

The usage of short-term planning tools and methods

*An empirical study of budgeting, modifications to budgeting,
and beyond budgeting at large Swedish companies*



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Summary

Title	The usage of short-term planning tools and methods - An empirical study of budgeting, modifications to budgeting, and beyond budgeting at large Swedish companies
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Keywords	Budgeting, Better Budgeting, Advanced Budgeting, Beyond Budgeting, Short-term planning
Purpose	The main purpose is to investigate the use of different short-term planning tools and methods at the top management level in large Swedish companies.
Theoretical Background	Presents previous research on short-term planning and goes through the history and critique towards budgeting, the development of and the tools within better budgeting and beyond budgeting.
Methodology	An empirical study is conducted by using an online survey. The survey has been sent to 192 large Swedish companies.
Empirical Findings	The empirical findings are based on 22 responses from the survey. The findings presented are: To what extent the different short-term planning tools and methods are used as well as what purposes these short-term planning tools and methods have.
Conclusions	The three main conclusions in this thesis are: Firstly, large Swedish companies still use budgets to a large extent and will continue to use those in the future despite the extensive critique. However, most of the sample companies have adopted other short-term planning tools and methods in addition to traditional budgeting. Secondly, in contradiction to theory, the use of rolling forecast was not as extensive as expected. Thirdly, the data indicate that change towards modified budgeting and beyond budgeting tools and methods can be seen both now and in the expectations of the future.

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Glossary

Rolling forecast	RF
Activity-based budgeting	ABB
Activity-based costing	ABC
Activity-based management	ABM
Zero-based budgeting	ZBB
Beyond Budgeting	BB
Key performance indicator	KPI
Balanced scorecard	BSC

1. Introduction

Short-term planning is an important process for most organizations (Bangs, 1998). A normal planning process follows the next six steps. Firstly, the company identifies what they wish to achieve (goals). Secondly, they implement the plan and communicate it to all the employees. Thirdly, the plan is monitored to see whether the company has moved in the right direction. Fourthly, the performance of a company and individuals is evaluated. Fifthly, the goals are revised if needed. Sixthly, the data is gathered and analysed. After these steps, the whole process begins again. (Atanasijevic, Aleksiz & Stimac, 2015) However, the planning process varies in all of the companies to some extent. There are managers from different levels involved, the direction of the planning is different (top-down/bottom-up), and the length of the plans and updating periods vary (Wallander, 1999; Pinson, 2008; Raghunandan, Ramgulam & Raghunandan-Mohammed, 2012). Different tools and methods can be used in each step of the planning process. These tools and methods include, for example, different budget variations, rolling forecast (RF), benchmarking, key performance indicators (KPIs), balanced scorecard (BSC), and other performance measures (e.g. Wetherbe & Montanari, 1981; Cooper & Kaplan, 1991; Kaplan and Norton, 1992, 1996; Banham, 2000; Dattakumar & Jagadeesh, 2003; Hope & Fraser, 2003a).

1.1. Problematization

Academic literature for short-term planning tools and methods has developed a lot during the past century. Firstly, the developments focused on budgeting and modifications to improve budgets (Cardoş, Pete & Cardoş, 2014). However, during the last 50 years, there has been a growing number of studies criticizing traditional budgeting and bringing up new ideas to improve short-term planning in organizations (eg. Jensen, 2002; Hope & Fraser, 2003c; Hansen, Otley & Van der Stede, 2003; Bogsnes, 2008). There are many external reasons for the change towards the usage of more advanced short-term planning tools and methods. For example, the business environment has become more and more uncertain which has forced companies to adopt new planning tools to be able to react to changing markets (Lorain, 2010). The other reason for adopting the more advanced tools and methods is the change in the management control philosophy. In the 1980s, it was normal that organizations had a centralized structure and strict control over costs in the form of budgets and employees in the form of rules and guidelines (Hope & Fraser, 2003a). However,

today's environment is very different. Companies are starting to decentralize the structure, thus giving more power to lower-level management, making it easier to control and give employees trust and autonomy (Govindarajan, 1986; Kald & Nilsson, 2000). These reasons have had a major influence on the change towards new planning and measurement tools and methods.

Despite a large amount of critique and suggestions for new tools in academic literature, empirical studies from all around the world are showing contradictory results regarding the use of budgeting. At the beginning of the 2000s, there were many empirical studies written about short-term planning tools and methods. They showed that companies are heavily relying on budgets, with the exception of a few progressive companies (Ekholm & Wallin, 2000; Neely, Bourne & Adams, 2003; Ahmad, Sulaiman & Alwi, 2003). One could expect that the heavy reliance on budgeting would have decreased over the years when the academics' critique towards budgets have reached the top-level managers. Still, recent studies have shown similar results with the older ones. For example, Lorain (2010), and Henttu-Aho and Järvinen (2013) found that Spanish and Finnish companies are still using budgets to a large extent even though some might have added other tools to complement budgets. Libby and Lindsay (2010) also found that companies are not even willing to abandon budgets yet even though the academic studies seem to suggest that the budget should be abandoned in favor of using beyond budgeting (BB) methods.

Still, most of the academic literature from the beginning of the 2010s predicted the situation to change during the next 10 years. Some researchers argue that companies start to rely on certain tools and methods more in the future (eg. Libby & Lindsay, 2010; Lorain, 2010). This topic is interesting and important to research as it increases the understanding of the current situation and future prospects. The results can be compared to previous predictions to see whether the short-term planning practices have moved towards the predicted direction. This serves also as a basis for future research on the usage of short-term planning tools and methods. Furthermore, there are many studies on the implementation of new tools and methods, and the current situation of their usage, the authors of this paper were not able to find any studies that would focus on the purposes why companies still use budgets. Discovering the differences between academic papers and practice might help to understand the reason behind the slow change towards new short-term planning tools and methods.

1.2. Purpose and research questions

The purpose of this paper is to investigate the use of different short-term planning tools and methods at large Swedish companies. We have formulated three research questions to support this purpose. These three research questions are formulated to gain a deep understanding of the usage of short-term planning tools and methods in large Swedish companies.

To understand what short-term planning tools and methods large Swedish companies are using, the following questions need to be asked. Furthermore, this enables us to compare the result with previous studies to see whether the situation has changed over the years in the direction predicted in the earlier studies.

Q1: To what extent different short-term planning tools and methods are used currently?

To further extend the knowledge regarding the use of different short-term planning tools and methods, it is important to understand the purpose of each tool in companies' short-term planning processes. The purpose of these tools and methods can be compared with academic literature to see whether the companies' perceptions are in line with the academic literature.

Q2: What are the purposes of the tools and methods in the company's short-term planning process?

Lastly, it is important to examine whether the companies are going to change their short-term planning habits. Thus, whether they are going to keep using the same tools and methods as they do now, or if they are going to implement some other tools and methods. This is also important for understanding the current situation, and whether this is a passing phase or a lasting condition.

Q3: To what extent the companies are going to use different tools and methods in the future?

