Examensarbete I Redovisning på Kandidatnivå
Research on Flexible and Innovative Enabling of Business Unit/Responsibility Center

Name: Danfeng Zhang
Handledare: Peter W Jönsson
Datum: 09-01-2018
Kurs: FEKH 69
Skola: Lunds Universitet
Contents

Chapter 1 Introduction ........................................................................................................ 4
  1.1 Background .............................................................................................................. 4
  1.2 Problem Discussion ............................................................................................... 4
  1.3 Innovation and Flexibility ..................................................................................... 5
  1.4 Research Questions ............................................................................................... 5
  1.5 Research Purpose .................................................................................................. 5
  1.6 Thesis Outline ....................................................................................................... 6

Chapter 2 Literature Review and Theoretical Framework ................................................... 7
  2.1 Literature review .................................................................................................... 7
  2.2 Concept of responsibility centers ......................................................................... 8
    2.2.1 Concept of BURC ........................................................................................... 8
    2.2.2 Different types of BURC from monetary measure perspective ....................... 9
    2.2.3 Different types of BURC from structure perspective .................................... 9
  2.3 Matrix Organization .............................................................................................. 11
  2.4 Theoretical frame .................................................................................................. 12
    2.4.1 Galbraith standards of choosing MGCS ......................................................... 12
    2.4.2 Simons’ level of control .................................................................................. 12
    2.4.3 The enabling of MGCS and BURC ................................................................. 14
    2.4.4 Dimensions of performance evaluation ......................................................... 14
    2.4.5 Summarize of this paper’s theoretical frame ................................................. 15

Chapter 3 Methodology .................................................................................................. 16
  3.1 Approach ............................................................................................................... 16
  3.2 Strategy ................................................................................................................. 16
  3.3 Data ....................................................................................................................... 17
  3.4 Procedure .............................................................................................................. 17
  3.5 Chosen Sample ..................................................................................................... 17
  3.6 Interview ............................................................................................................... 18
  3.7 Interview question design ..................................................................................... 18
  3.8 Limitations of research methodology .................................................................. 19

Chapter 4 Empirical Foundation ....................................................................................... 20
  4.1 Background of the chosen company ..................................................................... 20
    4.1.1 Chosen of empirical case ............................................................................... 20
    4.1.2 General background—type, product, and technology .................................. 20
    4.1.3 Company value .............................................................................................. 20
4.1.4 Size and developing trend ........................................................................ 21
4.2 Company's MGCS and BURC choice .......................................................... 21
  4.2.1 Early stage ............................................................................................ 21
  4.2.2 Structure changes .................................................................................. 23
4.3 Independent responsibility .......................................................................... 25
4.4 Share responsibility ..................................................................................... 27
  4.4.1 Shared responsibility ............................................................................. 27
  4.4.2 Time Writing ........................................................................................ 27
4.5 Special project--Green house ...................................................................... 28
4.6 Flexibility and Innovation .......................................................................... 29
Chapter 5 Analysis ......................................................................................... 30
  5.1 Galbraith standards of choosing BURC .................................................... 30
    5.1.1 Type .................................................................................................... 30
    5.1.2 Product ................................................................................................ 30
    5.1.3 Technology ........................................................................................ 30
    5.1.4 Size ..................................................................................................... 31
    5.1.5 Chosen structure ................................................................................ 31
5.2 Simons' levels of control ............................................................................ 31
  5.2.1 Beliefs systems .................................................................................... 31
  5.2.2 Boundary systems ................................................................................ 32
  5.2.3 Diagnostic control systems ................................................................... 32
  5.2.4 Interactive control systems ................................................................... 33
5.3 Ahrens and Chapman’s model for increasing flexibility for MGCS and BURC .................................................................................. 33
  5.3.1 Repair .................................................................................................. 33
  5.3.2 International and global transparency .................................................... 33
      5.3.2 Flexibility ........................................................................................ 34
5.4 Jordan and Messner’s evaluation dimensions: .......................................... 34
5.5 Summary of empirical analysis ................................................................... 34
Chapter 6 Conclusion ..................................................................................... 37
  6.1 Discussion and Conclusion ....................................................................... 37
  6.2 Limitation of research ............................................................................... 38
  6.3 Suggestion for future research ................................................................. 38
Reference: ....................................................................................................... 40
Appendix Interview Questions ......................................................................... 42
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B</td>
<td>Business to Business sales channel</td>
</tr>
<tr>
<td>B2C</td>
<td>Business to Consumer sales channel</td>
</tr>
<tr>
<td>BURC</td>
<td>Business units/responsible centers</td>
</tr>
<tr>
<td>CAPEX</td>
<td>Capital expense</td>
</tr>
<tr>
<td>HW</td>
<td>Hardware</td>
</tr>
<tr>
<td>ID</td>
<td>Industrial design</td>
</tr>
<tr>
<td>KPI</td>
<td>Key performance indicator</td>
</tr>
<tr>
<td>MGCS</td>
<td>Management control system</td>
</tr>
<tr>
<td>OPEX</td>
<td>Operating expense</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>S &amp; M</td>
<td>Sales and Marketing</td>
</tr>
<tr>
<td>SW</td>
<td>Software</td>
</tr>
<tr>
<td>SWS</td>
<td>Smart Workplace Solution</td>
</tr>
<tr>
<td>TW</td>
<td>TW</td>
</tr>
<tr>
<td>UX</td>
<td>User experience</td>
</tr>
<tr>
<td>WBS</td>
<td>Work breakdown structure</td>
</tr>
</tbody>
</table>
List of Figures:

Figure 2.1 Functional Structure.................................................................9
Figure 2.2 Project Structure.................................................................10
Figure 2.3 Structure of Matrix Organization........................................11
Figure 2.4 Controlling business strategy...............................................13
Figure 2.5 Theoretical frame.................................................................15
Figure 4.1 Company A Structure 1.........................................................22
Figure 4.2 Company A Structure 2.........................................................24
Figure 5.1 Theoretical frame and conclusion........................................35

List of Tables:

Table 2.1 BURC list..................................................................................9
Table 3.1 Interview Constitution............................................................18
Table 4.1 Company A 2016 OPEX overview report................................23
Table 4.2 Global Marketing KPI..............................................................26
Table 4.2 Company A KPI.......................................................................26
Table 4.3 Company A Project Time Writing (2017, November)..............27
Table 4.4 Company A Project TW Labor cost (2017, November)...........27
Table 4.5 Company A Booking of TW Labor cost (2017, November) ....28
Chapter 1 Introduction

This chapter starts with description of business and academic background of research on business unit/ responsibility center (BURC). After going through the general situation of BURC in modern company and achievement of main researching theories about management control system, the author points out the purpose of this thesis and then outlines the thesis’ structure.

1.1 Background

Since 1920s, BURC, called multidivisional organizations at the beginning, has experienced wide development and been considered as “American capitalism’s most important single innovation of the 20th Century” (Williamson, 1970, pp. 175).

In the past, BURC were used as formal management control system (MGCS) to increase corporations’ standardization and efficiency, which played big role in company’s business life. However, recent research shows that the traditional BURC model can also lead to inflexible and even mechanistic MGCS, standardization can even limit people’s potential capability for innovation (Ahrens & Chapman, 2004). Drivers of globalization and trade liberalization bring more competition and deregulation. Modern corporations need to be flexible and innovative for changing business world. Facing the changing business environment, one big question for BURC and MGCS design and use is that how to avoid command but enable the BURC and MGCS to guarantee standardization and efficiency at the same time of making good use of managers’ potential ability and encouraging innovation.

One research has been done on twenty-six firms founded since 1984 and entered the Fortune 500 between 1997 and 2007. The research shows that more than half of these firms established innovative BURC model: eBay, Starbucks, Qualcomm and Google, to name a few (Johnson, 2010). Once competition has caught up or markets have changed, managers should seize new business opportunities by crafting the right new business model (McGrath, 2010).

To meet the needs of modern corporations’ request for innovation, scholars have been questioning the standardized form of BURC as a main part of MGCS and working on how to enable the BURC in practice (Jorgensen & Messner, 2009). Pfister once said that “control does not mean to be coercively constraining, rather it can be directing, guiding, enabling, supportive and as such leaves much room for creativity and innovation.” (2014).

1.2 Problem Discussion

Although a lot of scholars have done research on enabling of BURC and MGCS in modern corporations, academic research on business model innovation is still in its’ early stages and study of BURC for encouraging innovation is even more limited. According to Trapp’s survey in 2014, many companies, especially big-sized companies, have contributed a lot of successful and failing experience in the areas of enabling BURC to raise innovation. But academic research in the same area is very much behind the practice. The author decides to do an empirical analysis and study of BURC’s use in a middle-sized company and how can this company encourage innovation at the same time of control standard everyday work, hoping the experience from this company can enrich the academic study of BURC and
contribute a possible solution for modern companies' BURC and MGCS for encouraging innovation.

1.3 Innovation and Flexibility

The concept of innovation and flexibility can be very complicated and changeable in different situations. Many scholars for MGCS research have their own understanding of innovation and flexibility. In this thesis, the author chooses Jørgensen and Messner's explanation of flexible MGCS as research base. Jørgensen and Messner takes flexible and innovative MGCS as allowing employees to depart from routine activities to explore new opportunities (2009). This thesis' author takes innovation and flexibility as opposite side of formal and fixed controlling system. Traditionally, MGCS and BURC are considered as controlling systems which are supported by mechanistic rules and standards constraining creativity of people (Ahrens & Chapman, 2004). With limited creativity, people will lose flexibility and emotion for innovation. But modern companies need not only allow but also encourage employees to think outside of box sometimes. So how to find the balance between standard efficiency and innovative ideas is the focus of this thesis.

1.4 Research Questions

To conduct a thorough research of how BURC can be design and enabled in modern company to reach innovation, the author would like to obtain answers to the following questions. The main research question is: How can company encourage innovation and flexibility by enabling BURC and MGCS?

To make sure the research can be more reliable for complicated situation, the author breaks down the main question to three sub-questions:

1. How can the request of innovation and flexible MGCS affect or change the enabling of BURC?
2. Can flexibility be controlled and encouraged at the same time by enabling flexible BURC?
3. Besides of financial results, can innovation and flexible MGCS bring other results for BURC and the company?

1.5 Research Purpose

Although some top management surveys reveal that BURC and MGCS enabling requires innovation, which has been taken an important source of profitable growth and company's development, there is still a lot of companies trapped by traditional BURC model which is lacking the flexibility and innovation needed by current business environment (Reinhold, 2011). Academic research on this field is even more limited. Besides of limited number of journal articles about innovation within MGCS, articles about BURC for innovation almost don't exist.

