Group Controlling has gone beyond the recommendation given by the project group in terms of level of detail in the LTF. He agrees with SET that it is better for everyone to have a longer forecast horizon with higher transparency, but he also believes that it would be satisfactory to only forecast turnover, investments, operating profit and maybe one more thing. “But now we have a forecast which requires full P&L, balance sheet and cash flow statement which is just nonsense because it is very uncertain, it only takes a lot of time for the finance department to prepare it” (CFO of Alpha Sweden).

“In the UK, it is not difficult to prepare the LTF as they only have 50 large projects, in Poland we have 1300 and therefore it becomes quite difficult.” (Reporting Manager of Alpha Poland)

⁶ Turnover, operating profit, expected investments, operating costs, orders received and backlog

How the organisation has adopted the LTF varies between the BUs depending on, for example, existing routines and the structure of the business. Even though the largest difference is between Alpha and Beta, we can see differences within Alpha as well. The units that already had similar routines in place had it much easier to adopt the LTF and to start reporting in the new way because they both had the mentality and the systems in place (CFO of Alpha Norway; Group Controller 4). Alpha Norway already had experience from working budgeting processes similar to the LTF according to the CFO of Alpha Norway. The implementation did not result in any major change as they had been using a 12 month rolling forecast for their internal reporting for the past ten years. They only added four quarters and made the financial statements a little bit more detailed. Additionally, when Alpha Norway was acquired by Atlantis in the 1990's, the HQ did not replace management in the acquired organisation as they had done when acquiring Alpha Poland. Instead, Alpha Norway could operate quite independently from the other organisation and therefore preserve its culture (CFO of Alpha Norway). This has made the transformation less disruptive for Alpha Norway compared to the other interviewed BUs because they were used to report more aggressively. However, the Controller of Alpha Norway highlights that they have not fulfilled the goal of transparency yet even though they are among the best BUs within Atlantis.

5.4.3 AN ALREADY PREPARED ORGANISATION – THE VIEW OF BETA

“The only difference [prior to the implementation] is that now they need to submit their internal forecast to the HQ.” (CFO of Beta Nordic)

As highlighted earlier, it was easier for Beta to adopt the LTF. The LTF Project Manager argues that there is a significant difference between the BUs Alpha and Beta as they both have their own economy and their own psychology. Extending the forecast with four quarters has not had any profound impact on Beta since they have been working with long term planning for many years (Divisional CEO 2 of Beta Nordic). The reason for this is the nature of the business within Beta. The duration of the projects they undertake are normally 5-7 years, each country/region initiate only a few projects each year and each project ties up a lot of capital. Consequently, it is natural for Beta to work with a longer forecast horizon and, therefore, the LTF did not come as a shock. Furthermore, the CFO of Beta Europe believes that they can be more agile in the adoption as they are one of the smaller units within Atlantis. The adjustments that they needed to take were minor and so were the reactions. The CFO of Beta Europe point out that their routine for LTF-reporting is based on how they worked before the implementation although the difference is an increase in focus on the numbers. Before LTF, they used what they called “Project Plan” for their business planning and they still use this tool even though the LTF was implemented.

“We do not even discuss the LTF on our management meetings.” (Divisional CFO 2 of Beta Europe)

None of the divisions within Beta use the report for internal purposes. The report is too aggregated and cannot serve as a basis for taking business decisions according to the Divisional CFO 2 of Beta Europe. All interviewees agree that the LTF is just another report they need to prepare and send to the HQ. According to the Divisional CFO 1 of Beta Europe, it is not a problem to come up with the information as they already have most of the information in their systems. Beta Europe has a business intelligence system that enables them to forecast until 2026. The Divisional CFO 2 of Beta Europe further highlight that the LTF has not affected the business, the only implication of the LTF for Beta Europe is that the finance team has to work some extra hours at the end of each quarter. “We do not even discuss the LTF on our management meetings.” Even though it is just another report, it is an addition to an already complicated reporting process with too many reports (Divisional CFO 1 of Beta Nordic). It would be valuable if the LTF was integrated into existing tools and other reports, currently it is just a separate report (CFO of Beta Europe; Divisional CFO 1 of Beta Nordic). However, with the introduction of the LTF, the people within Beta are doing a more thorough forecast for the second year than they have done before,

and the forecasting process has also become more structured. Prolonging the time horizon of the forecast was seen as something positive by all Beta managers, because it forces them to look further into the future.

“It is a small report. However, in order to get the figures in it, you have to do a big job actually. You have to have much more detail when preparing the forecast than what is in the report [LTF]. I have to do my own [Excel] model to come up with the figures.” (Divisional CFO 1 of Beta Nordic)

As the instructions on how to prepare the LTF were vague, each division within Beta had to come up with their own solution. This is something that is also true for Alpha. It implies that the BUs and divisions must develop their own routines of how to prepare the report. A lot of manual work has to be done in order to retrieve the necessary information (Divisional CFO 1 of Beta Nordic). As a consequence, each division develops a slightly different view and approach of what was expected of them and how to come up with the information for the report. One example of this is the difference of how many scenarios the units report; Beta Europe report several scenarios while Beta Nordic only report one scenario. If HQ wants everyone to report in the same way, these types of differences are not appropriate. Furthermore, they are losing precious time for doing business (Divisional CFO 2 of Beta Europe). All Beta units agree that the implementation of the LTF was poorly managed by the headquarters. Both the Divisional CFO 2 of Beta Europe and the Reporting Manager of Beta Europe highlights that an organisation, the size of Atlantis needs to have a top down coordinated reporting framework. “It is not efficient if everyone in the organisation has to invent the wheel” (Divisional CFO 2 of Beta Europe).

The collective view of the interviewees in Beta is that the LTF was designed with Alpha in mind. Even though Beta and Alpha are two completely different organisations, the design is the same with some few exceptions. The Divisional CEO 2 of Beta Nordic compares Atlantis to a company that produces both potato chips (Alpha) and oil tankers (Beta). Were the LTF is designed with the potato chip business in mind and then implemented it in both business areas. According to the Divisional CEO 2 of Beta Nordic, the reason for this could be that Beta was not represented in the project group that designed the LTF. He believes that Atlantis should have adapted the LTF to the different business streams. The general impression is that Beta often feels that they are neglected by the HQ even though they greatly contribute to the overall profit of Atlantis.

The second objective with the LTF was, as discussed earlier, to increase transparency and get the BUs to report their most likely future outcome. The main reason for this is the widespread conservatism in the budgeting and forecasting which make the previous budget process inadequate for business planning. Beta, in contrast to Alpha, does not have a deeply rooted tradition of conservative reporting. When interviewing people from Beta, they did not have much to say about the issue of conservatism. The Divisional CFO 2 of Beta Europe said that, because of the uncertainty in the projects, it is an unwritten rule that you are more conservative in the beginning than in the end. People from Beta describe the conservatism, more or less, as a behaviour of finance people and a natural part of the process while people from Alpha describes it as an important part of the culture to be conservative.