1.3. Outline

This paper is further divided into eight sections. In *section two*, a review of the literature will be performed. It is divided into three parts - budgeting, modification to budgeting, and BB. In each part, the academic literature and empirical studies will be discussed. In *section three*, the methodology of this study will be explained. This section includes the design of the study, ethical considerations, and critique against the chosen method and design. In *section four*, the results of the questionnaire will be presented in a similar order as in the theory section. In *section five*, the empirical results will be discussed and analysed together with the academic literature presented in section two to answer research questions. The structure of this section is formulated to answer all the research questions. *Section six* concludes the whole paper with the most interesting findings of this study. It also lists the general limitations of this thesis and presents ideas for future research.

2. Theoretical background

Short-term planning tools and methods have changed a lot during the last century. In the following sub-chapters different budgets, RFs, benchmarking, and other performance measures will be introduced based on the academic literature. There will also be a discussion about the advantages and disadvantages of each tool and method to enable the identification of the purposes. There are also previous studies introduced to allow the authors to compare and analyse the empirical findings of this study later on. Tools and methods are presented in the following order: 1) different types of budgets, 2) activity-based budgets, zero-based budgets, and rolling forecasts under modifications to budgeting, 3) key performance indicators, benchmarking, and balanced scorecard under beyond budgeting.

2.1. Short-term planning

There are three main reasons why a business should create and work with a business plan. Firstly, the process of making a plan takes a critical and objective view of the entire business. Secondly, the finished plan is an operations tool that, if done in the right manner, will aid in the management of the business. Thirdly, the plan will work as a way to communicate ideas to others and provides the basis for the company's financing proposals (Bangs, 1998). In this study, the main focus will be on the second reason why a business plan is created. Hence, the different tools and methods used in the business plan will help manage the daily operations in the business. Moreover, the normal time frame for a businesses' short-term plan is one year (Pinson, 2008). The plan needs to continuously be updated and revised to be efficient. The primary factors that create the need for updating the plan are internal changes, customer originated changes, and technological changes (*Ibid.*).

Three main approaches can be used when developing a short-term plan. The first one is the imposed (top-down) approach. In the imposed approach the short-term plan is first generated for the whole company and then divided into the different departments and divisions of the company. The departments and divisions should modify the short-term plan based on their knowledge and estimations but keep to the general assumptions made on the top management level (Wallander, 1999). The second approach is participative (bottom-up). The participative approach to short-term

planning supports a more democratic style of leadership in which lower-level management is empowered and contributes to the planning process by setting the objectives and goals (Raghunandan, Ramgulam & Raghunandan-Mohammed, 2012). According to Kramer and Hartman (2014), using a top-down process for the short-term plan will reduce the budget slack while a bottom-up approach leads to higher self-reported performance. The third and final one is the negotiated approach. The negotiated approach combines both the imposed and participative styles of short-term planning and creates a setting where the responsibility for preparing the plan is shared between all levels of managers (*Ibid.*). Moreover, regardless of which of the above approaches are used, the focus in this study will be on the short-term planning on the top level of the company.

2.2. Budgeting

The budget was born in the 1920s to be used as a tool for managing cash flows and cost control (Goode & Malik, 2011). Hence budgets were established as a management accounting tool to assist companies in their short-term planning. In the 1960s budgets were established as a fixed performance agreement between managers and employees with the main focus on estimating future costs and income (Cardoş, Pete & Cardoş, 2014). The traditional budget also called fixed budget is a measurable expression of a suggested plan of action formulated by management covering a specified period and helps to coordinate what needs to be performed to complement that plan (Campbell, 1985; Cardoş, Pete & Cardoş, 2014; Horngren, Datar & Rajan, 2012). The time frame of the budget is usually one year but it can reach two, three or even five years (Wallander, 1999). The budget functions as a plan to support the achievement of specified targets. Traditional budgeting is considered to be one of the most vital, successful and well-used techniques for short-term planning and managerial accounting (Pietrzak, 2014). Cardoş, Pete, and Cardoş (2014) argue that today almost all organizations rely deeply on budgets and budgetary systems to obtain strategic goals and to gain substantial rewards if they are correctly understood and applied.

Horvath and Sauter (2004) argue that the budget was designed to serve three main purposes: (A) coordinate the organization's financial activities and picture, (B) communicate financial expectations, and (C) motivate managers to act in the company's interest. This can be compared with Raghunandan, Ramgulam and Raghunandan-Mohammed (2012) who argue that the budget

was designed to serve five main purposes: (1) Systematic Planning, (2) Coordination and Communication, (3) Quantification and Cost Awareness, (4) Control and Evaluation, (5) Motivation. Hence, there are large similarities between Horvath and Sauter (2004) and Raghunandan, Ramgulam and Raghunandan-Mohammed (2012) description of purposes. One could argue that Raghunandan, Ramgulam and Raghunandan-Mohammed (2012) have more explicit and detailed developments of Horvath and Sauter (2004) definition. Hence in this paper, we will analyze what purpose the companies have for using budgeting or other budget-related methods based on Raghunandan, Ramgulam and Raghunandan-Mohammed, (2012) definition of budgeting purpose. However, we have divided the five purposes into more detailed and practically applicable purposes.

The critique against the use of traditional budgeting was not started by academics. Instead, the critique goes back to the 1970s when Jan Wallander, currently the CEO of a large Swedish bank, started to highlight the issues of using traditional budgeting. Starting in the 1990s, academic research regarding the limitations of budgets has been extensive and peaked in the early 2000s. Since the mid to late 2000s, a large part of the academic collective with the field of management accounting (Jensen, 2002; Hope & Fraser, 2003c; Hansen, Otley & Van der Stede, 2003; Bogsnes, 2008) agrees that traditional budgeting has extensive drawbacks; this is also the general view of practitioners. In a survey from 2006 based on responses from CFOs, a large dissatisfaction with traditional budgeting as a tool was highlighted. The general issues with traditional budgeting are according to the survey: “conventional budgeting is contentious and political (45 percent), yields unrealistic numbers (72 percent), and makes managers behave badly (53 percent)” (Durfee 2006).

Looking more closely at the critique against traditional budgeting one can see that the time and effort put into making the budget is too long. Hence, the budget process is time-consuming and does not contribute with a value corresponding to the effort put into the making of the budget (Jensen, 2002; Hansen, Otley & Van der Stede, 2003; Hope & Fraser, 2003c; Bogsnes, 2008). Additionally, the connection between strategy and budgeting is highly debated. Some argue that the budgets usually have a weak link to strategy (Jensen, 2002; Hansen, Otley & Van der Stede, 2003; Bogsnes, 2008) while others argue that the budgets are used for strategy implementation thus enforcing the link between strategy and budgets (Libby & Lindsay, 2010).

To address the two of the early critiques of traditional budgeting, the lack of revisions or updates (Tucker, 1982) and the issue with a fixed time frame (Wallander, 1999), flexible budgeting was introduced (Tucker, 1982). Some academics denote flexible budgeting as revised budgeting since the essence is the same although revised budget seems to be changed less often than flexible budgeting. The main benefit of the flexible budget was that it allowed the companies to adapt to the changes in the market (Tucker, 1982). Due to the changing markets, it can be hard to compare budgeted numbers with the outcome. For example, the budget is based on the production of 15 000 units while the actual production is only 10 000 units. Hence, comparing the budget income and cost for 15 000 units with the actual outcome of 10 000 can give an incorrect picture of the company's efficiency (Tucker, 1982). Thus, to manage the changing market, companies need to rapidly adapt to the new market, for example by employing a flexible budget system (Ekholm & Wallin, 2006; Frow, Marginson & Ogden, 2010). Hence, using a flexible budget system enables companies to manage uncertain environments in a better manner than the traditional budget.