The purpose of this paper is to provide a detailed analysis of innovation at the process of enabling BURC and MGCS in modern companies. By doing so, the author hopes to offer more experience and academic backup for the changes or even revelation of some companies' MGCS.
1.6 Thesis Outline

This thesis includes following chapters:

Chapter 2 Literature Review and Theoretical Framework

To put the thesis into a broader context, this chapter begin with an overview of previous researches on not only BURC, but also MGCS. In order to make sure readers can follow this paper without understanding problems, this chapter will also clarify some basic concepts about MGCS and BURC. This part goes through the traditional research as well as latest research on BURC and MGCS and explains the research gap of this MGCS area which this thesis can fill in. Then some new MGCS research theories will be introduced as the basis of this thesis’ theoretical framework.

Chapter 3 Methodology

This Chapter is introduction and motivation of research methods chosen to conduct research. It starts with description of research approaches and methods chosen to conduct the research. Then the author introduces the way for data choosing and collection, and how the data will be analyzed and used.

Chapter 4 Empirical foundation

This chapter introduces the corporation chosen for this thesis' analysis. The empirical result of company A’s company structure and some financial reports will be analyzed based on the theoretical framework. In this chapter, the three research questions have been attested.

Chapter 5 Analysis

Based on the theoretical frame built in chapter 2, this chapter analyzes empirical data and information in detailed.

Chapter 6 Conclusion

As the last part of this thesis, the research questions will be answered, supported by the empirical foundation and analysis made in chapter 4 and 5. At the end of this part, the limitation of this thesis and future research recommendation has also been brought up.
Chapter 2 Literature Review and Theoretical Framework

After the introduction of some basic concepts for research of BURC and MGCS, this chapter will walk readers through research environment and achievement of other scholars in the same area. Based on carefully chosen theories of BURC and MGCS, the author frames the theoretical structure which are used for empirical analysis later.

2.1 Literature review

Invented by giant General Motors in 1920s, BURC was diffused widely both inside and outside the USA, to become the most dominant organizational form (Ezzamel, 1992). A lot of scholars and writers have contributed to the research of BURC. Most of their works were published in scholarly journals. (Ezzamel, 1992). Besides of the books and articles the author will discuss in Theoretical Frame part later, there are some classic books of systematic research on BURC worth mention here: David Solomons’ Divisional Performance: Measurement and Control (Financial Executive Research Foundation, 1965), Cyril Tomkins’ Financial Planning in Defictionalized Companies (Haymarket, 1973), Richard Vancil’s Decentralization: Ambiguity by Design (Irwin, 1979), and Mahmoud Ezzamel’s Business Unit & Divisional Performance Measurement (Academic Press).

In Yavitz and Newman’s model of BURS (1982), four elements of business strategy to narrow the choices for BURS are:

1. Market Sough: What products and services are to be sold to a particular group of customers?

2. Comparative Advantage: On what dimension of service, cost, or quality does the unit expect to outdo its competitors?

3. Actions Required to Accomplish the Strategy: What steps will be necessary to move the business unit from where it is today to where it would like to be? This step involves resource application and takes place during the business planning and programming processes.

4. Results Expected: What results should be expected and when? What benchmarks should be attained? By when?

After the establishing of BURS portfolio, it has three characteristics (Yavitz and Newman, 1980):

1. Attractive Individual Units: BURS will differ in perceived attractiveness where attractiveness is usually related to current profit and to prospects for growth in sales and profits. Although each BURS should engage in strategy planning, top management is required to make the tough decisions regarding resource allocation among BURS. Resource plans of business units should be scrutinized at the corporate level in light of opportunity costs (1980).

2. Side Effects Among BURS: BURS may be arranged so that they complement the strengths of one another and build each other up. They are potentially of more value collectively under the same corporation than they are individually. Some of the causes of these synergistic effects are economies of scales in management whereby managers are able to extend their expertise by acquiring firms whose technologies are related to the parent firm or whose special competencies they are also to use in other BURS. Side benefits may also be created as a result of vertical integration (1980).
3. Profit, Cash Flow, and Risk Balance: Still other considerations in corporate strategy involve balancing risk, profit and cash flow. Since businesses differ along these dimensions, it is desirable to achieve a balance among BURS units that yields a desirable overall level profit, cash flow, and risk (1980).

March talked about the key for any corporations to last for long time is the balance between exploration and exploitation (1991). He said that “relationship between exploration of new possibilities and the exploitation of old certainties” (1991, P71). According to him, exploration is “things captured by term such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation” (P71) and exploitation “includes such things as refinement, choice, production, efficiency, selection, implementation, execution” (P. 71).

At the early 21th, Kirby has talked about the original business units limiting the development and the managers had to tailor BURC structure to feet actual needs. His article focuses on the transformation between different types of BURC (2002).

Ahrens and Chapman’s study emphasizes the typical hierarchical and centralized use of MGCS (2004). But in their four design characteristics, flexibility, together with repair, internal transparency, and global transparency, has been emphasized concerns the workforce’s discretionary power regarding the use of control system (2004). They also mentioned the importance of balance between flexibility and efficiency (2004).

Jørgensen and Messner put flexibility as one key for balance efficiency and exploitation. They argued that to make a company efficient, it must exploit current capacities, at the same time, it must be flexible enough to break certain routine to certain extent. (2009).

Although researchers mentioned above have done great contribution to the study of MGCS, academic research on business model innovation is still in its early stages (Trapp, 2014). The research on BURC is even more limited. In 2014, Martin Trapp published a book of analyzing five BURC and talked about the innovative elements of building successful BURC. In his book, Trapp uses inductive method for theory-building case study and analyzed five multi-business companies. He has chosen and analyzed five cases from five different BURC, three successful examples and two failed examples. The three successful cases have creative design of BURC and the new BURC fix the business growth well and brought even higher efficiency to the companies than before. The two failed cases, on the contrary, have lower efficiency and the BURC were out of the control after structure changes.

2.2 Concept of responsibility centers

For companies whose top managers cannot directly control the whole companies’ business, they need to set up MGCS to make sure middle managers can control the business for them. As a method for business control, instead of giving direct command, the main purpose of setting up BURC is to make sure middle manager can have fair amount of authority, within reasonable limits, to control parts of the business and their performance can be evaluated. (Bergstrand, 2009).

2.2.1 Concept of BURC

A BURC is an organization unit that is headed by a manager who is responsible for its activities. A company can be seen as a hierarchical collection of BURC, each of which is represented by a box on the organization chart. At the lowest level are the centers for sections,
work shifts, and other small organization units. Departments or business units comprising several of these smaller units are at the higher level of the hierarchy. In this way, the entire company is a BURC (Anthony & Govindarajan, 2007).

2.2.2 Different types of BURC from monetary measure perspective.

In Anthony and Govindarajan’s theory of BURC, there are four types of BURC according to the measure of the monetary inputs and/or outputs: revenue centers, expense centers, profit centers and investment centers. The measurement of each BURC’s input and output are two criteria which can be used as standard to evaluate this BURC’s efficiency and effectiveness (Anthony & Govindarajan, 2007). For revenue center, output (i.e., revenue) is measure in monetary terms. For expense centers, inputs are measured in monetary term. Profit centers are measured by both input and output. For investment centers, profits are related to capital employed.

<table>
<thead>
<tr>
<th>Type of responsibility</th>
<th>Controlled variables</th>
<th>Responsibility measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost centers</td>
<td>Managing variable resources usage</td>
<td>Cost per unit</td>
</tr>
<tr>
<td>Revenue centers</td>
<td>Managing sales</td>
<td>Total revenues</td>
</tr>
<tr>
<td>Expense centers</td>
<td>Managing activities with non measurable output</td>
<td>Total expenses</td>
</tr>
<tr>
<td>Profit centers</td>
<td>Prices, volume and costs</td>
<td>Operating profit</td>
</tr>
<tr>
<td>Investment centers</td>
<td>Profit, level of investment in operating assets</td>
<td>Residual income, ROI</td>
</tr>
</tbody>
</table>

Table 2.1 BURC list

2.2.3 Different types of BURC from structure perspective

There are mainly two types of BURC from structure perspective: functional type and project type.

Functional BURC is organized by groups of people based on “their common expertise and experience or because they use the same resources” (Gareth, 2001).

Figure 2.1 Functional Structure (Galbraith, 1971)
As Gareth describes, the base for the building of functional BURC is horizontal differentiations, and companies build functional BURC so that they can group tasks into functions to increase the effectiveness of their work (2001). Each function can have its own hierarchy as it shown in Galbraith's format below. After general manager grouped engineers, producers and marketing workers, each BURC can set up their own sub-group/sub-BURC based on their needs. In big-sized international companies, such hierarchy can become many levels.

When companies specialize different functions, they can be benefited with improved skills, technologies and competences (Gareth, 2001). Besides, functional structure can also several advantages according to Gareth (2001):

1. People with similar background can learn from each other and become more specialized and productive.
2. People in the same BURC can supervise each other, control each other's behavior and be each other's backup.
3. After working closely with each other for a long time, people in the same BURC can develop norms and values which can make them even more effective at what they do.

The disadvantages of functional structure are (Gareth, 2001):

1. Because of the hierarchy structure, general managers or middle level managers normally have problems to control BURC under them.
2. Because of the communication problems, it takes long time for decision making.
3. Evaluation based on each BURC is very problematic for the whole group.
4. Under totally functional structure, product can fall behind the schedule.

Because of the disadvantages and limitation of functional BURC and structure, many scholars proposed another type: project BURC. A project is a "temporary endeavor undertaken to create a unique product, service or result, and the major goal of a project is to satisfy a customer's need" (Larson & Gray, 2011). A classical project structure looks like below. Each project, can be on project as one product, has its own finance, market, production, HR and engineering groups.
According to Larson and Gray's theory, there are normally five steps to build a project BURC (2011, pp 102-116):

1. Defining the project scope: project BURC owner needs to be clear on target customers' need, technical requirements, limits of resources, project milestones, and so on.
2. Establishing project priorities: BURC owner needs to be good at planning schedule (time), budget (cost), and scope (performance) of his or her project.
3. Creating the work breakdown structure: project BURC owner needs to break down the tasks into smaller work elements.
4. Integrating the work breaking down structure (WBS) with the organization: BURC owner allocates work elements to employees or organizational units and connect all employees/organizational units through cooperation.
5. Coding the WBS for the information system: codes are used to define levels and elements in the WBS organization elements, work packages, and budget information.