Even though conservatism is not a problem within Beta, people are still in the same way as in Alpha uncertain about the link between the LTF and their bonus targets. They also believe it is important that HQ is clear on how they will react if a BU does not reach its targets. Because of this widespread uncertainty, the BUs do not want to promise too much in the LTF. The CFO of Beta Europe emphasise that if the headquarter fails to address these issues; they are unlikely to reach their desired outcome of transparent reporting.

The CFO of Beta Europe requests a more structured approach of implementing new management control techniques. He believes that the implementation would have benefited from a communicated plan and more discussions earlier on in the process. “It is only recently that we received information about the planned workshops.” He believes that more discussion, education and a communicated plan would have resulted not only in a more uniform reporting but also that the units would have had more acceptance for the substandard quality of the implementation. Major changes always create anxiety in a group. “If the group could adopt a standardised process of conducting these changes, a lot of the anxiety could be reduced as the anxiety often arises because of lack of information” (CFO of Beta Europe).

“We need clearer communication with individual BUs affected by the change in order to deal with the fact that we do not have any average BUs, everyone is different.” (CFO of Alpha Sweden)

Also, the CFO of Alpha Sweden suggests that the Group CFO should communicate more with the organisation than he did before the implementation of the LTF. In this way, he can take inspiration from similarities and differences between the different BUs and discuss what can be value creating for both the organisation as a whole as well as for the individual BU. “It is important to anchor suggestions and create a sense of involvement through discussion.”

6 ANALYSIS

We will analyse the management accounting change processes that Atlantis has undergone by applying the framework developed by Burns and Scapens (2000). The analysis will begin with an explanation of how the two change initiatives were implemented in the organisation through the introduction of new rules. Next, we analyse how the rules related to the introduction of Capital Employed became routinised within Atlantis. This is followed by an analysis of the routinisation process of the LTF. The difference in how the business areas Alpha and Beta adopted the change is analysed and we continue with a more in-depth analysis of the response from the parts of the organisation that had the most difficulty in implementing the new forecasting process. Finally, we analyse the cultural transformation process that the LTF has initiated.

6.1 INTRODUCTION OF NEW RULES AND THE EMERGENCE OF ROUTINES

The introduction of Capital Employed and the LTF are two top-down initiatives which have been implemented by the HQ. Using Burns and Scapens (2000) institutional framework, the initiatives can be seen as formal changes because the HQ intentionally wanted to change both the capital management- and the forecasting processes. These initiatives can be categorised as new *rules* imposed in Atlantis as they are formalised statements and procedures and the *rules* becomes the recognised way in which “*things should be done*” when they are implemented. The new rules *encode* the creators’ of the change initiatives assumptions of how the organisation should work with capital management and how the forecast process should function in order to operate as a good business planning tool. Capital Employed was introduced with rules determining how much Capital Employed each BU can carry on their balance sheet at the year end. This *rule* was accompanied with another *rule* saying that the BU managers would lose their bonus if they did not achieve the limit. Regarding the LTF, the two objectives with the change initiative was translated into a set of *rules* that were introduced in the organisation. The objective of a longer forecast was clearly defined by HQ through the reporting template each BU had to fill out and submit. Although, in contrast to the forecasting horizon, transparent reporting is a vague concept although it was somewhat concretised with the Bell Curve-concept.

It is difficult to determine whether the implementation of Capital Employed and the LTF was successful or not. When new *rules* are introduced and implemented, new *routines* will emerge which means that actual procedures will be developed and reproduced by the various people involved. Compliance with the *rules* implemented by the HQ is simple to verify. The BUs have kept or reduced their Capital Employed to a level that does not exceed the limit. The BUs are also reporting a longer forecasting horizon (the first objective of the LTF). However, increased transparency (the second objective of the LTF) by reporting according to the Bell Curve-concept is more difficult to verify. It is difficult to verify that the numbers reported by the BUs are Most Likely estimates and not estimates influenced by conservatism. Furthermore, it is difficult for HQ to assess the quality of the submitted forecasts, i.e. how well they predict the future.

The process of *routinisation* of the *enacted* rules differs between the change initiatives depending on the clarity of the rules. How the rules have become *routinised* is largely influenced by the characteristics of the *rules* that have been exemplified above. Moreover, the context has a large impact on how the *rules* become *routinised*, and one of the main reasons for why reactions to the new rules have varied between different BUs is to what extent they challenge existing routines. We will explore how in the specific contexts, histories and individuals involved in the BUs influence the implementation of the two initiatives separately below.

6.2 ROUTINISATION OF CAPITAL EMPLOYED

Atlantis was already used to Capital Employed as they in the past had used a similar measurement to govern the organisation which meant that the organisation was used to think in terms of capital usage. Furthermore, many of the BUs already used some kind of KPI related to capital usage to govern their operating units when Capital Employed was implemented. For example, Alpha Poland measured and rewarded their project managers based on how much working capital they used. Therefore, we can conclude that both Alpha and Beta already had organisational *routines* for capital management in place at the time of the implementation. As organisational routines *encode* the institutionalised assumptions, the organisational routines reveal that the importance of capital efficiency had become institutionalised with the former capital management KPIs implemented by the HQ. It can be concluded that Capital Employed did not challenge the existing rules, routines and institutions because the change initiative was aligned with these aspects. As a result, the organisational members accepted the introduction of Capital Employed even though it limited the autonomy of the BUs and restricted their ability to invest. The understanding of Capital Employed was shaped by the existing routines and institutions.

One additional reason for this could be the clear connection between the limit on Capital Employed and the bonuses. As several of the interviewees indicated, Atlantis is a very goal oriented organisation and the cliché “what you measure gets done” is without a doubt true for the organisation. The use of bonuses in Capital Employed *encodes* HQ’s assumption of the organisation being responsive to rewards and the efficiency of bonus target as a corporate governance tool. Because the limit possibly could eliminate the whole bonus for some key individuals, people complied with the new instructions. As the CFO of Alpha Sweden highlighted when commenting on the risk of exceeding the Capital Employed limit: “we will not put ourselves in that situation.” Even if Capital Employed adventured the whole bonus for some key individuals, most of the interviewed employees did not have any concern with the rule being introduced. Only a few of the BU managers expressed concerns with Capital Employed limiting their ability to make investments. Since bonuses are important in Atlantis and the organisational members are used to being measured on different bonus targets, the use of the bonus target in Capital Employed informed the members how important Capital Employed was for the organisation.