2.3. Modifications to budgeting

There is no uniform definition in the academic literature for the tools or management control methods that are meant to improve the traditional budgeting process. Most of the researchers use the term *better budgeting* to describe all the alternative tools related to the budgeting process (Banham, 2000; Neely, Bourne & Adams, 2003; Goode & Malik, 2011; Cardoso, 2014). Some researchers divide the alternative tools into the following categories: better budgeting and *advanced budgeting* (Bunce, Fraser & Woodcock, 1995; Rickards, 2006; Rivero, 2013). However, there is no agreement on how the improved budgeting tools should be divided into these categories. For example, Cardoso (2014) lists activity-based budgeting (ABB) as better budgeting whereas Rivero (2013) considered ABB as an advanced budgeting tool. This creates challenges in the analysis as these definitions are not only about tools but also about management controls ideas and management styles (Bunce, Fraser & Woodcock, 1995; Hansen, Otley & Van der Stede, 2003; Rickards, 2006). Because the definitions are not uniformed, we have decided to use Hansen, Otley and Van der Stede's (2003) definition *modifications to budgeting* as it covers all the tools between traditional budgeting and BB and enables us to analyse the results of our questionnaire more broadly.

Despite the disagreements in the definitions, all of the articles agree on the core purpose of the new tools and management control methods is to improve budgets and the budgeting process (Bunce, Fraser & Woodcock, 1995; Hansen, Otley & Van der Stede, 2003; Neely, Bourne & Adams, 2003; Rickards, 2006; Goode & Malik, 2011). There are many different tools mentioned across the articles. For example, Neely, Bourne and Adams (2003) have identified five tools: ABB, zero-base budgeting, value-based management, profit planning, and rolling budgets and forecasts. This paper further examines ABB, rolling forecasts (RF) (Hansen, Fraser & Van der Stede, 2003; Hope & Fraser, 2003a; Neely, Bourne & Adams, 2003; Rickards, 2006; Goode & Malik, 2011; Rivero, 2013; Cardoso, 2014), and zero-base budgeting (ZBB) (Neely, Bourne & Adams, 2003; Goode & Malik, 2011; Cardoso, 2014) as they have received the most attention in the academic literature. Neely, Bourne and Adams (2003) also argue that these three are the ones that are most used by companies.

Modifications to budgeting are considered to be the next step away from traditional budgets as it is easier to implement compared to BB (Rickards, 2006). It also allows companies to keep using traditional budgets which lowers the bar to implement the new tools (*Ibid.*). According to Ekholm and Wallin (2000), already 61 percent of companies in Finland have started to improve their budgeting processes and 14 percent are going to abandon budgeting or are considering doing it. The Chartered Institute of Management Accountants (CIMA) is in line with Ekholm and Wallin as they report that 60 percent of organizations in the UK are improving their processes (Dugdale & Lyne, 2006; CIMA, 2007). Even though companies keep using traditional budgets, there are many benefits identified in previous studies. For example, these tools improve companies' current planning process (Ansari, Bell & Klammer, 1999; Hansen & Torok, 2004; Hansen, 2011) which lays the foundation for more radical changes in the future. Changes in the planning process should also increase efficiency which saves time and money.

2.3.1. Activity-based budgeting

Activity-based budgeting (ABB) was developed by Cooper and Kaplan at the end of the 1980s (Cooper & Kaplan, 1991; Cardoso, 2014). The ABB has been built on activity-based costing (ABC) and activity-based management (ABM) which had become more used in organizations before the 1980s (Cooper & Kaplan, 1991). Even though the bases for evaluation and calculations are similar

with ABC, ABM, and ABB, the time focus is different - ABC focuses on the past, ABM on the present, and ABB on the future. Cooper and Kaplan (1992) define ABC systems as estimating “the cost of resources used in organizational processes to produce outputs”. This also means that short-term planning using ABB is based on resources needed in the processes, not on last year's realized costs or fixed cost targets set by the management (Cardoş, 2014).

There are many benefits related to the activity-based approach. Firstly, ABB can be used to reveal the relationship between processes and costs which helps organizations to optimize their expenses (Cooper & Kaplan, 1991, 1992). Secondly, ABB enables organizations to find hidden resources that can be utilized, and by that increase the capacity (Hansen, 2011). Lastly, ABB highlights the imbalances and inefficiencies in the processes (Hansen, Otley & Van der Stede, 2003) which leads to reduced costs and increased efficiency. Based on these benefits, it can be expected that besides planning, the organizations most likely use ABB for resource allocation purposes and to identify the most important development areas.

Despite the multiple benefits, there are a lot of companies that have not started to use ABB yet. For example, in 2008 only five percent of Czech companies were using ABB (Popesko & Novak, 2008). The main reasons for the weak implementation of ABB are the following. Firstly, ABB does not combine financial and non-financial measures (Franco-Santos et al., 2012) which might be a deal-breaker for some organizations as non-financial measures are regarded as leading measures (Ittner & Larcker, 1998b). Secondly, ABB requires the managers to understand how the activity-based budgeted numbers are being calculated (Cooper & Kaplan, 1991). The numbers can be easily misinterpreted if the acting manager does not understand or remember which is the cost driver and whether it is based on units, batches, or something else. Lastly, ABB focuses more on planning than controlling, so it requires some other tool for control purposes (Hansen, Otley & Van der Stede, 2003) which can be expensive money- and timewise for the organization.

2.3.2. Zero-based budgeting

Zero-based budgeting (ZBB) is one of the oldest modified budgeting tools as it has been around from the 1970s forward (Wetherbe & Montanari, 1981). ZBB is similar to ABB since the only difference compared to traditional budgeting is the basis of how the numbers are calculated or

estimated. In ZBB, numbers are estimated from zero and every cost item is given a justification (*Ibid.*). One important step of ZBB is questioning the continuation of all the company activities which allows the company to distribute resources from old unprofitable projects to new profitable projects (*Ibid.*).

As ZBB is very similar to ABB, the benefits of using ZBB are similar to ABB's benefits. However, Neely, Bourne and Adams (2003) have researched ZBB more closely and they argue that zero-base budgeting is improving the accuracy of budgets as it is not tied to last year's budgets but tied to justifications given to each cost item individually. Based on this, it can be expected that organizations use ZBB for planning and resource allocation purposes. Furthermore, Cleverley (1989) argues that ZBB is usually done in a bottom-up manner. To have reliable and successful numbers in the master budget, the lower-level managers need to be educated. This takes time and money which might be one reason why companies have decided not to use ZBB. To further justify the argument on low implementation rate, it is found that there are very few studies focusing on ZBB in addition to Neely, Bourne and Adams study in 2003 which might also indicate the lack of knowledge in organizations.