2.3 Matrix Organization.

As early as 1971, scholars like Galbraith realized the limitation of both functional structure and project form of organization, and they proposed matrix structure. Matrix structure can be built by either functional BURC or project BURC. The combination of both BURC and Project BURC in matrix organization is mainly recommended by scholars like Galbraith.

Figure 2.2 Project Structure

For companies developing high technology products, choosing functional structure to manage the company will face varying amounts of specialized resources applied in varying sequences, which requires either fantastic amounts of information or long lead times for task completion.
(Galbraith, 1971). But if the companies choose project form of structure, more people are needed to work with different projects and it will be harder for technologies’ development. The solution recommended by Galbraith is matrix organization of combining functional and project structure.

Theoretically, matrix organization takes advantages of both functional and project organizations and avoiding their disadvantages, but matrix organization has some disadvantages in practice. Gareth has listed three main disadvantages (2001):

1. Matrix organization lacks a control structure which leads employees to develop stable expectations of one another.
2. Matrix organization lacks a clearly defined hierarchy of authority which leads to conflict between functions and product teams over the use of resources.
3. When top managers do not get the result they expect, they sometimes try to increase their control over the matrix and to increase their power over decision. Slowly the matrix becomes flatter and less flexible structure.

2.4 Theoretical frame

2.4.1 Galbraith standards of choosing MGCS.

The first step for building MGCS is the design and choosing of BURC and MGCS. Which structure should a company choose then? Galbraith offers four standards (1971):

1. Type of the company: Whether the company is a pure functional, pure product, or more combined organization?
2. Product Lines: How many product lines the company has and how often the product lines change?
3. Level of technology: Which levels of technology the company works with? Is expertise critical to competitive effectiveness?
4. Economics of Scale and Size: Does the company needs expensive equipment in development and manufacturing? How big is the company?

By building up matrix organization, companies manage to reduce functional varies and overcome the problem of subunit orientation, open communication between functional specialists by creating change for different functions to learn from each other, and also maximize its use of skilled professional who can move from product to product (Gareth, 2001). More importantly, for product focused companies, matrix organization form helps to specializing and development functional capability at the same time of keeping products in the schedule (Galbraith, 1971).

2.4.2 Simons’ level of control.

To get to know how modern companies work with innovation and revolution of MGCS, Simons did research on 10 newly pointed top managers and their choice and setting of MGCS. Developed traditional understanding of MGCS, Simons defines MGCS as “the formal, information-based routines and procedures used by managers to maintain or alter patterns in organizational activities” (Simons, 1987). Based on this definition, Simons proposed four types of management control systems based on his analysis of the 10 newly pointed top managers as styles of using MGCS for fostering innovation:
1. Beliefs systems are used to “define, communicate, and reinforce the basic values, purpose, and direction for the organization”. Beliefs systems are mainly shaped by the company’s core values (Simons, 1994, p. 170). This system helps to “inspire and direct the search for new opportunities” (Simons, 1995, p. 7).

2. Boundary systems are “created through codes of business conduct, strategic planning systems, and operating directives provided to business managers.” They are used to “establish explicit limits and rules which must be respected” (Simons, 1994, p. 170). This system also limits “opportunity-seeking behavior” (Simons, 1995, p. 7).

3. Diagnostic control systems are used to motivate and “monitor organizational outcomes”, reward achievement and “correct deviations from present standards of performance.” Diagnostic control systems are feedback systems for tracking variances of business plans and budgets (Simons, 1994, p. 170-171).

4. Interactive control systems are used by “top managers to regularly and personally involve themselves in decision activities of subordinates”. The purpose of interactive control systems is to “focus attention and force dialogue and learning throughout the organization” (Simons, 1994, p. 171). Interactive control system will lead to “organizational learning and the emergency of new ideas and strategies” (Simons, 1995, p. 7).

The table below summarizes Simons’ four categories of MGCS:

![Diagram of MGCS categories](image)

Figure 2.4 Controlling business strategy (Simons, 1994)
According to Simons, the four levers, creating opposing forces, support each other to reach the balance of the organization—effective strategy implementation. Beliefs systems and interactive control systems create “positive and inspirational forces”. Boundary systems and diagnostic control systems create constraints and ensure compliance with orders to avoid risk. (Simons, 1995, p. 7-8).

Simons controlling business strategy and empirical research offers theoretical support for the flexibility research of BURC.

2.4.3 The enabling of MGCS and BURC

After the chosen and design of MGCS, companies need to make sure the chosen structure can be realized and accepted by managers. If managers feel that the MGCS can help them to control their work better, the MGCS can be received positively; but if managers feel that top management coerce them to accept the MGCS, their attitude will be in a negative way (Jordan & Messner, 2012). To make sure the MGCS is enabling control but not coercive system, Ahrens and Chapman proposed four design principles that underlie the enabling use of management control system: repair, internal transparency, global transparency, and flexibility (2004). The traditional cybernetic model of MGCS is aimed to increase efficiency in top-down hierarchical and centralized structure. Ahrens and Chapmans’ model increased the flexibility and innovation of modern companies.

1. Repair: managers allow to repair the formal MGCS to solve problems and correct mistakes. The main way of doing repair is to break down standards into it constituents so that each process step “could easily be used for operational problem solving” (2004, pp. 279-280).

2. Internal transparency: internal process of repair needs be made accessible to organizational members. It is important to give layered access to information and avoid information overload (280).

3. Global transparency: organizational members need to perform their specific duties with good knowledge of overall context. Information of key targets should not be only limited in senior management, but needs to be transparent to broader units and organizational members (280).

4. Flexibility: technology offers many possible ways for building up different aggregations of performance information and management control system can support highly differentiated, yet interrelated, mental maps of the organization (281).

To balance the tensions between the company’s efficiency and innovation, Jørgensen and Messner suggest that companies needs to exploit current capacities with sufficient flexibility and abandon routine to a certain extent (2009). In their empirical studies, they use Ahrens and Chapman’s ideas to analyze companies who break certain rules and find good balance between efficiency and flexibility.

2.4.4 Dimensions of performance evaluation.

Evaluation of different BURC and managers’ performance is also important part of MGCS design. The mainly method for performance evaluation is based on accounting information of cost (for cost centers), income (profit centers) and revenue (revenue centers) (Anthony & Govindarajan, 2007). However, accounting information usually “does not capture all the dimensions of performance considered relevant for an organization or manager” (Jordan &
Messner, 2012). Using only accounting information for performance evaluation is considered as incompleteness, which will make managers experience the control system as more coercive (Jordan & Messner, 2012). However, Jordan and Messner believe that “as long as a flexible handling of the control system is possible, such a system can still be regarded as enabling despite its perceived incompleteness” (2014, pp. 561). In their article, Jordan and Messner suggested other dimensions for evaluation besides of accounting result as dimensions for performance measure, such as quality, on-time, delivery, cycle, efficiency and productivity (2014, pp. 550). There are two conditions that operational managers can be flexible with performance measure and not just limited in incomplete dimensions:

1. Top management has to communicate the role and relevance of indicators (2014).
2. Managerial practice exhibits an important degree of continuity with the past (2014).

2.4.5 Summarize of this paper’s theoretical frame.

To summarize, this paper focuses on the discussion of enabling of BURC for both standardization, efficiency and innovation, by analyzing chosen case through Galbraith and Simons’ MGCS and BURC designing theory, and Ahrens, Chapman, Jørgensen and Messner’s theory of MGCS flexibility, and Jordan and Messner’s theory of flexibility to avoid incompleteness.

![Theoretical frame](image)

Figure 2.5 Theoretical frame
Chapter 3 Methodology

This chapter describes the method and approach the author uses to conduct the research, as well as the way to collect data and the types of data this thesis using for analysis.

3.1 Approach

Literally, research is a process aiming to discover, interpret and communicate new knowledge; research has the potentiality to enhance our understanding towards the world. (Ryan, 2003). There are mainly two research theories: deductive theory and inductive theory. Deductive theory means that researchers first formulate hypotheses based on specific knowledge, collect empirical data to formulate hypotheses, and then confirm to the original knowledge upon which their studies have based on (Bryman & Bell, 2003; Saunder et al., 2007). On the contrary, inductive theory indicates that researchers firstly have systematically observed and assessed the collected data, and then come out with new conclusions or theories (Cooper & Schindler, 2003; Saunder et al., 2007).

This thesis aims to investigate the development and use of MGCS and BURC based on existing theories. The theoretical framework in chapter 2 has been built based on research achievement of other scholars. In other words, the author of thesis will follow the process from theory to hypothesis, then to empirical studies and finally conclusion. So this thesis uses deductive research approach. Based on the theoretical frame, the study and analysis will be based on case study.

3.2 Strategy.

In Bryman and Bell’s research strategy system, there are two methods: quantitative and qualitative methods (2003). The qualitative method puts a great focus on interviewee’s point of view, relies on words rather quantifying data (Bryman & Bell, 2003). Quantitative method, on the other hand, is based on collection of numerical data and building the relationship between data and theory (Bryman & Bell, 2003). Holme and Solvang mentioned that the difference between the two methods lies on which numbers and statistics influence and being use in the research (2007). The quantitative method is formalized and standardized with more general information and the benefit of this method is the high level of reliability from the outcome. The qualitative method, however, offers a deeper understanding of the research field and to describe the overall picture of the context of the study, which leads to a high level of validity (Holme & Solvang, 2007).

Both methods have advantages contributing to the research’s representativeness and tenability. The thesis aims to find out the actual situation about the use of BURC in modern corporations, which requires detailed information about chosen cases’ background, needs, design of BURC, and measure of performance standards. Since both methods have special focus and have different research advantages, the two methods can be used to enrich each other. To make sure the author can dig to details at the same time of catching the whole picture, both methods are used in this thesis.

To get the general view of the chosen corporation’s BURC structure design and each BURC’s performance, the raw data of corporation’s financial situation (master day book) and internal financial report will be collected and analyzed. The raw monetary data is the key for input/output evaluation and performance measure, which shows the overview of this
corporation's MGCS structure and how the system works. In this thesis, the author uses not only some part of the company's master day book, budget, reports and key performance indicators as quantitative data for analysis. The aim of using such quantitative data is to get unbiased and detailed view of the enabling situation of BURC in the company. To get deeper understanding of the motivation and function of the MGCS structure, interviews were also used. As Saunder wrote, interviewing is a qualitative technique and it has various advantages that quantitative method does not have (2010). With the help of qualitative method, more detailed data could be studied, and much wider depth could be covered (Silveman, 2010). The qualitative data collected by interviews helps the author to understand the background and result of quantitative data analysis. For abstract reasons and situation of designing and enabling of BURC which can't be shown by written documents, qualitative information helps to offer clear picture of the company's BURC enabling.