As BU managers began to consider their level of Capital Employed, the capital management rules were *enacted* by the organisational members. In this *enactment* of the rules introduced, *routines* emerged and they will be reproduced over time and passed on to new members of the organisation as they represent how “*things are actually done*.” This process of ongoing *enactment* and *reproduction* is called *routinisation*. The established *rules* may be subject to conscious or unconscious change. Especially, unconscious changes may occur if the rules give room for interpretation and there is no monitoring system that captures routines which do not follow the established rules. As the rules introduced with Capital Employed are very clear, they do not give much room for interpretation and unconscious change. Furthermore, it is difficult for the BU managers to use their power to overthrow the rules as it would cost them their bonus and therefore, any conscious change is unlikely to take place. Under the right circumstances, the *rules* and *routines* that have emerged from the introduction of Capital Employed can become *institutionalised* which means they are dissociated from their historical circumstances. In this case, it means that Atlantis would be able to take away the KPI and bonus target without capital starting to accumulate on the balance sheet. However, the measure has only been present in the organisation for little more than a year, which is probably a too short time-period for it to become institutionalised.

The implementation of Capital Employed did not differ much between the different BUs in Atlantis even though they have diametrically different capital needs. Both business areas already used some kind of capital management routine in the operating units and both parts of the organisation witnessed that they had seen improvements in the awareness of the need for capital efficiency further out in the organisation.

It is therefore not necessary to analyse the management accounting change process for the two business areas separately. The introduction of Capital Employed shows us that formal change can be path-dependent and evolutionary. It also shows that formal change, increasing the control of the HQ, not necessarily have to face resistance if the change is coherent with existing rules, routines and institutions.

6.3 ROUTINISATION OF THE LTF

The introduction of the LTF challenged the existing *routines* and *institutions* to a greater extent than Capital Employed. A majority of the members of the organisation had not worked with a long forecast horizon previously, and moreover the majority have also been conservative in their forecasts. We have observed significant differences in how the business areas Alpha and Beta as well as different countries within the same business area have adopted the change initiative. The introduction of the LTF shows that existing rules, routines and institutions in Alpha and Beta have affected how the two business areas have *enacted* the new rules. The introduction of the LTF demonstrates the importance of taking the existing routines and institutions into consideration when implementing new management accounting systems. These observations will be analysed below and we begin to analyse the first objective of the LTF (longer forecast horizon) and then we continue with the second objective (increased transparency).

To begin with, the objective of a longer forecast horizon was effectively implemented in the organisation. As it is easy for HQ to verify that all the BUs are reporting accordingly to the new reporting template, the preparers are bound to fill out the template with the numbers. However, it was easier for Beta to adapt their *routines* since the nature of their business already required them to have a longer forecast horizon. Beta's assumption of the need for a longer forecast is *encoded* in their 5-year business plan which they use in parallel to the budgets and forecasts. The introduction of the longer forecast did not challenge the existing routines and institutions within Beta; instead they took advantage of the situation within Beta. Alpha, on the other hand, got their existing routines challenged with the introduction of the LTF. It was more difficult for Alpha because they did not have the same possibility as Beta to plan their future since they only have 5-10% of the revenues for the next year planned in their backlog. Because the rules how long the forecast should be are clearly stipulated, any deviations from these rules will be highly visible for the HQ. Consequently, it is unlikely that any unconscious change will take place in the process of *enactment* and *reproduction*. However, multiple interviewees had an opinion on the level of detail in the forecasts. The CFO of Alpha Sweden for example expressed his view on this issue and said that they should lower the requirements for the second year since it does not add any value to forecast full P&L, balance sheet and cash flow statement. Hence, it is likely to believe that conscious change might take place in the future as the HQ adapts to the requests from the organisation.

The efforts of increasing the transparency in Atlantis have been more controversial. The initiative was regarded as controversial because it aimed at eliminating, or at least significantly reducing, conservatism in the company. The tradition of conservatism has determined how the forecast has been prepared for many years and when the LTF was introduced, the change initiative challenged the existing rules and routines in Atlantis. Several representatives witnessed of the conservatism in Atlantis being the taken-for-granted way of forecasting. It is not surprising that a change initiative with the intention to change the institutionalised behaviour is seen as controversial; Busco and Scapens (2000) argue that management accounting change that challenges existing routines and institutions is more likely to meet resistance. Using the institutional framework, conservatism became *institutionalised* in Atlantis and this process took place over a long period of time. Alpha Poland is a good example of how conservatism became institutionalised in the organisation. When Alpha Poland was acquired by Atlantis around 10 years ago, representatives from the HQ taught them to be conservative. They told them, for example, that it was always better to get a positive surprise than a negative one. Through a long process of *enactment* and *reproduction*, the conservatism became *institutionalised*. In other words, through the process of quarter-by-quarter

forecasting, the accounting routines evolved as the BUs and the HQ found mutually acceptable ways of working. Today, the conservatism, seen as the institutionalised accounting based assumptions, is disassociated from its historical origin and it is *encoded* in the accounting routines of the organisation, i.e. the taken-for-granted ways of forecasting.

6.3.1 THE DISSIMILARITIES BETWEEN ALPHA AND BETA

Introducing management accounting change which directly confront the existing routines and institutions of the organisation can be expected to be more difficult to achieve than change that are in line with the routines and institutions. Burns and Scapens (2000) argue that the response to such major events is likely to be determined largely by the current context of the organisation. As the Project Manager points out, the two different BUs have their own economy and their own psychology which gives them different prerequisites for implementing the LTF.

We have seen that Beta has adopted the LTF with less resistance than Alpha. Beta has not had the same problems because they do not have the same tradition of conservatism and consequently the existing routines and institutions were not challenged to the same extent as in Alpha. Moreover, it is reasonable to believe the differences in complexity of the two organisations have contributed to how the LTF was adopted. Beta is a much smaller organisation with fewer employees and fewer layers of managers in the hierarchy which makes it easier to communicate the message of the LTF. Beta's less complicated project structure also contributed as the managers higher up in the organisation can evaluate each project more in-depth and therefore question assumptions made in the forecast. It therefore becomes much more difficult for the project managers to create a buffer by reporting conservatively as management are able to monitor the projects better in Beta. Alpha's project structure constitutes of several thousands of projects which make it impossible for the BU managers to question the forecasts for specific projects and therefore they have to trust the project managers' forecasts.

Based on these observations, the arguments for management accounting change being path-dependent are demonstrated in *how* the BUs adopted the initiative. The process of *enactment* and *reproduction* was largely dependent on the type and structure of their business. In other words, the business type and structure was an important contextual factor influencing the adoption process. Moreover, the history of the two business areas affected the degree conservatism to a large extent. Furthermore, it was apparent that business type and structure was of much more important than the BUs nationality. We studied the two business areas Alpha and Beta in three different regions in order to be able to make a regional comparison. We were although unable to observe geographic location or national culture having any importance for the implementation of the LTF. When comparing the observations in the three regions studied, we could not observe any significant factors related to the national context having any impact on the implementation process in both BUs, in each region. It was rather the structural factors mentioned above in combination with the BUs historical background. The latter factor, the importance of the BUs history, will be elaborated on next.