2.3.3. Rolling forecasts

A rolling forecast (RF) is a budget-like short-term planning tool (it is sometimes referred to as a rolling budget). The difference between the traditional budget and the RF is that the RF is updated more often, usually monthly, or quarterly, with a continuous perspective of twelve to eighteen months into the future (Zeller & Metzger, 2013). This means that the total period is usually longer than in the traditional budget. RFs are also said to be management's best assumption of the actual outcomes of the future (Morlidge and Player, 2010) whereas traditional budgets are usually built on desired targets. Østergren & Stensaker (2011) argue that forecasting has become the most important aspect of planning when companies have abandoned budgeting. RFs can be argued to be the most used modifications to budgeting tools in organizations. Lorain (2010) found that already 84 percent of Spanish companies are using RFs. Ekholm and Wallin (2000) also found out that RFs are serious options for companies as most of the 61 percent of Finnish companies that are changing their budgeting process, are going to start using RFs.

RFs have many benefits. Firstly, RFs are flexible (Hope & Fraser, 2003a; Neely, Bourne & Adams, 2003; Cardoso, 2014). As the numbers in the RFs are not fixed targets, companies can allocate resources between departments more effectively during the financial year (Hope & Fraser, 2003a; Cardoso, 2014). Flexibility also allows companies to react to emerging events faster (Neely, Bourne & Adams, 2003) as the management does not need to worry about pre-set targets that might be tied to employees' rewards. Secondly, RFs are also found to be improving the accuracy of forecasting (Hansen, 2011; Cardoso, 2014) which is an important part of companies' decision-making processes (Athiyaman & Robertson, 1992). If the forecasts are not reliable, management might make poor decisions as they base their actions on unreliable estimations. Thirdly, RFs focus on maximizing shareholder value, not manipulating the system to meet the budget (Zeller & Metzger, 2013; Hope & Fraser, 2003a). One can argue that this is the most important argument for using RF, as maximizing shareholder value has been perceived to be the most important function of the companies (Wallace, 2003). Lastly, Henttu-aho (2018) found that RFs are used to strengthen the knowledge about forecasting related matters. Thus, RFs are used for internal communication.

Even though the benefits sound tempting, there are few reasons why all companies have not started using RFs. Firstly, RF requires more active work as it is updated more often (Bergstrand, 2009) which might not be suitable for some companies. Ekholm and Wallin (2000) and Bergstrand (2009) argue that rapid changes in RFs may lead to uncertainty among managers. This might lead to distrust towards the planning system and other managers which will make the RF system inefficient (Bergstrand, 2009). Secondly, it is argued that RFs still have fixed time horizons which can be too rapidly or too rarely for the organizations (Bogsnes, 2010). Morlidge and Player (2010) also argue that different elements in the RF need to be refreshed at different frequencies which will be time-consuming. Lastly, Lamoreaux (2011) argues that RFs can be too focused on details that the big picture is lost. He also argues that companies fail to learn from the RFs records (Lamoreaux, 2011). However, Lamoreaux arguments can be very company-specific as they are related to managements' skills.

2.4. Beyond budgeting

The idea of beyond budgeting (BB) was brought into light by Jeremy Hope and Robin Fraser in the late 1990s (Rickards, 2006; Cardoso, Pete & Cardoso, 2014). Hope and Fraser also established

the Beyond Budgeting Round Table (BBRT) to help and support companies struggling with the challenges of traditional budgeting (Rickards, 2006; Cardoso, Pete & Cardoso, 2014). It is argued that a more ambitious goal of BB and BBRT is to get all or most of the companies to abandon traditional budgeting and get them to use the BB (Hope & Fraser, 2003b; Rickards, 2006; Lorain, 2010). Rickards (2006) and Lorain (2010) argue that using BB would increase flexibility, innovativeness, and thrift in the companies. Three tools are usually discussed when referring to BB: balanced scorecard (BSC), key performance indicators (KPIs), and benchmarking. Even though these tools are associated with BB they were invented and adapted in organizations before the idea of BB was born.

Many large international companies have started to use BB and abandoned the traditional budgeting processes either fully or to a large extent (Rickards, 2006; Banham, 2011). Already at the beginning of the 2000s, six large and known companies had abandoned the traditional budgets: Svenska Handelsbanken, Borealis, Rhodia, UBS AG, German Railways, and BASF-IT-Services (Rickards, 2006). There are many reasons for abandoning traditional budgets. Firstly, the management control style has changed over the decades which requires new tools and management control systems (Hope & Fraser, 2003a; Rickards, 2006). Secondly, BB allows companies to focus the employee performance evaluation on relative performance whereas using traditional budgets the focus has been on fixed targets (Ekholm & Wallin, 2000; Hope & Fraser, 2003a; Hansen, 2011). Thirdly, abandoning traditional budgets allows the company to adopt more adaptive management processes and decentralize the company structure (Hope & Fraser, 2003c). Lastly, the financial crisis from 2007 to 2008 has caused the managers to figure out that traditional budgeting is outdated (Banham, 2011) as it is not flexible enough for today's uncertain world.

2.4.1. Key performance indicators

Companies have used KPIs increasingly throughout the 20th century (Corporater, 2020). The popularity of KPIs can be explained by the flexibility of the targets. Wohlers et al. (2020) defines KPIs as “measurable and define target values for the operating performance of selected processes, which are important for the success of an organization”. Thus, this leaves room for companies to decide what is important in their value creation and how they will get there (Hope & Fraser, 2003a). KPIs are also quite common tools like RFs. According to Eckerson (2009) already 40

percent of the U.S. companies were using KPIs and 52 percent said they were going to start using KPIs in a short time horizon. One of the most popular examples of a company that has used KPIs for a long time is Ahlsell (Hope & Fraser, 2003a). KPIs can be used alone, but usually, companies benchmark KPIs to gain more out of them (Hope & Fraser, 2003a; Eckerson, 2009).

The main benefit of KPIs is that they can easily be aligned with the organization's strategy (Eckerson, 2009). KPIs also reduce the possibility of gaming or manipulating the numbers (Eckerson, 2009; Wohlers et al., 2020) since the calculation of KPIs is usually more complex than the calculation of budget items. The other advantage is that companies can identify development areas and processes in the business by using KPIs (Wohlers et al., 2020; Lindberg et al., 2015). There are two ways to do this, either by benchmarking (Hope & Fraser, 2003a; Eckerson, 2009) or by identifying signals related to KPIs (Lindberg et al., 2015). To be able to reach all the benefits, companies have to plan the KPIs carefully. Otherwise, the company will end up having KPIs that overlap or conflict with each other (Wohlers et al., 2020) which risks the desired results.

2.4.2. Benchmarking

Benchmarking has been used for over 40 years now to gain the most out of the KPIs (Dattakumar & Jagadeesh, 2003; Hong et al., 2012). Even though companies mostly benchmark KPIs, benchmarking can be also used to compare other measures (Dattakumar & Jagadeesh, 2003). It does not matter whether the measures are financial or non-financial (Bassi & Cheney, 1997). Companies can benchmark against their own performance in other plants and departments, or they can benchmark against the performance of competitors (Clarke & Manton, 1997; Hong et al., 2012). Benchmarking can be argued to be one of the most used tools after traditional budgeting as already in 1997-1999 almost 80 percent of the companies in a worldwide study used benchmarking (Rigby, 2001).