3.3 Data.

Jacobsen introduced two types of data for academic research: primary data and secondary data (2002). Primary data is the new data collected for the first time and the secondary data is the data collected from the existing data created by others (Jacobsen, 2002).

It is always desirable to have different data within the research to establish a control and complementary mechanism (Jacobsen, 2002). So the author uses both types of the data in this thesis. The primary data used in this thesis has been gathered by interviews of managers and financial workers of the chosen company. Secondary data in this thesis is taken from authoritative reports and statistics in a qualitative or quantitative form, the financial data and report, to be specific.

By using both types of the data, a more detailed and representative picture can be shown in this thesis.

3.4 Procedure

The thesis follows the procedure of Bryman and Bell's steps of qualitative research (2003, P. 282-284):

1. General research questions: all data collection and research are designed based on the research questions proposed on chapter 1.

2. Selecting relevant site and subjects: Analyzed case is chosen carefully based on the research purpose and the needs of theoretical analysis.

3. Collection of relevant data: quantitative and qualitative, primary and secondary data are collected for analysis.

4. Conceptual and theoretical work: after theoretical review, a theoretical frame is built in chapter 2 for analysis to ask the research questions.

5. Interpretation of data: all collected data is analyzed in chapter 5 within theoretical frame.

6. Writing up findings/conclusions: conclusion of analysis is made in the last chapter.

3.5 Chosen Sample
The using of BURC started at the early 20th in USA and has been developing very fast. Fligstein did a survey in the year 2000 and the statistic result shows that all most all top 100 corporations in USA began to use BURC as management control method with in less than 100 years. Today, BURC's use does not only limited to big-sized corporations. Many middle-sized and even small companies began to use BURC to reach more effective and profitable MGCS.

Considering the research's completeness and need for detailed analysis, the author chooses one middle-sized international high-tech company as sample for research data. This company is at the size that one bachelor thesis can cover the whole picture of its MGCS. The company's business is also complicated enough because of fast-changing international business environment. As a startup high-tech company, innovation is an important part of the company's everyday work. All these characteristics makes this company a good example of modern corporations which needs standardized MGCS to improve efficiency, but also innovation to catch up with the changes of the business world.

3.6 Interview

After the setting of research questions, interview has been designed to answer the research questions. To get a view of chosen company's BURC situation from different perspectives, the author chose to ask four people of this company, who are responsible for different types of BURC. English is the language for interviews.

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Name</th>
<th>Position</th>
<th>Date of interview</th>
<th>Interviewing time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mr. Borge</td>
<td>CEO</td>
<td>December 16th, 2017</td>
<td>30 min</td>
</tr>
<tr>
<td>2.</td>
<td>Mr. Rosen</td>
<td>CFO</td>
<td>December 10th, 2017</td>
<td>30 min</td>
</tr>
<tr>
<td>3.</td>
<td>Mr. Jarl</td>
<td>Global marketing director</td>
<td>December 10th, 2017</td>
<td>40 min</td>
</tr>
<tr>
<td>4.</td>
<td>Mr. Gredinger</td>
<td>Project manager</td>
<td>December 10th, 2017</td>
<td>50 min</td>
</tr>
</tbody>
</table>

Table 3.1 Interview Constitution

Based on the theoretical framework presented in chapter 2, all interview questions are designed to fit the chosen company's real situation. Instead of "why" questions, "how" are asked to make sure the questions are in an open and unbiased manner (Yin, 2009). During the interview, some changes of the interview questions have happened to make sure the author can catch the unexpected real point of interviewees. Because of the short time for the four face-to-face interviews, the author got the permission to sound record the interview, which helps the author to listen and compare four interviews during the process of writing this thesis.

Due to the request of the chosen company, the name and some registration information of the company can't be written in this thesis. So the author uses company A instead of the company's real name.

3.7 Interview question design

The designing of interview questions mainly follows two main standards:

1. Research purpose and questions: the purpose of interviews is to find answers to research questions. All research questions are set up as supportive questions to research questions from different perspectives.
2. Theoretical support: theories chosen in chapter two does not only offers frame for analysis, but also foundation and perspectives for interview question design. Interview questions cover all perspective and questions proposed by chosen theoretical frame.

3. The real situation of the company: in order to catch important information which doesn’t covered by research questions and theoretical frame, the author also set up some open-ending questions, which allow interviewees to speak out their full opinion about researching area.

All 18 interview questions can be found in appendix at the end of this paper.

Bryman and Bell said that interview guideline and pre-set list of questions can help to organize the interviewing process (2011). So the author make sure interviewees receive all interview questions before the interview and they have time to think about the answer. Holme and Solvang mentioned the potential redundancy following the close contact between interviewees and interviewers, which may lead to pre-determined expectations where the interviewees answer questions as they think it is expected by the interviews (1997). The author has advantage to avoid this problem because of college relationship between interviewees and interviewer. The author has deep understanding of the company’s controlling work and interviews will give the author answers for some questions from managers’ perspective. By combining the understanding from different perspective, the author can get more comprehensive picture of the company.

3.8 Limitations of research methodology

Although the author tries to use both qualitative and quantitative methods in this thesis to make sure the thesis can be representative with both depth and breadth, there is still short come for the methodology.

One limitation is the limited number of cases analyzed in this thesis. Because of the limitation of research time and the length of the thesis, the author can only choose one corporation’s data for analysis. This may raise the question of typicality. In other words, the chosen company may be not typical case for all big, small and even other middle-sized corporations.

Another limitation is the lack generalization of deductive approach (Saunders et al., 2009). Although quantitative method is also used in the thesis, the data is still limited to one company’s financial data. The data or information beyond this company is not clear. With statistic data’s support, the tenability of this thesis can be questioned.
Chapter 4 Empirical Foundation

This chapter offers information about the case which will be analyzed in Chapter 5. The chosen company’s background and MGCS system is explained in detail.

4.1 Background of the chosen company

4.1.1 Chosen of empirical case

Scholars have noticed that new business models are mostly launched by new entrants as opposed to established industry players (Comes & Berniker, 2008). For new companies, fresh eyes for designing and building BURC leads to more need for flexibility. So the author chose a middle-sized startup company, company A, as empirical case.

4.1.2 General background—type, product, and technology

Company A was registered in September 2015 and the company is in the third largest city of Sweden, Malmö. The region the company is located in is called Västra Hammen, which is known for location of a great number of startup companies and activity center for startup company communications. The company’s four founders and first 25 employees were employees of one of the Fortune Global 500 companies, which is a Japanese electronics giant producing high-tech products such as TV, camera, smart phone, smart watch, housework robot, and so one. When founders and employees were working for the Fortune Global 500 company (Company S), they worked for the same product category (smart wearable product) and their work covered all operational function of this product category (industrial design, research and development, operations, sales and marketing, and finance and business controlling). Although Company A started in 2015, most employees at the beginning have been colleagues for many years and they are quite familiar with their work and are already used to work with each other. On the one hand, as a very new company, Company A shares characteristics of all startup companies and needs to explore in many ways for the right and suitable MGCS and BURC. On the other hand, inherited not only technical knowledge and lab equipment, but also management and administration experience from a super-sized international company, Company A’s MGCS and BURC design and building didn’t start from scratch.

Company A continues with what employees are good at: developing and selling smart wearable product. But Company A is also an innovative company, wanting to do better job than Company S and create products with new concept and technology which can be accepted by more consumers. The first product category is a totally new concept for the whole world: connected watch, also called hybrid watch. Unlike pure smart watches, connected watch combines traditional watch technology and cutting-edge electrical technology. All smart watches on the market now are actually mini versions of smart phones, which have different functions for message, calling, date, health control, and so on. Connected watch, on the other hand, focus on using traditional looking watch with function to connect to smart phones, furniture, video players and games, cars, and so on.

4.1.3 Company value

Company A’s core value is “smarter and nicer”. CEO Borge mentioned that the concept of “smarter and nicer” is very broad and can be any possibility people think about and experience
in everyday life. All Company A employees are encouraged to think about how they can make others and their own life easier and nicer. There is one white board in the middle of the hall of the company. Everyone can write on the board when they suddenly think of some new ideas. Good ideas will be summarized every day after work for further evaluation. Creative ideas don’t need to be figured out only during the limited eight working hours in the office. When employees are training, biking or driving home, having vacation, enjoying social life, and so on, everyone can think about what my life can be if I can… For instance, when I walk home alone after later party, what if my husband can know where I am and walk me home from long distance with the help of high-technology? When I leave home for vacation but forget if I have turn off the oven or not and really want to go back to check, what if high-tech can help me to control all my family system from long distance? When I came back home late can feel too tired to search for light switch in darkness, what if I can turn on the light early without any searching? All such kind of ideas are encouraged, and the company sets special group activities and communication area for employees with different rolls to talk about their new ideas. Good ideas can be used in the company’s next product.

4.1.4 Size and developing trend

When employees’ number has been increasing a lot, the communication between different BURC is important. Besides of routine communication activities for different BURC, Company A also sets up a big screen near the entrance of the company. The screen rolling plays the important events or information of different BURC, for instance, net sales in different countries, most popular product collections, new articles about products, customer feedback, new product concept, new functions for the products, and so on. The picture or video showed by the screen is updated every 20 minutes in all 24 hours.

Now, Company A has developed to around 90 employees in average of each month and with three daughter companies in US, UK and China. The company CEO Mr. Borge said that efficiency is the key word of Company’s everyday work. The company aims to develop nice-looking products which help consumers to save time but experience more in life. For Company A’s employees, efficiency is also the key for success. As a new startup company, Company A faces competition with companies which have much bigger technical and business advantages. Developing products with high quality, unique characteristics and attractive outlook in very short time is very important for Company A to occupy the market. In 2017 February, Company A launched world’s first connected watch in Malmö. The company has been honored as one of Sweden’s 33 most promising young technology companies in both 2016 and 2017.

4.2 Company’s MGCS and BURC choice

4.2.1 Early stage

At the beginning of the company’s establishment, the MGCS and BURC structure was mainly copied from Company S, where management team have worked more than 20 years. From day one, the BURC and MGCS structure were almost the same as the structure of the Company S and every employee know what they should do.