6.3.2 THE DISSIMILARITIES WITHIN ALPHA

Although we found distinct differences between Alpha and Beta, we also found that different countries *within* Alpha adopted the change differently. Alpha Norway has been successful in implementing the LTF in comparison to other BUs within Alpha. Much because they were not educated in conservatism and they kept their management team intact when they were acquired by Atlantis. Additionally they had similar processes in place when the LTF was introduced. It was more difficult for Alpha Sweden and Poland to introduce the LTF as it challenged the existing rules, routines and institutions to a large extent. As Busco and Scapens (2000) argue, the change initiatives that challenge existing routines and institutions are more likely to face resistance from the organisations affected by the change initiatives. Nevertheless, we have not observed any formal and overt resistance from any BU. Although Alpha Sweden and Poland have

opposed the introduction of the LTF, they did not react with overt resistance. The interviewees have explained that the LTF, for different reasons, have not reached the project managers. It can be concluded that the two BUs have not achieved “true Most Likely.” Alpha Poland even admits that they have deliberately waited with the actual implementation of the LTF. Instead, managers are reporting more aggressive forecasts by making adjustments to the forecasts they receive from the organisation. Even though the organisation did not react with any formal and overt resistance, the organisations who got their routines and institutions challenged the most manifested their resistance in other ways.

Based on these observations, the adoption of the LTF by Alpha Sweden and Poland can be said to be “Ceremonial”. It looks, from an outside perspective, like the LTF has been fully implemented. Burns and Scapens (2000) argue that management accounting change that is not widely accepted and is subject to resistance can result in ceremonial adoption. We draw this conclusion because the managers in the BUs make adjustments to the forecasts submitted by the project managers and then state to SET and Group Controlling that their numbers are reported according to the new rules. The use of the LTF, therefore, becomes a façade with the purpose to give the impression of compliance with the new management accounting system. Nor-Aziah and Scapens (2007) would call it a ritual which does not have any effect on the day-to-day activities or the values, meanings and routines that still exist in the organisation.

It is difficult for the HQ to verify the content in the forecasts, i.e. the transparency and the quality. HQ will have to compare many forecasts with the actual outcomes, over a long period of time, before they can say anything about the transparency and the quality. As a consequence, the BUs are given the opportunity to claim they are reporting transparently according to the Bell Curve-concept even though they might be “faking” it. In this way, managers preserve the status quo as they avoid further interventions into their business. It also shows that the managers act as change agents that actively can shape the process of management accounting change. Under these circumstances, BU managers have the possibility to hinder the understanding of the new forecasting process. Furthermore, it is difficult for the HQ in Atlantis to discover this behaviour, even though they are aware of it as they seldom communicate with organisational members below BU manager-level. If the LTF had been implemented instrumentally, the opposite of ceremonial, the LTF would be used to make informed decisions instead of preserving status quo. When the responsibility of making adjustments to the forecasts has been shifted from SET and Group Controlling to the BU managers, it cannot be said that the LTF has aided the decision-making in the organisation.

This ceremonial adoption shows that the HQ has not, so far in the implementation, achieved what they intended. The ceremonial adoption hinders the fulfilment of one of the objectives with the LTF – to leave the conservatism behind. A change process which several interviewees described as a cultural transformation process. As the HQ actively wanted to change what is institutionalised in the company, it can also be said that they actively wanted to change the culture of the company. Burns and Scapens (2000) provide little understanding of the institutional change process in which a cognitive and behavioural re-definition takes place. We will instead turn to Busco and Scapens (2011) extended institutional framework which can be used for studying *how* and *why* organisational culture evolves across time and space. In the next section, the cultural transformation process in Atlantis will be studied and light will be shed on why the LTF was implemented ceremonial in some BUs.

6.4 DEGREES OF CULTURAL CHANGE

Representatives from both Group Controlling and the BUs agree that in order to leave conservatism behind and report more transparently according to the Bell Curve-concept, the organisation has to undergo a cultural transformation. By using Busco and Scapens (2011) extended institutional framework, we can interpret how the culture has been affected by the implementation of Capital Employed and the LTF. As stated before, the implementation of Capital Employed did not challenge existing institutions in

any significant way and therefore have not had any significant impact on the institutional realm. The LTF, on the other hand, has an explicit objective to transform an established way of thinking within the organisation. Cultural change can be said to be both evolutionary and revolutionary. They both represent a continuous process of cognitive and behavioural definition and re-definition but differ to which extent they disrupt existing routines and institutions.

On the face of it, the implementation of the LTF can be categorised as a revolutionary change as it is a small management accounting change, in terms of content, which brings a substantial institutional change. It challenges a long-standing tradition within Atlantis. However, as we have stated before, Atlantis is structured in several autonomous BUs and the conclusion that the LTF can be categorised as a revolutionary change is not valid for all BUs. It is apparent, if you compare the business areas Alpha and Beta, that both evolutionary and revolutionary change takes place at the same time. Upon closer examination, we also draw the conclusion that revolutionary change does not take place in all of Alpha's BUs. Alpha Norway was better prepared than Sweden and Poland as they already reported according to something similar to the Bell Curve-concept. As a result, the introduction of the LTF was not as disruptive in Alpha Norway as it was in the other Alpha BUs and the change can therefore be categorised as evolutionary. Below we will describe the process of evolutionary and revolutionary change in Atlantis respectively from Busco and Scapens (2011) framework.

In the BUs where the introduction of the LTF did not have a disruptive effect on the routinised behaviour, the change can more be seen as evolutionary as the change can be seen as more incremental. As the new forecasting process did not infuse any cultural values that challenged the existing routines and institutions these BUs, the change initiative can be expected to result in only minor adjustments to the taken-for-granted assumptions. The adjustments take place through an evolutionary process which constitutes of the four movements encoding, enacting, reproducing and institutionalisation. Interesting in this process is the third moment, the reproduction of the management accounting systems through day-to-day actions. As management accounting systems can be seen as carriers of cultural values, the reproduction of the system will reinforce the culture of the organisation. Evolutionary change is highly path-dependent as it does not involve any sudden disruptions to the behaviour of the individuals within the organisation; it is more of an adaption of the organisational routines to the new situation. Nonetheless, revolutionary change is also path-dependent but it reduces the constraining effect existing routines and institutions which enables a greater transformation of the culture in the organisation.