There are three main benefits of benchmarking. Firstly, benchmarking can be used to identify improvement areas and processes (Clarke & Manton, 1997; Lindberg et al., 2015). And since companies can benchmark against their own operations or competitors, benchmarking is a suitable tool for various companies from different industries. Secondly, benchmarking can be used to link corporate strategies to performance evaluation by benchmarking strategically important aspects

(Hong et al., 2012). This also means that companies can tie employee performance measurement to strategically important aspects. Lastly, Durfee (2006) found that employee satisfaction is increased if the company is using benchmarking. He also found that if benchmarking is tied to a manager's rewards, it improves the whole company's performance (Durfee, 2006).

For companies to successfully implement benchmarking, they must take into account the following obstacles. Firstly, benchmarking requires a specific state of mind to succeed (Ammons, 1999). If the managers are too defensive, the benchmarking cannot succeed as they do not recognize the right processes to benchmark. Managers have to be willing to learn from others and implement good process ideas in their organizations. (*Ibid.*) Managers should also be able to focus on their organization and not worry too much about the ranking since otherwise, the management may ditch the benchmarking technique before they can see the results (*Ibid.*). Secondly, managers must avoid election bias (Denrell, 2005). Thus, they must know how to choose a company or department to benchmark against so that it represents the whole population. If the wrong companies or departments are chosen, the results might be a lot worse than expected. (*Ibid.*)

2.4.3. Balanced scorecard

The newest BB tool is the balanced scorecard (BSC) which was invented by Kaplan and Norton at the beginning of the 1990s (Kaplan and Norton, 1992, 1996). This was the first tool to combine financial and non-financial measures along with the link between short-term and long-term strategies (Kaplan and Norton, 1992, 1996). Thus, focusing more on what enables the success of the company, not previous results (Mooraj, Oyon & Hostettler, 1999). Mooraj, Oyon, and Hostettler (1999) also argue that there is a geographical difference in whether the companies use their BSCs for planning or controlling purposes. They argue that in Europe, the focus is more on planning than controlling compared to the US (Mooraj, Oyon & Hostettler, 1999).

Like all the other BB tools, BSC has many benefits for the companies. Firstly, BSC links the short-term actions and long-term strategies together (Kaplan & Norton, 1996; Banker, Chang & Pizzini, 2004). However, this requires that evaluators have detailed information about each business unit's strategies (Banker, Chang & Pizzini, 2004). Secondly, Mooraj, Oyon & Hostettler (1999) argue that BSC "provides relevant and balanced information". So, using BSC should reduce the time

managers try to understand the information, releasing more time for decision-making. Lastly, by combining financial and non-financial measures (Kaplan & Norton, 1992; Ittner & Larcker, 1998a) companies can focus on leading measures, such as customer satisfaction which usually enable the good financial performance (Ittner & Larcker, 1998b; Banker, Potter & Srinivasan, 2000). Thus, one can argue that companies cannot survive in today's business environment without any short-term planning tool including non-financial items.

Even though BSC is regarded as a forerunner in academic performance management literature, not many companies have implemented BSC. The problems with BSC relate mostly to communication and rewards. Kopecka (2015) argues that without clear communication, the targets might not be reached. Lipe and Salterio (2000) argue that by using BSC middle managers' performance is evaluated based on common measures, not based on specific business units. They argue that it undermines the core purpose of BSC (Lipe & Salterio, 2000). Ittner and Larcker (1998a) touched on the same topic as they raise the question of how to determine the balance between rewarding financial and non-financial performance or the balance between rewarding short-term goals and long-term targets. Further Kald & Nilsson, (2000) argues that although there has been an increase in the importance of non-financial measures the focus is still mainly on financial measures.

3. Methodology and method

In this section, the chosen method and research study design will be presented. It starts with a discussion about the research method, followed by the research design and data collection. Lastly, the limitations to both chosen method and research design will be presented.

3.1. Methodology

3.1.1 Research approach

The research paradigm used in this study generates precise, objective, quantitative data (Collis & Hussey, 2014). This enables the results to be generalized from the sample to the population. Hence, increasing the validity of the conclusions drawn regarding the use of different short-term planning tools and methods and the purposes of traditional budgeting, modification to budgeting, and BB. The research approach will be the following. Firstly, theory based on both Swedish and international research regarding short-term planning focusing on traditional budgeting, modifications to budgeting and BB has been used to identify the research gap. Secondly, based on the identified research gap the research questions have been formulated. Thirdly, these research questions have been reviewed using an empirical approach where an online survey was sent out to the largest Swedish companies. Fourthly, the findings for the empirical data have been analyzed and discussed using the existing theory on short-term planning. Finally, the findings have been used to modify the existing theory regarding the status quo of short-term planning focusing on traditional budgeting, modification to budgeting and BB in large Swedish companies.

3.1.2. Motivation of the selected method

Within the empirical research, two main research methods could be employed for data collection: questionnaires or interviews (Collis & Hussey, 2014). In earlier studies, the methods used to research short-term planning were questionnaires and interviews. However, a majority of the studies used questionnaires. In this thesis, an approach using emails with links to online tools was used since it had the lowest cost both monetary and time vice. This enabled a larger sample size than other methods could offer without compromising the quality and response rate to any larger extent. Thus, this thesis will utilize an online survey to conduct research that aims to obtain rich

empirical data that can contribute to valuable insights regarding the current use of short-term planning methods.

3.2. Research design

3.2.1. Sample selection

We chose to examine the 440 largest Swedish companies by turnover. From this, we excluded holding companies, subsidiaries, and public sector organizations. These three categories were left out since the purpose of the study was to investigate the tools and methods used for short-term planning at large Swedish companies. It was assumed that holding companies do not compose short-term plans at the corporate level, and public sector organizations' corporate level short-term plans are done at the government or municipality level. After deducting holding companies, subsidiaries, and public sector organizations, we were left with 192 companies. The gathering of emails was done manually by conducting a search by using Google as a search tool. To ensure the adequate knowledge of respondents, the survey was primarily sent to the email address of the chief financial officer (CFO). If the CFO's email address was not found the survey was sent to another top-level manager. There were no participants outside the top-management or finance department so there was no need to disregard answers based on the participant's job position. This sample was selected because it gives us the possibility to compare the results with many other studies (e.g., [Rigby, 2001](#); [Lorain, 2010](#)). Even though the sample in the studies might slightly differ from our sample, all the studies are using large corporations rather than small companies.

3.2.2. Non-response analysis

One major risk when using surveys in research is the risk of a high non-response rate which leads to that no conclusion can be drawn from the data. Hence, the findings will have low validity ([Andersen 1998](#)). According to Andersen ([1998](#)), the numbers for non-responses can be decreased by having a short survey, sending a reminder, having a recognized institution as the sender of the survey, and having questions that aim to gather objective information.