Under CEO, there were four BURC which covers all works of production line and company operation. All four cost centers, even Sales and Marketing, were typical cost centers at that time. Admin contained only three employees, who worked for HR, finance, business controlling, workplace solution, legal and all functions which keeps the company’s logistic work. Sales and Marketing (S&M) contains also three employees, whose main job at that
moment is market research and analysis to support research and development (R&D). Product creation contains four employees, focusing on the industrial design and creating of product concepts. Development & Operations had 14 employees and covered product’s research, development, sourcing and production. Key performance indications (KPI) to measure the four cost centers were mainly about cost control, product quality and different kinds of deadlines. Under these four BURC, there were ten sub-BURC: Admin covered Business & Finance, which took responsible of all finance work of the company, and Workplace Solution, which covered all working environment, legal issue, HR, and so on. S & M naturally covered Sales and Marketing. Product creation took responsibility of figuring out the basic product concept and evaluating chosen users’ feedback of the product. So this function had three sub-BURC: Product Management, Industrial Design (ID), and User Experience (UX). The last function Development & Operations was the largest BURC of the company, which covered three sub-BURC: Software research and development (SW), Hardware research and development (HW), and Project Office & Operations, taking care off sourcing, supply chain, sample producing, and so on. There were also three projects, as three cost centers, under Development & Operations. There were three projects under cost center Project office & operations. Project Primo was project to totally smart watch. This project was cooperation with another big technical company, which is the biggest investigators of Company A. Project Primo guaranteed the financial investment for Company A’s operation and development of its own products Secondo and Garbo. Secondo is male connected watches and Garbo is for female connected watches. Because male watches and female watches requires different technology and face different target groups, so two projects were set up to track different products and customer groups.

![Company Structure Diagram]

Figure 4.1 Company Structure 1 (January 2016)

As figure 4.1 above shows, all BURC of Company A at 2015 and 2016 are cost centers, measured by cost control standards and product quality standards. The whole company’s BURC were structured in a hierarchy. CEO had four functional managers reporting to him.
Under each functional manager, there were two or three junior managers. Finally, three project managers reported to one junior in Project office & operations. The company took a down-up process for all business and budget planning. All sub-cost centers made plan for their own. Functional managers summarized all budget and plan from junior managers, adjusted them, and reported to CEO and CFO. CEO and CFO balanced four functions’ plan and requests and finalized the budget and business plan for the whole company.

Table 4.1 shows OPEX general split of Company A in 2016. At the beginning of company’s establishment, the focus of the whole company’s work was on research and development (R&D). In 2016 quarter 1 (Q1), Development and operations and Product creation took totally 1,5 million USD for OPEX, around 70% of the whole company’s OPEX cost. Admin’s OPEX expenses were comparatively same each month of the whole year. Besides of cost centers Product creation and Development & Operations which took the main responsibility for product development, all the other cost centers’ working focused on support the two R&D cost centers work. S&M OPEX cost is only 0,13 million USD, around 6% of the whole company. It is only natural that only cost centers were needed when not much income was made. Hierarchical MGCS structure was chosen because Company A’s main task at the early stage was mainly functional and it was easier to just copy MGCS from Company S, where most employees and management team had used to work.

<table>
<thead>
<tr>
<th>Functional cost center</th>
<th>Q1</th>
<th>2016Q2</th>
<th>2016Q3</th>
<th>2016Q4</th>
<th>2016Q5</th>
<th>2016Q6</th>
<th>2016Q7</th>
<th>2016Q8</th>
<th>2016Q9</th>
<th>2016Q10</th>
<th>2016Q11</th>
<th>2016Q12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>516</td>
<td>-1,56</td>
<td>-1,60</td>
<td>-1,37</td>
<td>1,90</td>
<td>2,39</td>
<td>-1,37</td>
<td>-1,29</td>
<td>-1,64</td>
<td>-2,31</td>
<td>-1,653</td>
<td>-1,882</td>
<td>-1,99</td>
</tr>
<tr>
<td>Dev. &amp; Operations</td>
<td>1,075</td>
<td>-3,63</td>
<td>-6,79</td>
<td>-7,74</td>
<td>-7,58</td>
<td>-4,30</td>
<td>-3,20</td>
<td>-5,94</td>
<td>-5,15</td>
<td>-7,89</td>
<td>-5,279</td>
<td>-5,904</td>
<td>-6,25</td>
</tr>
<tr>
<td>Product creation</td>
<td>-3,881</td>
<td>-1,22</td>
<td>-1,83</td>
<td>-1,45</td>
<td>-1,89</td>
<td>-1,01</td>
<td>-1,63</td>
<td>-1,66</td>
<td>-1,89</td>
<td>-1,71</td>
<td>-2,796</td>
<td>-1,741</td>
<td>1,055</td>
</tr>
<tr>
<td>S &amp; M</td>
<td>-1,331</td>
<td>-0,95</td>
<td>-1,10</td>
<td>-1,37</td>
<td>-3,17</td>
<td>-1,26</td>
<td>-2,22</td>
<td>-2,99</td>
<td>-2,28</td>
<td>-5,74</td>
<td>-1,765</td>
<td>-2,052</td>
<td>-2,97</td>
</tr>
<tr>
<td>OPEX Total</td>
<td>-2,110</td>
<td>-0,79</td>
<td>-1,129</td>
<td>-0,79</td>
<td>-1,313</td>
<td>-0,851</td>
<td>-0,884</td>
<td>-1,096</td>
<td>-1,042</td>
<td>-1,545</td>
<td>-1,1493</td>
<td>-1,548</td>
<td>-5,56</td>
</tr>
</tbody>
</table>

Table 4.1 Company A 2016 OPEX overview report

In table 4.1, we can also see the trend of increasing input in S&M. Because the company planned to launch product in February 2017, the needs for brand marketing and searching for potential customers have been becoming more and more important. In December 2016, the input to S&M increased around four times and took 29% of the total OPEX cost of the company. In company’s 2017 November report (not allowed to be shown in thesis yet), S&M OPEX input increased to 58% of the whole company’s total OPEX input.

4.2.2 Structure changes

During the company’s development, problems regarding BURC and MGCS stand up. After the product was launched, the company has rapidly increasing income and more types of BURC are needed. Profit is the company’s lifeline. So S&M work has been emphasized more and more. On the one hand, increasing selling and profit becomes a focus of the company’s work. On the other hand, as an innovative high-tech company, Company A has to keep working on technology innovation and new product developing to guarantee the company’s competitiveness in the fast-growing electron industry. CEO Pål explained that when the company needs more cooperation between different BURC and more dimensions for controlling, the old structure showed some problems, such as long decision timing, rigid working process and lack of communication between BURC and between top management and junior managers. So the company needs eagerly more flexibility and controlling at the
same time. In August, Company A has experienced a great change of BURC and MGCS structure.

As a middle-sized Swedish company, even though the company faces more product lines and more working focuses, the company abandoned the traditional hierarchical MGCS structure and designed flatter MGCS structure as figure 4.2 shows below.

The original four-level hierarchical structure has been replaced by two-level structure. The original four main BURC have been broken done to 11 BURC. Original junior managers become functional managers. Business & Finance is still cost center taking care of all financial work of the company. Workplace Solution & HR is still cost center working with environmental and working coordination. ID and UX have been separated from Product Creation, become two separated cost centers. SW, HW, Sourcing, Supply & Quality have also been separated from Development & Operations and became separated cost centers. Sales, Global Marketing and Customer Service have been broken done from the old S&M and become three profit centers: Sales taking care of off-line sales channels: distributors and retailers, also called Business to Business channel (B2B). Global Marketing works with brand promotion, advertising and online sales channel directly to end consumers, also called Business to Consumer channel (B2C). Customer Service works with consumer supporting and product feedback analysis. These three profit centers are control by not only cost KPI, but also income KPI and margin KPI. From financial perspective, each BURC’s performance is followed up each month to see what’s the deviation they have from standard financial standards. From non-financial perspective, BURC’s performance is followed up quarterly. For instance, market courage and product quality are checking once every quarter.

![Figure 4.2 Company A Structure 2 (December 2017)](image)

In December 2017, three people work for Business & Finance, two for Workplace solution & HR, four for Industrial design, six for User experience, 14 for SW, 12 for HW, three for Sourcing, three for Supplier & Quality, 27 for Sales, 16 for Marketing, and six for Customer service. Among these employees, the company’s three daughter companies in US, UK and China are mainly for sales and marketing.

Based on the first product line’s success, Company A increased two more projects. Now the company has totally four projects: Primo, Secondo, Garbo, Terzo, and Green House. Terzo is for next generation’s connected watch. Green House is for collecting new and creative ideas which may be used for products in the future. These five projects are no longer under any
functional BURC anymore. They are five separated BURC overlapping with all functional BURC as it showed in the chart above. As figure 4.2 shows, functional BURC and projects’ work overlaps with each other. Cooperation and team work between different BURC becomes the main way for business budget planning. For instance, new project Terzo’s project manager is responsible of make clear plan of project development and launching time line. His needs for workers from ID, UX, SW, HW, Sourcing, Quality, Marketing, Sales and Customer service will need filled in at the different stages with the help of different functional managers. Project managers and functional managers cooperate a lot on what kind of people and work different projects need. Functional managers need to decide who can fill in project managers’ need and how to optimize resources they have to balance and meet the needs of different project. For instance, in a project manager’s plan, there should be different project stages with tasks for different functional BURC. At the beginning stage of a new product, S&M helps to summarize market analysis and customer feedbacks, which help ID and US to come out with project concept and design. Then SW and HW need to fill in engineers who can finish the job according to project request. Then Sourcing and Supply Chain need to deal with suppliers with materials for prototypes and mass productions. Both project managers and functional managers are involved in this whole process. At the corporate level, CEO and CFO focus not on telling managers their tasks, but on coordinate different BURC’s cooperation, optimize the use of functions, and also evaluating BURC’s performance with different standards.

The new structural experience has increased flexible use of manpower and working process. Most employees can work for different projects or functions based on needs and their specialty. Employees are encouraged to not only limit on their daily work, but also develop their potential capability to see if they can work for other function or projects.

4.3 Independent responsibility.

One main purpose of creating BURC is to give operational managers enough authority and responsibility to manage BURC which they are responsible of. Company A does not have big size, but the company’s work covers many perspectives. So the design of BURC from very beginning is that every BURC manager/owner takes full responsibility of his/her BURC, both before and after structure changes in 2017. CEO and CFO’s main job is to choose the right managers and set up goals and targets for budget, delivery deadline, product quality, sales volume, profit, market share, home page traffic and so on. Every BURC has its own KPI to evaluate its performance.