The implementation of the LTF, however, introduced a revolutionary change to Alpha Sweden and Poland as their culture was based on conservatism. As the interviewees highlighted, the technical part of the LTF is easy while the difficult part is the cultural journey that has to take place for people to become more transparent. This indicates that a cognitive re-definition has to take place within Atlantis, especially in the BUs with a history of conservatism. This change process takes place by the unfreezing and refreezing of institutionalised values. By unfreezing the institutionalised values, which inform the organisational culture, cultural change becomes possible. Within Atlantis, this began with the CFO informing the BUs about the need for the LTF and how it was essential for the company to be able leverage their resources and make good decisions. The information from the CFO challenged the institutionalised cognitive schemas and the routinised patterns of behaviour within the organisation as it emphasised the need for leaving the conservatism behind and the same behaviour would not be accepted in the future. The information was disconfirming and created survival anxiety in the BUs that were particularly conservative. The information from the CFO had a disconfirming effect because it was regarded as valid and relevant. Additionally, the introduction of the LTF acted disconfirming in itself as it challenged the existing rules, routines and institutions. People within the organisation were aware of the conservative behaviour; some even admitted they were deliberately conservative. Furthermore, people

welcomed the LTF because they believed it would be beneficial for the organisation to have a longer forecasting horizon.

To overcome the anxiety created by the change process, the individuals must find new psychological safety as the implementation of the LTF cancelled their existing sense of psychological safety provided by the routinised patterns of behaviour, i.e. by acting conservatively. In the past, they knew that they could be conservative in their forecast and SET would not complain as they knew what they were doing, and they would just set bonus targets that were a bit higher than the forecast. Today, this agreement has been suspended with the implementation of the LTF and in this new reality they do not know what type of behaviour will be accepted. In other words, the existing institutionalised (cognitive) schemas will no longer help the people within the organisation because their existing routines will not work when the LTF has been implemented. Therefore, they try to assemble new rational and resources that will work in the new environment. Busco and Scapens (2011) argue that the actors use their reflexive ability to make sense of the new reality and that this is done with mental dialogue. Based on the testimonies in the interviews, it is reasonable to believe that the actors, in their search for psychological safety, asked themselves questions such as “Will the LTF affect my bonus targets?”, “What will happen if I continue to report conservative?” or “How much should I deduct from the Most Likely-scenario in order to prepare the ‘Reported’-scenario?”. By asking these questions, the individuals try to make sense of what is happening around them. This process is a conscious re-evaluation in which the cognitive schemas of the actors become redesigned. This means that their mental maps, portraying how the social world operates, changes. The redesigned schemas then influence the routinised behaviour of the organisational members.

When individuals find psychological safety, they overcome their *survival-* and *learning anxiety*. If the new routines become validated, i.e. they repeatedly prove to work in the new environment, they will be institutionalised. In the studied parts of Atlantis where the introduction of the LTF created a revolutionary change, the actors have faced many difficulties in their unconscious search for psychological safety. The reason the organisational members did not find psychological safety is dependent on many factors. It is apparent that many people in the organisation do not have what Busco et al. (2006) call “trust for change.” To begin with, the unclear definitions of the concept created *learning anxiety* for the people who tried to adopt it. The instructions did not cover *how* to prepare the forecasts; they only covered *what* to report, and it was consequently difficult and it required a great effort the first times the forecasts was prepared. Despite this situation, the interviewees explained that they prepared a forecast according to the rules of the LTF. However, when the BUs who reported a more aggressive forecast got mistreated in the bonus target setting, it demonstrated that it does not work to report according to the LTF. This means that the new way of forecasting did not become validated as it did not provide any psychological safety.

The mistreatment in the bonus setting has not only demonstrated the inability of the LTF to work in the new organisational reality but also, it has contributed to the depletion of trust in the change process. Busco et al. (2006) defines trust in two forms: *personal trust* and *system trust*. As the BU managers are unable to rely on anticipated behaviours of and responses from SET who receives the forecasts and set targets for the BUs, the personal trust have been undermined. It is worth mentioning that the level of “trust for change” probably was on a low level even before the first forecasts as SET and Group Controlling had not clearly defined what would happen if they did not achieve the forecast and how the targets would be affected by the reported forecasts. These interpersonal interactions between BU managers and SET also affect the trust for the LTF as a concept, defined as system trust by Busco et al. (2006). Because SET acts as an access point for Capital Employed and the LTF, the trust for the representatives (*personal trust*) will shape the trust for the introduced concepts (*system trust*) and in the change process they will impact the creation of trust or distrust. In the case of the introduction of the LTF, distrust have been created through the experience with the access points.

However, both of the change initiatives are designed based on well-known concepts such as the calculation of capital employed, the bell-curve distribution and the idea of rolling forecasts. Consequently people knew that there were concepts that worked well outside Atlantis and therefore had trust for the concepts themselves (*system trust*). None of the interviewees criticised the concepts, on the contrary they welcomed the introduction of the LTF and they did not have much to say about Capital Employed. They, however, did not know how to act in the new reality because of the unreliable anticipated behaviours and expected responses.

For new routines to become institutionalised, the new routines have to prove that they work in the new organisational reality during a long time. It is therefore difficult to draw conclusions about the *institutionalisation* of the *routines* related to the LTF through this study because the change process only have been going on for less than a year, and this study merely presents a freeze frame of the change process through the interviews with affected representatives from various parts of the organisation. However, by studying *what* has happened in the change process it is observable that SET and Group Controlling have acted in a way that has not facilitated the cultural change process. The change process was hampered by the fact that the LTF was implemented with insufficient and confusing instructions, unpredictability in the bonus target setting and by not having a consistent management group. Especially for those parts of the organisation where the change resulted in disruption of the existing patterns of behaviours and institutionalised values. These parts of the organisation responded with adopting the new forecast ceremonially as they could not find psychological safety due to the above mentioned factors. Even though people in other BUs have borne witness of the same problems, they have not been affected to the same extent as the change process was more evolutionary for them, i.e. the change did not have a disruptive effect.

It is only possible to speculate about the future, but it is important to point out that the change initiative not necessarily will fail in Alpha Sweden and Poland. On the contrary, it is reasonable to believe that the HQ will address the issues that have made the resistance arise. Through a process of enactment and reproduction, acceptable modes of behaviour will be negotiated and the HQ and the BUs will probably find a new agreement in which they can rely on each other's responses. Hopefully in a way that makes the forecasting process an adequate business planning tool. If so, the resistance to the change will only have resulted in initial, perhaps significant, delay instead of an ultimate failure of the project.