One ambition with the study was to have a balance between the number of questions and the amount of data that the survey provided. Further, the questions were formulated so that they would

be easy to answer. The surveys were sent out on 18.4.2021 and the deadline for answering the survey was 30.4.2021. The round before the reminder yielded us 11 answers. The reminder was sent on 28.4.2021 to the companies that had not answered the survey yet. There was also a PDF file attached to the reminder email which contained all the survey questions. The file was added so that companies that have policies prohibiting the employees from opening external links, can participate in the study. After the reminder, we got 12 more answers. Consequently, the total number of responses was 23. However, one answer was not taken into account because the company did not use any short-term planning tools or methods at the top level leaving us a sample of 22. The survey was sent out from student emails and clearly stated that it was part of a master thesis at Lund University to increase the trustworthiness of the study.

This survey investigated the whole population. Hence, the aim was to conduct a census survey. However, if the non-responses are too extensive it is not a census survey anymore. Patel and Davidsson (2003) argue that if the non-responses are close to 20 percent, an analysis should be done to investigate to see if the results could be misleading. In this study, the non-response rate was 88.54 percent. Thus, a non-response analysis should be conducted to investigate the validity of the study. To give the reader an overview of what type of companies answered the survey, two analyses will be conducted.

3.2.2.1 Non-response analysis regarding size

To see the distribution of companies by size a non-response analysis was conducted using turnover, thus, four groups were formed in table 1. The turnover figures are for the year 2020. Looking at table 1, we see that companies with a turnover between 25-50 billion SEK are slightly overrepresented.

Table 1. The response rate in relation to turnover

	Number of companies	Number of response	Response frequency
Less than 10 billion SEK	99	10	10.10%
10-25 billion	47	5	10.64%
25-50 billion SEK	19	5	26.32%
Greater than 50 billion SEK	27	2	7.41%
Total	192	22	11.46%

3.2.2.2 Non-response analysis regarding listed vs non-listed companies

Table 2 shows the total number of companies that were listed on the stock exchange (Stockholm stock exchange) as well as the number of companies that were not listed. Looking at table 2, we can see that the sample distribution is fairly even between listed (approximately 58 percent) and non-listed companies (approximately 42 percent). However, there is an overrepresentation of listed companies compared to non-listed companies.

Table 2. The response rate in relation to whether the company is listed or not

	Number of companies	Number of response	Response frequency
Listed	111	17	15.32%
Non-listed	81	5	6.17%
Total	192	22	11.46%

3.2.2.3 Conclusion of the non-response analysis

In addition to having a minor overrepresentation of companies with a turnover between 25-50 billion SEK and listed companies, the overall distribution is in line with the total response rate as we see in table 1 and 2. One explanation to why companies between 25-50 billion SEK are overrepresented might be due to the low number of companies that are included in the population when compared to the other groupings of companies. Furthermore, one explanation to why listed companies are overrepresented might be that it is easier to access the email and contact information of the CFO compared to non-listed companies. However, even though the distribution is not fully

representative, the differences are diminishing. Thus, we conclude that it should still be possible to rely on the conclusions in this study.

3.2.3. Data collection

Our primary data source was the online survey sent by email. There was also a cover letter attached, with information regarding the research and explaining the survey. In appendix 1 the original version of the letter in Swedish is shown and appendix 2 shows the English translation. Before sending the survey, a finance department manager was consulted to ensure that the questions were comprehensible and that there were no problems with translations to increase the reliability of the survey (Bryman, Bell, & Harley, 2019). There were 30 questions in total divided into eight sections. Appendix 3 shows all the questions in the survey in Swedish and appendix 4 shows all the questions translated into English. However, not all the questions were compulsory as the companies might not use all of the tools and methods presented in separate sections of the survey. The questions were derived from previous studies as well as from the academic literature related to similar studies. The questions were modified to fit the study and translated from English to Swedish if needed. To ensure anonymity, the study does not mention the name of the participant or the company they are working for to decrease the traceability (Collis & Hussey, 2014). Instead, the position of the participants is disclosed in the empirical findings to justify the internal validity of the answers. The answers were available only for the writers of this thesis to ensure the confidentiality of information. Participation in the study was voluntary as forcing participants to answer the survey might lead to distorted answers which will lower the quality of answers and the whole study (*Ibid.*). Secondary data, such as the revenue and number of employees, were retrieved from the database called *Retriever* (n.d).

The first section of the survey had background questions to identify the respondent and to ensure that the respondent has been involved in the company's short-term planning process. All the questions in this section were open-ended. In the second section related to short-term planning, all the questions were multiple-choice questions. These questions aimed to understand how the company sets their goals and how often the short-term plans are followed up and updated. Sections 3 to 7 followed a similar design. Firstly, a 7-point Likert scale or multiple-choice questions were used to gain a deeper understanding of the specific aspects of the tool, such as is budget fixed or

flexible and what the budget is based on (last year's results, activities, justifications). After that, the respondents were asked to indicate to what extent the different tools and methods are used for the given purposes in short-term planning now and in the future. Lastly, the respondents were asked to indicate on the 7-point scale the importance of the tool in their short-term planning. Companies that did not use that tool in their short-term planning were asked to skip the questions related to purposes and importance. The last section (section 8) had one question combining all the tools and methods mentioned in the survey. Respondents were asked to indicate in a 7-point Likert scale what tools they are going to use in the near future (1 to 5 years).

3.2.4. Descriptive data

Table 3 shows the descriptive statistics for the 22 respondents. On average, the respondents had been employed for 2.5 years in their current position and 4.2 years with their current company. Job titles of the respondents were mainly group CFO (50 percent) and group controller (45.5 percent). The industry was classified using the Swedish Standard Industrial Classification (SNI) which is provided by the Swedish government agency Statistiska centralbyrån (SCB). Approximately 54.5 percent of responding organizations were from the manufacturing sector and 22.7 percent from the wholesale and retail trade. To give a perspective on the size of the companies that participated, the turnover and number of employees for 2020 was gathered from *Retriever* (n.d.). The revenue is fairly well distributed between 7.5 billion SEK and 50 billion SEK. Looking at the number of employees the majority of companies range from 1 000 to 10 000 as expected the number of employees correlates well with the turnover.

Table 3. Descriptive statistics of survey respondents

Number of respondents	22	Average years of employment	
		In current position	2.5
		with current company	4.2
Job titles		Business revenues (size)	
Group CFO	50.0 %	Less than 10 billion SEK	45.45 %
Group Controller	45.5 %	10-25 billion	22.73 %
VP Strategy	4.5 %	25-50 billion SEK	22.73 %
		Greater than 50 billion SEK	9.09 %
Industry		Number of employees	
Wholesale and retail trade	22.7 %	Less than 1000	4.5 %
Professional, scientific, and technical activities	9.1 %	1 000 - 10 000	63.6 %
Administrative and support service activities	9.1 %	10 000 - 20 000	18.2 %
Manufacturing	54.5 %	More than 20 000	13.6 %
Financial and insurance activities	4.5 %		

3.2.5. Variable measurement

In the table below, the variables for this study are presented. Table 4 also contains information on how the variables were measured.