Take profit center Global Marketing as an example. CEO and CFO only take responsibility of setting up three standards: budget for financial result (online net sales, revenue, profit, sales volume and OPEX), target for other performance (country, magazine coverage, brand influencer number, brand awareness and homepage traffic), as well as nine KPI as standards to evaluate the BURC’s performance. After the three standards is communicated with BURC responsible manager Mr. Jarl, he takes full responsibility of business plan and manpower plan to meet the target. Mr. Jarl and his team’s performance will be evaluated based on KPI below and their bonus is directly connected to the evaluation result.
Table 4.2 Global Marketing KPI

Table 4.2 shows all dimensions Global Marketing needs to think about during their everyday work. Online sale volumes, net sales, profit and OPEX will be evaluated once every month. Homepage traffic and brand influencers’ situation requires evaluation statistically also on month basis. Country coverage, brand awareness and Media coverage requires deeper marketing research and will be evaluated once every quarter.

Table 4.2 Company A KPI

As a summary of all BURC, Company A is seen as a profit center. So management team creates target and KPI for the whole company. Company A has budget, combining all BURC budget, and KPI (as below) which measure the performance of the whole company, and CEO and CFO’s bonus is connected to the evaluation results.
Table 4.2 shows the KPI for the whole company, which is like a summarized KPI of all BURC’s KPI. All financial standards need to be evaluated on monthly bases and some standards which need cost and time requires evaluation are on quarter basis.

4.4 Share responsibility

4.4.1 Shared responsibility

Although each BURC responsible has high authority and responsibility, different BURC have to help and support each other in many different ways. After structure changing in August 2017, BURC’s work overlap with each so that team work and shared responsibility have been emphasized. Take project Primo as example, it is a typical profit center, whose expense and income are both important. As Company A’s first product line, Primo needs to reach high quality, good outlook, edge-cutting technical functions and reasonable price with low cost. During the whole process of the product’s design, develop, producing and sales, Mr. Gredinger as project manager has been getting great support from Admin, R&D and S&M BURC. At the beginning stage of the project, Gredinger focused mainly on ID, UX and R&D BURC. S&M BURC’s main job was to supporting R&D with market feedback. Until the product has been launched in February 2017, Mr. Gredinger’s main focus has been generally moved from R&D till S&M. R&D BURC have been becoming supporting to S&M BURC, and R&D BURC’s focus moved to new projects. During this process, different BURC’s share responsibility is the key for the product’s success.

4.4.2 Time Writing

Gredinger introduced that one biggest problem regarding overlapping BURC and shared responsibility is the evaluation and measurement of overlapping BURC’s performance. Take the budget and accounting of manpower expense as an example. When same people work for different BURC, which BURC should take these people’s labor cost and how can their salary be booked under different BURC? To solve this problem, Company A introduced a new concept for labor cost booking: Time Writing (TW). Thanks to technology, Company A can use a time reporting system QBIS to track each employee’s working hours. For all employees who work for different projects, Company A request them to report how many hours they are working for different projects every day. These hours reported to projects are called Time Writing. QBIS calculates out TW every day.

<table>
<thead>
<tr>
<th>Project</th>
<th>HW</th>
<th>ID</th>
<th>Operation</th>
<th>Product</th>
<th>Marketing</th>
<th>Sales</th>
<th>Supply Chain</th>
<th>SW</th>
<th>UX</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primo</td>
<td>0</td>
<td>0</td>
<td>241</td>
<td>0</td>
<td>1026</td>
<td>1 151</td>
<td>26</td>
<td>443</td>
<td>0</td>
<td>2 888</td>
</tr>
<tr>
<td>Secondo</td>
<td>316</td>
<td>53</td>
<td>50</td>
<td>31</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>807</td>
</tr>
<tr>
<td>Garbo</td>
<td>220</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>1 272</td>
</tr>
<tr>
<td>Terzo</td>
<td>188</td>
<td>15</td>
<td>50</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>148</td>
<td>28</td>
<td>935</td>
</tr>
<tr>
<td>Green house</td>
<td>59</td>
<td>13</td>
<td>0</td>
<td>41</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>583</td>
</tr>
<tr>
<td>Total:</td>
<td>782</td>
<td>80</td>
<td>368</td>
<td>115</td>
<td>1026</td>
<td>1 151</td>
<td>26</td>
<td>1 030</td>
<td>164</td>
<td>6 484</td>
</tr>
</tbody>
</table>

Table 4.3 Company A Project Time Writing (2017, November)

Table 4.3 shows where people in different BURC put their time on. For instance, HW employees have worked totally 782 hours for project in November. Primo does not need HW support during November; HW worked 316 hours for Secondo. For the whole company, people from different functional BURC have worked totally 6 484 hours in November.
For accounting purpose, Company A sets up a standard price for each working hour: 500 SEK per hour. In other words, the TW table above can be transferred to a TW labor cost table by timing all hours with 500.

<table>
<thead>
<tr>
<th>Project</th>
<th>HW ID</th>
<th>Operation</th>
<th>Product</th>
<th>Marketing</th>
<th>Sales</th>
<th>Supply Chain</th>
<th>SW</th>
<th>UX</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primo</td>
<td>0</td>
<td>0</td>
<td>120 625</td>
<td>0</td>
<td>513 125</td>
<td>575 625</td>
<td>13 125</td>
<td></td>
<td>221 344</td>
</tr>
<tr>
<td>Secondo</td>
<td>157 813</td>
<td>26 250</td>
<td>25 000</td>
<td>15 625</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>121 250</td>
</tr>
<tr>
<td>Garbo</td>
<td>110 000</td>
<td>0</td>
<td>0</td>
<td>13 125</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>96 750</td>
</tr>
<tr>
<td>Terzo</td>
<td>93 750</td>
<td>7 500</td>
<td>25 000</td>
<td>21 250</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>73 750</td>
</tr>
<tr>
<td>Green house</td>
<td>29 375</td>
<td>6 250</td>
<td>0</td>
<td>20 625</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>291 250</td>
</tr>
<tr>
<td>Total:</td>
<td>390 938</td>
<td>40 000</td>
<td>183 750</td>
<td>57 500</td>
<td>513 125</td>
<td>575 625</td>
<td>13 125</td>
<td>515 094</td>
<td>81 875</td>
</tr>
</tbody>
</table>

Table 4.4 Company A Project TW Labor Cost (2017, November)

From the table 4.4, we can get the information of how much the company expended on labor to different BURC. For instance, the company spent totally 3 241 969 SEK in project labor cost in November. Marketing labor cost is only on Primo, 575 625 SEK for November.

For accounting, accountant needs to book real salary cost under functional BURC. For TW labor cost, accountant need to book debit under both functional BURC and project BURC, and only credit under functional BURC.

<table>
<thead>
<tr>
<th>Account</th>
<th>Functional BURC</th>
<th>Projekt BURC</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>9998 - Time writing</td>
<td>HW</td>
<td>Primo</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9998 - Time writing</td>
<td>HW</td>
<td>Secondo</td>
<td>157812,5</td>
<td></td>
</tr>
<tr>
<td>9998 - Time writing</td>
<td>HW</td>
<td>Garbo</td>
<td>110000</td>
<td></td>
</tr>
<tr>
<td>9998 - Time writing</td>
<td>HW</td>
<td>Terzo</td>
<td>93750</td>
<td></td>
</tr>
<tr>
<td>9998 - Time writing</td>
<td>HW</td>
<td>Green house</td>
<td>29375</td>
<td></td>
</tr>
<tr>
<td>9999 - Against Time writing</td>
<td>HW</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9999 - Against Time writing</td>
<td>HW</td>
<td></td>
<td>157812,5</td>
<td></td>
</tr>
<tr>
<td>9999 - Against Time writing</td>
<td>HW</td>
<td></td>
<td>110000</td>
<td></td>
</tr>
<tr>
<td>9999 - Against Time writing</td>
<td>HW</td>
<td></td>
<td>93750</td>
<td></td>
</tr>
<tr>
<td>9999 - Against Time writing</td>
<td>HW</td>
<td></td>
<td>29375</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 Company A Booking of TW Labor Cost (2017, November)

Table 4.5 shows how TW labor cost is booked. After the real labor cost (salary) is booked under HW, TW cost is booked both under HW and projects (Secondo, Garbo, Terzo, and Green house). Exactly same amount of credit is booked only under HW. After TW book, HW manager can track HW labor cost (salary), because TW labor cost is zero for them (the same amount of debit and credit will be balanced to zero). When project BURC managers need to track project labor cost, they will get TW labor cost in their financial report (debit booking of TW labor cost). For the whole company, TW labor cost’s debit and credit together will be zero, too. So the financial report for the Company A will not be affected by TW booking.

4.5 Special project--Green house

Company A even sets up a special project called Green house. This project is the only project which is and will not be directly connected to product lines. The control of Green house is very flexible. With project manager’s approval, any other BURC can hire university students or young researchers around the world for their graduation design or research thesis. Hired
students or young researchers will be guided by experienced engineers or S&M specialists to work on projects which may lead to new ideas for next new products.

The setting of Green house is a way to collect new ideas and use fresh eyes for company development with low cost.

4.6 Flexibility and Innovation

Flexibility is very important for Company A to meet changeable situation and to be innovative. The MGCS and BURC design in Company A is mean to make sure the enabling of flexibility. Thanks to technology, flexibility can be enabled different perspective of everyday work.

One example is flexible sit arrange for most employees, the so called Smart Workplace Solution (SWS). Except for some SW and HW engineers, who need special computers and equipment, most employees of Company A have flexible sits. The company has introduced electronic office processing system. Most documents are scanned and saved in center computer or office web. For most employees, the only thing they need for work is laptops. Take CFO and business controller for instance, where they sit every day depends on what they work with in that day. Business controllers sit with different BURC members and managers when they are working with these BURC’s budget, for instance. Besides of opening working environment, the company also have built 18 separated conference rooms with different size. Employees can book and reference rooms and set up meeting with each other or external visitors. In each reference room, there is big screen for video meetings. So if there are colleagues on business trip or suppliers/customers in other countries, meetings can be easily arranged.
Chapter 5 Analysis

Based on the empirical background in chapter 4, this chapter will use the theoretical frame from chapter 3 to evaluate the enabling of BURC and MGCS in the chosen case to see how innovation is enabled in MGCS in reality.

5.1 Galbraith standards of choosing BURC

Galbraith believes that companies need to consider four elements when they design BURC and MGCS: company’s type, product line, technological level and economic size (1971). Company A has experienced big MGCS change since establishment, which shows the company trying to change MGCS to fit its practical needs.

5.1.1 Type

At the beginning, Company A has comparatively simple situation. The company focused on the development of the first product. R&D function was the most important function of the company and other functions were taking the role of supporting R&D. Without a product line at that time. The company can be seen as a functional organization. The creators of the company all came from a big-sized international company (Company S), they brought with them high-technology, expensive equipment’s for labs, structured working habits, and also management experience. Company A has very clearly divided functional units. Managers of Administration, Operations, New Products, Product Development, Sales, and Marketing have clear division of responsibility. All these functions are supporting the product’s development and sales.