Two management accounting change initiatives in the organisation Atlantis have been studied in this section. The study demonstrates that management accounting change is path-dependent and that new rules will be interpreted in the context of the existing rules, routines and institutions. As a consequence, the different BUs have adopted the change initiatives differently. The reasons for why the different BUs in Atlantis adopted the new management accounting rules differently are complex and grounded in the specific contexts, histories and individuals involved in the BUs. It has also been shown that seemingly simple change initiatives can be difficult to implement if they challenge existing rules, routines and institutions in the company. Consequently, small change initiatives, in terms of content, can have a disruptive effect on existing patterns of behaviours and institutionalised values. In this process, it is important that the members of the organisation find psychological safety; otherwise they will respond with some form of resistance. The persons responsible for the change play a key role as they are the interface to change and if they erode the "trust for change," the change process will be more difficult.

7 CONCLUSION

This study aimed at providing insight into the complexities of management accounting change by studying the process of management accounting change for two change initiatives in a particular organisation. Two main research questions were addressed to shed light on two important aspects of the change process. Firstly, we aimed at understanding the path-dependent nature of change and how the specific context, histories and individuals in the organisation affected the process of change and consequently how the two change initiatives were adopted differently in the organisation. Secondly, we aimed at examining how the new accounting practises and the process of management accounting change takes an active part in the re-definition of organisational culture. Thereby, guided by Burns and Scapens (2000) together with Busco and Scapens' (2011) institutional frameworks, we have contribute with additional the understanding of *what* happens when new management accounting techniques are introduced in organisations through formal top-down change initiatives. In order to answer our research questions, a qualitative case study was conducted in the Swedish MNC Atlantis who had implemented two new management accounting systems. A total of 21 interviews were conducted with 26 unique individuals. To ensure a broad picture of the change processes in Atlantis, representatives from different BUs and levels in the company were selected as interviewees. Furthermore, interviewees were chosen so that they represented both the preparers and the users of the two management control change initiatives.

We illustrate how the different BUs in the organisation have different preconditions for adopting the two change initiatives. Our analysis showed that change initiatives that were aligned with existing rules, routines and institutions were easy to implement and did not react with resistance even though the change could have severe consequences for key employees. This evolutionary type of change also showed that formal change, increasing the HQ's degree of control, not necessarily have to face resistance if the change is coherent with existing rules, routines and institutions. Nonetheless, the introduction of a novel accounting system which the organisation lacked previous experience of illustrated how the specific contexts, histories and individuals in the different BUs affected the implementation. First of all, the BUs' business types and structures gave rise to difficulties in the implementation for some BUs. In one part of the organisation, the change was coherent with the challenges their businesses faced while the second part, they encountered difficulties with the new system because of the nature of their business. However, in our comparison between countries we could not show that the BUs' nationality had any significant impact on their ability to implement the new system. Instead, the contextual factors already mentioned together with the BUs' histories in the form of their institutionalised behaviour had a significant effect on the implementation. With other words, different subcultures existed in the organisation. We also showed that change which directly confronted the existing rules, routines and institutions were difficult to implement and could lead to resistance even though the organisation in large were positive to the change. The resistance could take the form of ceremonial adoption in order to preserve status quo.

The introduction of a forecasting process was used by the HQ as a vehicle for introducing new values in the organisation which is in line with Dent (1991). Top management wanted to achieve one common understanding of forecasting in the organisation and eliminate the widespread use of conservatism in some BUs. As a result, the implementation, as mentioned above, directly confronted institutionalised behaviour in some BUs – the same BUs that adopted the new system ceremonially. However, not all BUs got their existing routines and intuitions challenged. As a consequence, both evolutionary and revolutionary change took place at the same time within Atlantis. Cultural change through revolutionary change begins with “unfreezing” of institutionalised values which is followed by a cognitive and behavioural redefinition. In essence, it is about unlearning the old culture and then relearning the new one. It is important in this process that the individuals in the organisation find psychological safety. Only then can the new values become refrozen into the culture. It was apparent that the change process did not

assist the search for safety. Instead, several barriers to psychological safety were created by the HQ in the change process. In short, “trust for change” was not created. As a consequence, the BUs that experienced revolutionary change adopted the new forecasting process ceremonially as they haven’t been able to find a way of working in the new organisational reality.

We add to the literature using Burns and Scapens (2000) institutional framework for studying management accounting change. We confirm the authors’ arguments of management accounting change being path-dependent as the existing routines and institutions in the company will shape the change process. We show this by analysing two change initiatives and exemplified how these were adopted in two different parts of the organisation. More importantly, this study adds to the literature by using Busco and Scapens (2011) extended institutional framework which include cognitive and behavioural dimensions for studying how management accounting change contribute to the re-definition of organisational culture. This framework has not been used extensively in accounting research which makes this study an interesting contribution. We conclude that evolutionary and revolutionary can take place at the same time within a company as a consequence of management accounting change. When studying revolutionary, we find that small change initiatives in terms of content can have a disruptive effect on existing patterns of behaviours and institutionalised values. Therefore can management accounting changes have a large contribution on the re-definition of organisational culture. We also show how activities by the change managers are central for people in the organisation to find psychological safety, a key requirement for cultural change taking place.

Even though it is possible to retrospectively analyse management accounting change and its implications for the organisation, it is difficult to predict how the organisation will react to the change. However, having an understanding of the complexity and heterogeneity of a MNC will, to some degree, help the change managers. Understanding the existing routines and institutions in the organisation will help the change managers to identify the potential origins for resistance, thus making it possible to take these into consideration when managing the change process. Furthermore, as a company constitutes of several different sub-groups it is also important to consider how the management accounting change will affect the respective groups. Change will encounter different challenges in different sub-groups and therefore must the change managers adapt the implementation process for the individual groups.

The implications of the management accounting change on the organisational culture should also be considered. As accounting systems constitute cultural values, change can have an effect on the organisational culture in either an evolutionary or revolutionary way. Shown in the analysis, the actions of the HQ hindered the organisation in finding psychological safety when revolutionary change occurred. Thereby, the actions of the HQ also stalled the cultural transformation as the new management was adopted ceremonially. This underlines that *how* the process is managed will have an effect on the outcome of the change process. Hence, it is important for those responsible for the change to understand what impact the choices in the design of the process will have on the individuals affected by the management accounting change.

7.1 LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

As we have studied the interactions between phenomena and its context, a single in-depth case study, is seen as an appropriate approach according to Dubois and Gadde (2002). However, there are some limitations associated with the case study approach. The most articulated limitation is the difficulty to draw any general conclusions. We acknowledge that our findings cannot be generalised to a high degree on other companies, since they are based on a context that is unique for our particular case company. Generalisation may also be difficult as we have chosen not to include any company or industry specific details. However, we believe that our findings and conclusions are only to a limited degree affected by company and industry specific characteristics. Reaching the same conclusion by replicating our study at

the same company is not possible as our empirical data almost exclusively is gathered through interviews and if they were to be remade, the answers would probably change. In total, we have conducted 21 interview sessions with 26 unique individuals and feel that all crucial and relevant aspects have been well covered. There is always a risk for misinterpretation and biased answers, although we have tried to limit this risk by conducting interviews with several individuals who hold the same position within the organisation.