Table 4. Dependent variables

Variable	How is it measured?
How does a company set goals?	The respondents were given 5 choices from which they were allowed to choose one. These choices gave us an insight into whether the company uses a top-down or bottom-up planning process.
How often the short-term plan is followed up?	The respondents were given 8 choices from one day to one year and open space to write if they use some other period.
How often is the short-term plan updated?	The respondents were given 6 choices from one a week to once a year and open space to write if the period is different.
Usage of budgets	Respondents had to answer to 6 different budget forms: fixed, revised, rolling, flexible, activity-based, and zero-based budget on the 7-point Likert scale. 1 = not at all, and 7 = to a large extent
Usage of RFs	The respondents were asked a single yes or no question to determine whether they use rolling forecasts. Those who answered no, could not answer the specifying questions about RFs.
Usage of benchmarking	Respondents had to answer to 2 different benchmarking, internal and external use, on the 7-point Likert scale. 1 = not at all, and 7 = to a large extent
Usage of performance measures	Respondents had to answer to 4 different uses of performance measures: financial, non-financial, KPIs, and BSCs on the 7-point Likert scale. 1 = not at all, and 7 = to a large extent. Respondents were also given a chance to add some other performance measurement method and rate that on the same scale.
Importance of tools	Respondents were asked to indicate on the 7-point Likert scale how important the specific tool is in their short-term planning process. 1 = not important at all, 7 = very important
Purposes of each tool	Respondents were asked to indicate to what extent the specific tool is used for 11 predefined purposes. Purposes were derived from the previous literature. Respondents were also given a possibility to add a purpose themselves and evaluate it on the same scale. 1 = not at all, and 7 = to a large extent

3.2.6. Data analysis

After the survey end date, the answers received in the email were entered by one author and confirmed and checked by the second author. However, two responses were received after the closing of the form but since the empirical part was completed these answers were not considered. After closing the survey, the data was exported from Google Forms to Excel. To validate that the data was transferred correctly, a double-check was conducted between the form online and the excel document. Next, the data was divided into pages and summarized based on the identified themes and factors. Moreover, some of the data was categorized, e.g., company size (revenue) and numbers of employees. This was done to make the data more perspicuous, and thus obtaining an easy format to present. For each question that was answered by using the 7-point Likert scale, a mean, standard deviation (SD), minimum, and maximum values were calculated. If the company answered the follow-up questions regarding the tool that they do not use, answers for follow-up questions were erased. This was done to make the data more consistent and not influenced by answers from non-users of the tools and methods.

3.3. Methodology criticism

3.3.1. Reflection on the research approach

In general, the selected research method is subjected to several concerns. According to Bryman and Bell (2011), there are four main critiques towards quantitative research methods. Firstly, it fails to distinguish people and social institutions from ‘the world of nature’. Secondly, the measurement process possesses an artificial and spurious sense of precision and accuracy. Thirdly, it creates a static view of social life that is independent of people’s lives. Lastly, the focus on instruments and procedures reduces the connection between research and everyday life. Hence, the critique can be concluded as the focus is too academic and lacks the connection to fully grasp the ‘real world’ complexity. To diminish this limitation, the focus in this study has been to make the research questions and approach as connected and understandable as possible without compromising the academic connection and quality. One example of this is that feedback on the survey questions was gathered both from our supervisor as well as a practitioner.

Moreover, email surveys have a low response rate since they might go to junk mail (Bryman, Bell & Harley, 2019). This issue was recognized before sending out the survey. However, this method was still used since it was deemed the most effective method that was available to us. Furthermore, a second issue that was not recognized before sending out the first survey was the suspiciousness and unwillingness of participants to use links that were sent from unknown email addresses. To address this issue regarding the fear of clicking, a reminder email was sent with the PDF file containing the survey questions so the respondent could answer in the email and did not have to use the link. This generated several additional responses. One drawback was that some questions were left unanswered when this method was used. Thus, reducing the data quality of the study but not to any larger extent. The response rate was still low which contributed to a limitation for this study. The main reason for the low response rate was the lack of time amongst the sample companies. Several companies expressed the high importance of this topic, however, declined to answer due to the lack of time as they were preparing the first quarter's reports at the end of April.

3.3.2. Reflection on the research design

We have identified five main changes that, if implemented, would further increase the quality of the answers and the overall credibility of the study. Firstly, there should be more descriptions in the questionnaire to make sure that the respondents understand all the definitions in the same way. This would also improve the reliability of answers as it could be assumed that the respondent knew that the answer was made with the knowledge base. Secondly, the technical design of the questionnaire should be different. In this questionnaire, many questions were not compulsory so that companies that do not use the tool could move on. This led to having answers to the questions that the company should not have answered and not having an answer when required. However, this was a conscious decision as the authors wanted the companies to see all the options before stating that they do not use that tool or method. Thirdly, there were two large questions with the same answers right after each other, which might have caused the respondent to miss the new question in the middle. If that happened, the answers to the questions about the future are not reliable as the respondent thought that she or he was answering the question about the present time. Fourthly, we did not ask to what extent companies are using RF as it was a yes or no question. This made it more difficult to compare the usage of different tools. Lastly, the questionnaire was quite extensive, which might have reduced the quality of the results in the later sections. On the

other hand, if the questionnaire would have been shorter, all the needed information would not have been acquired.

4. Empirical Findings

This section introduces the main findings of the empirical study. The order is similar to the theoretical background. The questions are introduced in the following order: 1) general findings regarding the short-term planning 2) different types of budgets, including ABB and ZBB, 3) RFs, 4) benchmarking, 5) performance measures including KPIs and BSC, 6) other tools and methods not mentioned in the study, 7) the usage of all the tools on a company level and lastly 8) the future use of these short-term planning tools and methods. All the subsections go through the usage of that tool or method as well as their purposes in short-term planning.

4.1. Short-term planning

This section was mandatory for all the participants; hence, the number of answers was 22. As it can be seen from table 5, only 9.02 percent of the organization uses a purely top-down approach when setting goals for the short-term plan and no organization uses a pure bottom-up approach. Instead, the most used approach was mainly top-down and mainly bottom-up with 45.45 percent and 36.36 percent usage rates respectively.

Table 5 also shows how often the short-term plan is followed up and how often it is updated. Looking at how often the short-term plan is followed up; one can see that this is mainly done once a month (63.64 percent) or once a week (22.73 percent). Moreover, the survey had options for up to one year, however, the companies that had the longest follow-up time frame did it once every quarter. Looking at how often the short-term plan was updated, both the data on a company and overall levels indicated that updating is not done as often as the follow-up. Thus, the short-term plan was mainly updated every quarter (50 percent) or every month (27.27 percent). One observation is that, in general, companies follow up the short-term plan every month and the plan is updated every quarter. The same pattern is present for the companies that follow up the short-term plan every week since they update it every month. Furthermore, this question also had options for up to one year, however, the longest update time frame was once every 6 months.