As the development of the company, more elements need enough attention. BURC’s type becomes multiple. Some cost centers become profit or revenue centers and new BURC have been built. To control multiple BURC, multiple standards are built for evaluation and control. Hierarchical structure, which can meet the needs of MGCS with simple BURC type, brought problems such as high cost for management, long time for decision making and inflexible structure for new and creative ideas. In other words, the company has become a combined organization with both function and products. So more flatter structure is needed.

5.1.2 Product

At the beginning, the company has multiple projects but no production line. As a high-tech company, Company A’s main purpose from the very beginning is to produce and sell world’s first hybrid watch. Even since the company launched world’s first hybrid watch, the company still focus on to beat all the other smart watch producers and offer the most nice-looking and well-functioned hybrid watch. Therefore, efficiency is very important for the company’s development. To keep all projects under control, the top management team needs make sure functional and project managers have the right to make decision in short time and can solve each product line’s problems by themselves. That’s why project BURC are also needed. To develop a product from scratch, the company needed specialists on different areas, from industrial design to HW and SW development. So the needs for simple function line and complicated technical work led to the creation of many functional cost centers.

For high-tech company, updating new products’ speed is the key to win competition with other high-tech company. Like most high-tech companies, Company A needs to think and work on products for market in three years ahead. After the success of the first product, more projects are created for new product lines.

5.1.3 Technology
Technology is always the focus of Company A. At the beginning stage, Company has only one focus: engineering. Later, engineering along can’t meet the request of the company’s development. Company A chose to change the structure when more types of BURC and innovation is highly needed. The company’s work requires high valued equipment for technic development and test. Besides of the equipment brought from Company S, the high speed of technology requires updating of machines and tools all the time. High CAPEX and OPEX cannot be ignored for a new started company. Budget needs to be smartly planned and resources needs to be utilized carefully of different product lines. The company also has three daughter companies, which lead to complicated situation.

5.1.4 Size

On the one hand, Company A is a fast growing company. From the economical scale and size perspective, although Company A is only a middle-sized company, it’s employee number has increased from less than 30 to around 90 within around two years. A local company has become an international company with three overseas daughter companies.

On the other hand, Company A’s size is not big enough for creating needs for hierarchical structure. Company A does not have abundant resources and gigantic size as Company S. The advantage of smaller size is that Company A doesn’t need bear a huge management machinery and can speed up decision time and make business model more flexible. The disadvantage is that Company A has comparatively much less resources for development and saving time and cost becomes important element for company’s survival and development. Especially after the first product has been launched, S&M’s importance has been increasing. As a new company and new brand, launching new products before all the other competitors is the key for sale. So, the schedule of products’ development and selling must be emphasized. Managers need to both focus on cutting edge-technology’s development and combine the feedback of the market to the product. At this time, not only cost centers are needed, profit centers and revenue centers are created. All BURC are highly depended on each other for the latest technology, marketing or management information.

5.1.5 Chosen structure

To sum up, Company A needs flatter and comprehensive MGCS and multiple BURC to make the company more flexible and effective. According to Galbraith standards, matrix MGCS with multiple BURC is the right choice for Company A. As Galbraith mentioned, matrix organization normally have problems of lacking control structure, conflicts and managers trying to increase authority. Company A takes these problem into consideration and takes some activities, which can be supported by Simon’s four levers’ theory.

5.2 Simons’ levels of control

Simons theoretical frame of MGCS enabling is the standards for the company to work innovative and flexible. Beliefs systems and boundary systems are two control levers guiding search activity for opportunities in organizations. Belief is a positive system motivating the search for opportunities and boundary is negative system constraining the search (Simons, 1995). Simons described also diagnostic and interactive control systems as two powers against and backing up each other. Diagnostic systems are information systems for managers to control the organizational outcomes and correct wrong performance, and interactive control systems offer managers chance to involve in decision activities and subordinates, so they can enhance and allow open and productive discussion (Simons, 1995).

5.2.1 Beliefs systems
Company A has created its core value from the first day of establishment: smarter and nicer. During each interview, the core value has been emphasized many times. The core value is not only communicated to functional managers and new employees but also mentioned a lot in the company’s everyday work so everyone can remember it. Besides of the traditional way of credos and mission statements, Company A also uses creative ways to communicate its core value to managers and employees. One example is using idea board to tell people that they need to always think if there is smarter or nicer way to finish their work. For instance, by use new idea white board, the company want to remind all BURC to think outside of box to create core value. In other words, things like idea board or innovation activities are symbol of company core value.

5.2.2 Boundary systems

By delineate the acceptable domain of activity for organizational participants based on defined business risks during opportunity seeking, boundary systems help modern companies to avoid these risks (Simons, 1995). The real case of Company A shows the weakness of boundary systems’ building and using, which brings problems for Company A’s MGCS.

During the interview, we can see that Company A tries to break the limit of boundaries to a certain level. Managers are granted with big freedom with their management and encouraged to arrange routine activities for new idea communication. The main purpose of such communication is to break the boundary of BURC and let people with different background to inspire each other. For instance, the understanding of “beauty” is different among people working for engineering, finance, marketing, and HR. Everyone has possibility to inspire industrial design. CEO is not the one who decided the products’ concept and main design. ID engineers design the products and get feedback from other teams again and again. It is ID operational manager who makes final decision of product design based on real feedback of different blue prints.

Besides, because of the overlapping of different BURC, employees from different BURC need to work with task which doesn’t belong to the BURC he or she belongs to. As a company with limited resources, Company A needs to make good use of each employee’ talent. Many employees need to finish tasks they are good at but not responsible of. BURC managers have freedom to give tasks to employees of other BURC. For instance, business controller with Japanese language skill got task to help S&M for Japanese marketing document translation.

Weak boundary systems bring innovation and flexibility which allow Company A can make good use of resources it has and bring employees’ superiority and creativity into full play. But lack of strong boundary system also causes some risks. For instance, too much time is spent on figuring out good ideas, too many new ideas for managers to evaluate and some of them are not very valuable. Employees also need to put too much time on tasks they are not responsible of and can’t totally focus on what they are responsible of.

One way for Company A to control the boundary system is KPI of timing and quality of each manager and employee’s work. Even though employees are encouraged to take time to think about smarter way of working, they still need to deliver good work under their duty.

5.2.3 Diagnostic control systems

Company A’s main diagnostic control systems are the budget control system and KPI standards. Financial targets are an important part of each BURC’s KPI. For instance, if the deviation of BURC’s actual OPEX or revenue is big compared with budget or KPI, there is a
signal for potential problems. In that case, operational managers and CEO need to find out problems and solutions with the help of business controller.

Company A tries to set up diagnostic control system which can cover comprehensive picture of different BURC. Take Global Marketing as an example. This BURC takes responsibility of both online sales and brand promotion, but it cannot be evaluated as a pure profit center. So the KPI for Global Marketing is considered from different perspective. First of all, Global Marketing’s sales performance is evaluated by traditional financial standards of budget, including net sales, volume sales, cost of sales, and so on. For Global Marketing’s branding promotion function, the KPI is OPEX budget and forecast, product homepage traffic, country coverage, brand awareness, brand influencers and media coverage. Besides of financial ways, many other ways of measurement are used, statistics, market research, and so on.

Financial KPI are used to measure the performance of each BURC on monthly bases. For some BURC, Global Marketing for instance, some performance is valued on quarterly or yearly bases, country coverage and media coverage for instance.

5.2.4 Interactive control systems

"Seeing control as a matter of interaction between superiors and subordinates helps seeing the link between the control and action-facilitating roles of accounting" (Jordan & Messner, 2012, pp. 546). Because of Company A’s flexible MGCS and weak boundary control system, interactive control systems is very important part for the company’s management. Since managers are granted great freedom with the use of employees and management, CEO and CFO’s interactive activities are not just for innovation encouragement, but more about control operational managers’ use of their freedom. There are many routine activities which CEO and CFO participate a lot. For instance, both CEO and CFO are heavily involved in the process of budget target setting and KPI evaluation. Employees are also encouraged to communicate their new ideas or problems directly to CEO or CFO. In Company A, CEO and CFO want that operational managers can develop their potential capability as much as possible, so they are normally encouraged a lot to be creative. CEO and CFO are involved in their decision and daily work to evaluate their ideas.

5.3 Ahrens and Chapman’s model for increasing flexibility for MGCS and BURC

Operational managers’ positive attitude towards MGCS and BURC’s setting is a key for the enabling of this MGCS (Jordan & Messner, 2012). Ahrens and Chapman’s model increased the flexibility and innovation of modern MGCS and BURC.

5.3.1 Repair.

In Company A, operational managers do have authority to make important decisions based on their expert experience and real situation. As mentioned above, the boundary control system has not been very strong from the beginning of the company’s development, which gives operational managers freedom and possibility to break rules which they don’t believe and fill the hole with better solution. Because of the strong interactive control systems, Company A’s operational managers are encouraged to challenge unfair rules with the help of CEO and CFO. One example is KPI for different BURC. Operational managers can challenge the KPI for his BURC.

5.3.2 International and global transparency.

One best job Company A has done is the creation of transparent MGCS and information system.
Since Company A has been created by a group of old employees from Company S, many of these employees are stockholders of Company A. One basic idea of these employees to leave Company S and create Company A is that they are all owners of the company and have access to important information about the company and can make invoice for important decisions. Besides of the information which has to be informed to stockholders, information communication has been carefully controlled to reasonable layered groups. For instance, the idea of repairing system is communicated to every employee. Budget target needs to be emphasized to all employees but some special targets (target price and quantity for negotiation with suppliers, for instance) are limited within operational managers. HR plans and stock plans can only be communicated to related persons.

5.3.2 Flexibility.

To make good use of limited resources and raise good ideas, flexible ways of working has been emphasized often after the changes of structure. The smart workplace solution of flexible seats is a simple that the boundary of BURC, time and location is not important any more. Team work is encouraged and people from different BURC can work and learn from each other. Managers also have bigger room for choosing right persons for the right tasks.

5.4 Jordan and Messner’s evaluation dimensions:

Jordan and Messner proposed two dimensions for evaluate BURC and managers’ performance: indicator communication and connection of past and currency (Jordan & Messner, 2012).

Company A has created complicated evaluation system to cover comprehensive picture. From indicator communication perspective, Company A’s all evaluation standards and process are result of discussion and negotiation between top managers and operational managers. After the standards and process are settled, they have been carefully communicated to all employees. For instance, the KPI for Global Marketing contains both traditional accounting measurement (net sales for instance), statistics measurement (brand awareness for instance), and technical measurement (homepage traffic for instance). Management team has also clarified how each standard can be calculated, compared and used.