For future research, as we discovered the importance of the actions taken by the responsible for the change in the outcome of cultural transformation, it would be interesting to more in-depth study these actions taken and their implications for the change process. We have noted an imbalanced use of culture intervention mechanisms studied by Järvenpää (2007). Future research could use Schein's (2010) framework for cultural transformation and examine which cultural interventions mechanisms that have been used and what the implications were of not using all of them in a consistent manner. It might as well be interesting to conduct a second case study on the same company further into the future when the initiatives are fully implemented. The area of interest can be to compare what was done initially (our case study) against what has been done after our study and the subsequent results of the actions taken after our study.

8 REFERENCE LIST

- Argyris, C. & Kaplan, R. S., 1994. Implementing new knowledge: The case of activity-based costing. *Accounting Horizons*, 8(3), pp. 83-105.
- Atkinson, A. A. o.a., 1997. New directions in management accounting research. *Journal of Management Accounting Research*, Volume 9, pp. 79-108.
- Bachmann, R., 2001. Trust, Power and Control in Trans-Organizational Relations. *Organization Studies*, Volume 22, pp. 337-365.
- Baines, A. & Langfield-Smith, K., 2003. Antecedents to management accounting change: a structural equation approach. *Accounting, Organizations and Society*, 28(7-8), pp. 675-698.
- Bartlett, C. A. & Ghoshal, S., 1996. Rebuilding behavioural context: a blueprint for corporate renewal. *MIT Sloan Management Review*, 37(2), pp. 23-36.
- Bhimani, A., 2003. A study of the emergence of management accounting system ethos and its influence on perceived system success. *Accounting, Organizations and Society*, 23(6), pp. 523-548.
- Brinkmann, S. & Kvale, S., 2009. *Interviews: Learning the craft of qualitative research*. 2 red. u.o.:Saga Publications, Incorporated.
- Brooks, I. & Bate, P., 1994. The problems of effecting change in the British Civil Service: a cultural perspective. *British Journal of Management*, 5(3), pp. 177-190.
- Buchanan, D. & Badham, R., 1999. *Power, Politics and Organizational Change: Winning the Turf Game*. London: Saga.
- Burns, J. & Scapens, R. W., 2000. Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), pp. 3-25.
- Burns, J. & Vaivio, J., 2001. Management accounting change. *Management Accounting Research*, 12(4), pp. 289-402.
- Burns, J. & Yazdifar, H., 2001. Trick or treats. *Financial Management*, pp. 33-35.
- Busco, C., Giovannoni, E. & Scapens, R. W., 2008. Managing the tensions in integrating global organisations: The role of performance management systems. *Management Accounting Research*, 19(2), pp. 103-125.
- Busco, C., Riccaboni, A. & Scapens, R. W., 2006. Trust for accounting and accounting for trust. *Management Accounting Research*, 17(1), pp. 11-41.
- Busco, C. & Scapens, R. W., 2011. Management accounting systems and organizational culture: Interpreting their linkages and processes of change. *Qualitative Research in Accounting & Management*, 8(4), pp. 320-357.
- Dent, J. F., 1991. Accounting and organizational cultures: a field study of the emergence of a new organizational reality. *Accounting, Organizations and Society*, 16(8), pp. 705-732.

- Dixon, R. J., Nanni, A. J. & Vollmann, T. E., 1992. Integrated performance measurement: management accounting to support the new manufacturing realities. *Journal of Management Accounting Research*, 4(1), pp. 1-19.
- Drury, C., Braund, S., Osbourne, P. & Tayles, M., 1993. *A Survey of Management Accounting Practices in UK Manufacturing Companies*. London: Chartered Association of Certified Accountants.
- Dubois, A. & Gadde, L.-E., 2002. Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), pp. 553-560.
- Easton, G., 1995. *Case research as a methodology for industrial networks: a realist apologia. Proceedings from the 11th IMP Conference*. Manchester : Manchester Federal School of Business and Management.
- Eisenhardt, K. M., 1989. Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), pp. 532-550.
- Ezzamel, M., Lilley, S. & Willmott, H., 1995. *Changes in Managers and Managing Change*, CIMA: London.
- Ezzamel, M., Willmott, H. & Worthington, F., 1999. Accounting, organisational transformation and work organisation. *Accounting, Organisation and Society*, pp. 4-6.
- Ferreira, A. & Otley, D., 2009. The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), pp. 263-282.
- Folkestad, B., 2008. Analyzing Interview Data: Possibilities and challenges. *Eurosphere working paper*, Volume 13, pp. 1-16.
- Granlund, M., 2001. Towards Explaining Stability In and Around Management Accounting Systems. *Management Accounting Research*, 12(2), pp. 141-166.
- Gupta, A. K. & Govindarajan, V., 2000. Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), pp. 473-496.
- Hared, B. A., Abdullah, Z. & Rafiul Huque, S. M., 2013. Management Control Systems: A review of literature and a theoretical framework for future researches. *European Journal of Business and Management*, 5(26), pp. 1-13.
- Hassard, J. & Sharifi, S., 1989. Corporate culture and strategic change. *Journal of General*, 15(2), pp. 4-19.
- Henning, K. L. & Lindahl, F. W., 1995. Implementing activity based costing: the link between individual motivation and system design. *Advances in Management Accounting*, pp. 45-62.
- Herath, S. K., 2007. A framework for management control research. *Journal of Management Development*, 26(9), pp. 895-915.
- Hodgson, G. M., 1993b. Introduction to The Economics of Institution. *Aldershot, Edward Elgar*, xi-xx.
- Hopwood, A. G., 1987. The archeology of accounting systems. *Accounting, Organizations and Society*, 12(3), pp. 207-234.
- Jansen, P. E., 2011. The effect of leadership style on the information receivers' reaction to management accounting change. *Management Accounting Research*, 22(2), pp. 105-124.