From the connection with past perspective, Company A is a new company with only two years history. Company A’s work can be seen as a continue of Company S’s work. From technological and MGCS perspectives, Company A always tries to go back to the history of work with Company S. However, as a new company working on a completely new product concept, Company A doesn’t have much existing experience and lessons to learn from Company S and even the whole electronic industry. CFO Rosen mentioned that at the first year of company’s establishment, budget was a big challenge for the whole company. Because experience and marketing analysis of both traditional watch industry and smart watch industry does not fit connected watch industry’s need. So innovative and creative ways of working is required. For Company A, more important connection is between similar companies and competitors. Choosing to locate in an area full of startup companies and new companies, the management team put enough thoughts on bridging up relationship between Company A and many other companies. It has been approved that it is right for Company A to compare its performance with similar companies and find its reasonable position in the industry.

5.5 Summary of empirical analysis
Company A proves most theories of this thesis’ theoretical frame. Company A changed its BURC and MGCS to balance the needs of standards efficiency and innovation. Figure 5.1 shows the comparation of Company A’s two BURC and MGCS structure based on theoretical frame.

![Diagram showing comparisons of BURC and MGCS structures]

<table>
<thead>
<tr>
<th>Author</th>
<th>Theory</th>
<th>Standards</th>
<th>Before structure changes</th>
<th>After structure changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galbraith</td>
<td>Choice of MGCS</td>
<td>Type</td>
<td>Simple RAD BURC</td>
<td>Multiple BURC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product</td>
<td>No-product line</td>
<td>Multiple BURC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology</td>
<td>Cutting-edge technology</td>
<td>Cutting-edge technology plus 5MB skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Size</td>
<td>Small</td>
<td>Middle</td>
</tr>
<tr>
<td>Siemens</td>
<td>Levels of control</td>
<td>Believes</td>
<td>Strong core value</td>
<td>Strong core value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boundary</td>
<td>Strong boundary among BURC</td>
<td>Weak boundary among BURC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diagnostic control</td>
<td>Weak diagnostic control</td>
<td>Strong diagnostic control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interactive control</td>
<td>Weak interactive control</td>
<td>Strong interactive strong</td>
</tr>
<tr>
<td>Akers &amp; Champagne</td>
<td>Enabling of BURC</td>
<td>Repairs</td>
<td>Less power for managers to repair</td>
<td>More power for managers to repair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal Transparency</td>
<td>Weak internal transparency</td>
<td>Strong internal transparency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Global Transparency</td>
<td>Strong global transparency</td>
<td>Strong global transparency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility</td>
<td>Less flexibility</td>
<td>More flexibility</td>
</tr>
<tr>
<td>Jordan &amp; Messner</td>
<td>Performance evaluation</td>
<td>Communication</td>
<td>Strong Communication</td>
<td>Strong Communication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hierarchical continuity</td>
<td>Strong historical continuity</td>
<td>Weak historical continuity; strong connection with similar business at the same time</td>
</tr>
</tbody>
</table>

Figure 5.1 Theoretical frame and conclusion

Based on theoretical frame, we can see that even at the beginning of the company’s establishment, the design and enabling of BURC and MGCS is problematic. The BURC and MGCS shows weak diagnostic control and interactive control. Top management and operational managers therefore have weak ability to repair the problem or leaking of the controlling system and the system is lack of flexibility. But because of the simple type and small size at that time, the hierarchical MGCS with simple BURC could still fit some of the management requirements. For instance, simple productive plan and limited size and resources can be managed with the BURC.
With the company’s development, the new structure can fit theoretical structure in better way. The old problems of lack of flexibility, communication and repairing capability have been solved. There are some weak points, such as weak boundary systems and connection with past, which can be made up by interactive control and connection with similar companies at the same age.

This result has proved Otley’s comment about BURC and MGCS: “There is no universal applicable system of management control but that the choice of appropriate control techniques will depends upon the circumstances surrounding a specific organization” (1999, pp. 367).
Chapter 6 Conclusion

This chapter is the final chapter of the whole thesis. Based on the theoretical and empirical analysis of chapters before, this chapter answers research questions promoted in chapter 1 and discusses possibility for future research.

6.1 Discussion and Conclusion

Company A’s experience and practice of BURC and MGCS design and work proves the possibility and importance of enabling BURC and MGCS for increasing efficiency and innovation. During the interviews and analysis, one word is very important for the MGCS to work, “flexibility”. Flexibility is also a key word to answer the research questions of this thesis.

1. How can the request of innovation and flexible MGCS affect or change the enabling of BURC?

Like most companies, the building of BURC and MGCS is to set up boundaries and rules to standardize and control employees’ work. At the same time of controlling people’s and BURC’s work and performance by boundaries and standards, the company also needs to encourage new ideas for R&D and S&M. In other words, the company needs to find the balance between controlling with rules and encouraging breaking the rules to certain level. Just like Simons’ system, the two powers of ruling and breaking the rule should be against each other but also supporting each other. To make sure that the two powers can work well together and the company doesn’t lose balance, flexibility is required for MGCS and BURC. Instead of standards of telling people what to do in detailed tasks, standards to evaluate employee performance and task result, KPI for instance, are more important. Being flexible and less standardized brings risk to high efficiency. So back-up systems need to be created to make up of the disadvantages of flexible but unordered MGCS. Just like Simons’ design of four levers shows, for companies encouraging innovation and flexibility, boundary and interactive control systems are necessary for keep high efficiency under flexible BURC and MGCS. In Company A’s case, we can see that management team’s strong interactive systems are the back-up system for its weak boundary systems.

2. Can flexibility be controlled and encouraged at the same time by enabling flexible BURC?

The word “flexibility” is also an important answer to this question. Just like Company A, putting big focus on encouraging innovation and good ideas can lead to problems like extra work for evaluating new ideas and long process of testing new ideas, the controlling of innovation is necessary for innovative companies. Especially when operational managers are granted freedom to challenge boundaries, top management team needs necessary control of their creative decisions. To both control and encourage innovation and creation, top management teams needs to set up reasonable and flexible measurement systems. Because of the changing forms of business work under flexible BURC and MGCS, the measurement and evaluation of BURC becomes more complicated. The traditional measurement of accounting standards is not enough for the evaluation of flexible MGCS and BURC. To reflect
comprehensive of a BURC’s performance, top managers need much communication with operational managers and they needs to think about creative ideas based on the real situation of their business. The measurement ways and standards can be different from traditional ways but stable enough in certain times for people to follow. Managers of different levels need be able to see the trend of their performance from the past.

3. Besides of financial results, can innovation and flexible MGCS bring other results for BURC and the company?

Besides of increasing efficiency and profit, flexible BURC encouraging innovation is also an important way for company culture establishment. One key levers from Simons’ model is the guiding function of core value. Flexible BURC structure needs emphasize the company’s core value in all process of everyday work, which helps to create strong business value. Besides, for BURC and MGCS been accepted by managers willingly, they need authority to repair unfairness or weakness of the system. Top management team is usually not the one who knows the detailed weakness of the company best. Operational managers can discover unfair rules and leaking of the BURC structure. For instance, Company A’s employees under certain BURC sometimes can help with other BURC’s task, but the old company structure can not evaluate their work for other BURC. So functional managers challenged the old way of evaluating manpower. That’s the main reason Time Writing system is used after structure changes.

Besides, managers of different levels are granted access to internal and global information. All these rights for managers can increase their personality and capability as leader.

To sum up, How can company encourage innovation by special BURC and MGCS? The answer to this question is all start from flexibility. Flexibility brings the innovation and high efficiency modern company needs. But to enable flexibility is a long process. Company needs MGCS which can encourage flexibility but also control and limit it. In other words, a strong MGCS and carefully designed BURC need to be established for the company to be flexible.

6.2 Limitation of research

From theoretical perspective, the chosen theoretical frame is not perfect. Because the research in this area is still very limited, there is still room for deeper discussion of the chosen theories. For instance, in Simons’ model of four levers, the discussion of diagnostic control theories still has room for more research.

From methodology perspective, the sample is not big enough to be representative for all modern companies. Because of the limit of research time and length of this paper, the author can only choose one case for analysis. The chosen case is a middle-sized company which has special background. “Control is a dynamic process the form and intensity of which may well change over time” (Jordan & Messner, 2012, pp. 546). To fully understand how flexibility works for BURC. More cases need to be analyzed.

From empirical analysis perspective, the length limit of the paper also kept some analysis from deeper level. For instance, measurement and evaluation of BURC’s performance under flexible MGCS within chosen case can have deeper discussion.

6.3 Suggestion for future research
In recent years, changes of business environment and high competitions have created a need for more flexibility and rapid changes of business ideas for efficient operations. The design and establishment of flexible BURC is an area with endless cases but limited academic research achievement. More studies can be done with the theoretical areas. To be more specific, the model of flexible BURC, ways of enabling flexible BURC, and the way to measure and control flexible BURC need more attention and research.
Reference:

Article


Julia Kirby, April 2002 issue of Harvard Business Review


Book


Trapp, M. 2014, Realizing Business Model Innovation-Strategic approach for business Unit Managers. Springer Gabler


Appendix Interview Questions

Q1: Can you describe your company/BURC and how the MGCS/BURC has been elaborated in 3 years?

Q2: What is the main objective of BURC/MGCS to you?

Q3: How come the company needed MGCS revolution in 2017 and who were involved in the design of new MGCS?

Q4: How is the new MGCS different from the old one?

Q5: How did you decide the core value of the company and how do you realize the core value in everyday work?

Q6: How have basic rules of each BURC created and how to make employees and managers follow the rules?

Q7: What is/are the biggest challenge or problem of the new MGCS for your company/BURC?

Q8: How difficult it is for managers/employees to accept structure revolution and get used to new BURC?

Q9: How do you have top manager control operational managers’ work and decision?

Q10: How flexible the new structure and new rules are? How much authority operational managers have during their everyday work?

Q11: How does information communicated within management team and within the whole company?

Q12: How do you define innovation and deal with innovation ideas and behavior?

Q13: How do you measure and evaluate different/your BURC’s performance and output?

Q14: What has the new MGCS system brought to the company/your BURC?

Q15: How do you feel about the new MGCS?

Q16: Is there anything of today’s BURE or MGCS that you want to change and if there is, how do you want to make changes?

Q17: Do you think there will be more changes of BURC and MGCS in the near future?

Q18: How does innovation works for your company/BURC?