- Johnson, T. J. & Kaplan, R., 1987. *Relevance Lost: the Rise and Fall of Management Accounting*. Boston, MA: Harvard University Press.
- Järvenpää, M., 2007. Making Business Partners: A Case Study on how Management Accounting Culture was Changed. *European Accounting Review*, 16(1), pp. 99-142.
- Kanter, R. M., 2008. Transforming Giants. *Harvard Business Review*, Volym January, pp. 43-52.
- Kasurinen, T., 2002. Exploring management accounting change: the case of balanced scorecard implementation. *Management Accounting Research*, 13(3), pp. 323-343.
- Kloot, L., 1997. Organizational learning and management control systems: responding to environmental change. *Management Accounting Research*, 8(1), pp. 47-73.
- Kostova, T. & Roth, K., 2002. Adoption of an organizational practice by subsidiaries of multinational corporates: institutional and relational effects. *Academy of Management Journal*, 45(1), pp. 215-233.
- Kreiner, K. & Mouritsen, J., 2005. The analytical interview: Relevance beyond reflexivity. i: *The art of science*. u.o.:Liber/CBS Press, pp. 153-175.
- Macintosh, N. B. & Scapens, R. W., 1990. Structuration theory in management accounting. *Accounting, Organizations and Society*, 15(5), pp. 455-477.
- Malmi, T., 1997. Towards explaining activity-based costing failure: accounting and control in a decentralized organization. *Management Accounting Research*, 8(4), pp. 459-480.
- Markus, L. M. & Pfeffer, J., 1983. Power and the design and implementation of accounting and control systems. *Accounting, Organizations and Society*, 8(2-3), pp. 205-218.
- Merriam, S. B., 1988. *Case study research in education: a qualitative approach*. San Francisco, CA: Jossey-Bass.
- Mitchell, F. & Sulaiman, S., 2005. Utilising a typology of management accounting change: An empirical analysis. *Management Accounting Research*, 16(4), pp. 422-437.
- Nicholson, N., 1993. Organizational change”, in Mabey, C. and Mayon-White, B. (Eds). i: *Managing Change*. 2 red. London: The Open University/Paul Chapman Publishing.
- Nor-Aziah, A. K. & Scapens, R. W., 2007. Corporatisation and accounting change: The role of accounting and accountants in a Malaysian public utility. *Management Accounting Research*, 18(2), pp. 209-247.
- Otley, D., 1994. Management control in contemporary organizations: towards a wider framework. *Management Accounting Research*, 5(3-4), pp. 289-299.
- Otley, D. & Berry, J., 1994. Case study research in management accounting and control. *Management Accounting Research*, 5(1), pp. 45-65.
- Ouchi, W. G., 1979. A conceptual framework for the design of organizational control mechanisms. *Management Science*, 25(9), pp. 833-848.
- Roberts, J. & Scapens, R. W., 1993. Accounting and control: a case study of resistance to accounting change. *Management Accounting Research*, 4(1), pp. 1-32.
- Roberts, M. W. & Silvester, K. J., 1996. Why ABC failed and how it may yet succeed. *Journal of Cost Management*, 9(4), pp. 23-35.

- Ryan, B., Scapens, R. W. & Theobald, M., 2002. *Research Method & Methodology in Finance & Accounting*. 2 red. Andover, Hampshire: Cengage Learning EMEA.
- Scapens, R. W., 1994. Never mind the gap: towards an institution perspective of management accounting practices. *Management Accounting Research*, 5(3), pp. 301-321.
- Scapens, R. W., 2006. Understanding management accounting practices: A personal journey. *The British Accounting Review*, Volume 38, pp. 1-30.
- Scapens, R. W. & Siti-Nabiha, A., 2005. Stability and change: an institutionalist study of management accounting change. *Accounting, Auditing & Accountability*, 18(1), pp. 44-73.
- Schein, E. H., 1992. *Organizational Culture and Leadership*. 2 red. San Francisco, CA.: Jossey-Bass Publishers.
- Schein, E. H., 1993. How can organizations learn faster? The challenge of entering the green room. *Sloan Management Review*, 34(2), pp. 85-92.
- Schein, E. H., 1999. *The Corporate Culture Survival Guide*. San Francisco, CA: Jossey-Bass Publishers.
- Schein, E. H., 2010. *Organizational Culture and Leadership*. 4 red. San Francisco, CA: Jossey-Bass.
- Shields, M. D., 1995. An empirical analysis of firms' implementation experiences with activity-based costing. *Journal of Management Accounting Research*, Volume 7, pp. 148-166.
- Simons, R., 1995. *Levers of Control: how managers use innovative control systems to drive strategic renewal*. Boston: Harvard Business School Press.
- Strebel, P., 1996. Why do Employees Resist Change. *Harvard Business Review*, Volym May, pp. 87-92.
- Tsamenyi, M., Noormansyah, I. & Uddinc, S., 2008. Management controls in family-owned businesses: a case study of an Indonesian family-owned university. *Accounting Forum*, 32(1), pp. 62-74.
- Yin, R. K., 2009. *Case Study Research: Design and Methods*. 4 red. London: Saga Publication.

9 APPENDIX

Appendix One: Interview list

Name	Date interviewed	Type of interview	Country
<i>Controlling</i>			
Group Controller 1	20 February 2014	Face-to-face	Sweden
Group Controller 2	20 February 2014	Face-to-face	Sweden
Head of Group Controlling	21 February 2014	Face-to-face	Sweden
Group Controller 3	03 March 2014	Face-to-face	Sweden
Group Controller 4	04 March 2014	Face-to-face	Sweden
LTF Project Manager	04 March 2014	Videoconference	USA
LTF Project Manager Assistant	04 March 2014	Videoconference	USA
<i>Alpha Norway</i>			
CFO of Alpha Norway	19 March 2014	Videoconference	Norway
Controller of Alpha Norway	10 April 2014	Videoconference	Norway
<i>Alpha Poland</i>			
Reporting Manager of Alpha Poland	08 April 2014	Face-to-face	Poland
Controller of Alpha Poland	08 April 2014	Face-to-face	Poland
CFO of Alpha Poland	09 April 2014	Face-to-face	Poland
<i>Alpha Sweden</i>			
CFO of Alpha Sweden	07 March 2014	Face-to-face	Sweden
Divisional CFO of Alpha Sweden	21 March 2014	Face-to-face	Sweden
Regional CFO 1 of Alpha Sweden	10 April 2014	Videoconference	Sweden
Regional CFO 2 of Alpha Sweden	10 April 2014	Videoconference	Sweden
<i>Beta Europe</i>			
CFO of Beta Europe	03 March 2014	Videoconference	Sweden
Divisional CFO 1 of Beta Europe	07 April 2014	Face-to-face	Poland
Divisional CFO 2 of Beta Europe	07 April 2014	Face-to-face	Poland
Reporting Manager of Beta Europe	07 April 2014	Face-to-face	Poland
Regional CEO of Beta Europe	07 April 2014	Face-to-face	Poland
<i>Beta Nordic</i>			
CFO of Beta Nordic	20 March 2014	Face-to-face	Sweden
Divisional CEO 1 of Beta Nordic	03 April 2014	Videoconference	Denmark
Divisional CFO 1 of Beta Nordic	03 April 2014	Videoconference	Denmark
Divisional CEO 2 of Beta Nordic	11 April 2014	Videoconference	Sweden
Divisional CFO 2 of Beta Nordic	11 April 2014	Videoconference	Sweden