Table 5. Overview of short-term planning

How does the company set up goals?	n	Full Top-down	Mainly top-down	Combination	Mainly bottom-up	Fully bottom-up
	22	9.09 %	45.45 %	9.09 %	36.36 %	0.00 %
How often the short-term plan is followed up?	n	Once a week	Once a month	Once every 3 months	Once every quarter	Once every 6 months
	22	22.73 %	63.64 %	4.55 %	9.09 %	0.00 %
How often is the short-term plan updated?	22	4.55 %	27.27 %	4.55 %	50.00 %	13.64 %

4.2. Budgeting

All the participants answered this question, so the total number of answers was 22. As it can be seen from table 6 below, traditional budgeting is one of the most common budgeting tools used in short-term planning with an average of 4.77. However, the standard deviation is 2.27 which is very high and indicates that there are also companies that do not use traditional budgets to a large extent. When examining more developed types of budgets: revised, rolling, and flexible budgets, one can see that the revised budget is the most used one followed by the rolling budget and flexible budget, respectively. However, the standard deviation is very high with the revised budget and rolling budget which means that some companies are using it to a large extent and some companies are not using it at all. The fairly low standard deviation for a flexible budget indicates that most of the companies are not using flexible budgets. When looking at the modifications to budgeting, ergo ABB and ZBB, one can see that ZBB is used to a very low extent as the average and the standard deviation are low. ABB, in turn, has also a low average but the standard deviation is fairly high which means that some companies use it and others do not. The sample companies value budgets as important tools in short-term planning since the average is almost five and the standard deviation fairly low, under 2.

Table 6. Overview of the use of different budget types

	n	Average	SD	Min	Max
Traditional budgeting	22	4.77	2.27	1	7
Revised budget	22	4.27	2.29	1	7
Rolling budget	22	2.55	2.36	1	7
Flexible budget	22	1.59	1.59	1	7
Activity-based budgeting (ABB)	22	2.95	2.17	1	6
Zero-Based Budgeting (ZBB)	22	1.64	1.40	1	6
How important is budgeting in short-term planning?	22	4.91	1.85	1	7

In table 7 below, the purpose of the budgets in current and future business settings are presented. As one can see, the main purposes of budgeting in the current environment are planning and the basis for follow-ups (avg 5.43), and resource allocation (avg 5.33). The standard deviation for these is also under 2 which emphasizes the use of budgets for these purposes. According to the data, budgets are not usually used for dividing responsibility internally (avg 3.90), adapting to external factors or identifying development areas (avg 4.24). However, dividing responsibility internally and adapting to external factors have fairly high (2.05) and high (2.34) standard deviations which mean that some companies are using budgets for those purposes to a larger extent and some to a small extent.

When looking at the future, the averages for all purposes increased, so companies think that budgets will have a bigger role in the future than it has now. The sample organizations thought that the same three purposes (resource allocation, planning, and following up the business) will remain the most important ones along with the goal setting (avg 5.45). However, the standard deviation went up with all of the three which indicates that companies were not that uninformed about the purpose anymore. The biggest increase in average (+0.90) was for dividing responsibility internally. Other purposes increased less than 0.30. The sample companies still think that budgets are least used for adapting to external factors and identifying development areas.

Table 7. Purposes of budgeting

	Current					Future				
	n	Average	SD	Min	Max	n	Average	SD	Min	Max
Planning	21	5.43	1.66	1	7	20	5.50	1.76	1	7
Resource allocation	21	5.33	1.77	1	7	20	5.45	1.99	1	7
Dividing responsibility	21	3.90	2.34	1	7	20	4.80	2.12	1	7
The basis for follow-ups	21	5.43	1.47	1	7	20	5.50	1.73	1	7
Communicating goals	21	5.14	2.01	1	7	20	5.20	1.94	1	7
Communicate the link between finance and operations	21	5.00	1.82	1	7	20	5.20	1.85	1	7
Setting goals	20	5.20	1.64	1	7	20	5.45	1.67	1	7
The basis for an incentive system	20	4.35	2.41	1	7	20	4.60	2.28	1	7
Adapting to external factors	21	4.24	2.05	1	7	20	4.50	1.99	1	7
Implementing the company's strategy	21	5.10	1.64	1	7	20	5.15	1.57	1	7
Identifying development areas	21	4.24	1.81	1	7	20	4.50	1.91	1	7

4.3. Rolling forecast

All the participants were required to answer the first question regarding whether they use RFs or not. From the sample organizations, 10 companies stated that they use RFs and 12 companies said that they do not. The rest of the questions related to RFs were not compulsory for those who answered that they do not use RFs, so the sample size for the rest of the questions in this part is 10. As it can be seen from table 8 below, most of the companies are doing RFs for 12 months but some companies also use 1, 3 and 18-month periods. Companies valued the RF fairly high as the lowest score for the importance was 3 on a scale from 1 to 7. Also, average (5.30) implies that the RFs are an important part of the short-term planning in the organizations. The standard deviation stayed very low (only 1.25), so the companies were coherent.

Table 8. Overview of rolling forecasts

	n	Yes		No	
Does the company use a rolling forecast?	22	10		12	
	n	1 month	3 months	12 months	18 months
How long is the rolling forecast?	10	1	2	6	1
	n	Average	SD	Min	Max
How important are rolling forecasts in short-term planning?	10	5.30	1.25	3	7

In table 9 below, the current and future purposes of RFs are presented. As it can be seen, the three most important purposes of RFs are planning (avg 6.00), adapting to external factors (avg 5.40), and following up on the performance of the company (5.30). The standard deviation stays around 1.5 which implies that these are the commonly most important purposes. It can be also seen that RFs are not usually used as an incentive tool (avg 2.90) or for implementing company strategy (avg 3.80). However, the standard deviation for both is over 2 which means that some companies use it to a larger extent than others.

When indicating the future, it can be seen that some purposes become more important than others. Still, the planning (avg 5.89) and following up the performance of the company (avg 5.67) are estimated to be the most important ones. However, the standard deviation for both planning and following up the performance of the company goes up near to 2 which means that the companies do not agree to the same extent. Even though the implementation of the strategy remained as a less important purpose of RF, the average increased by 0.53. Also, the standard deviation went up so the companies are not that coherent with the matter. The other purpose which changed to a relatively large extent was adapting to external factors (-0.40). Also, in this case, the standard deviation increased above 2. As one can see, the standard deviations for future averages are higher than for current averages which indicates that companies have different needs and uses for RF in the future.

Table 9. Purposes of rolling forecasts

	Current					Future				
	n	Average	SD	Min	Max	n	Average	SD	Min	Max
Planning	10	6.00	1.56	2	7	9	5.89	1.96	1	7
Resource allocation	10	5.10	2.18	1	7	9	5.00	2.60	1	7
Dividing responsibility	10	4.90	2.18	1	7	9	4.67	2.40	1	7
The basis for follow-ups	10	5.30	1.49	2	7	9	5.67	1.94	1	7
Communicating goals	10	4.10	2.47	1	7	9	4.56	2.46	1	7
Communicate the link between finance and operations	10	5.10	2.47	1	7	9	4.89	2.76	1	7
Setting goals	10	4.40	2.50	1	7	9	4.67	2.65	1	7
The basis for an incentive system	10	2.90	2.28	1	7	9	3.22	2.39	1	7
Adapting to external factors	10	5.40	1.71	2	7	9	5.00	2.40	1	7
Implementing the company's strategy	10	3.80	2.35	1	7	9	4.33	2.60	1	7
Identifying development areas	10	5.00	1.94	1	7	9	5.00	2.18	1	7

4.4. Benchmarking

The first question was related to whether the benchmarking is done internally or externally. Everyone was required to answer this question. However, if a respondent answered 1 to both internal and external use, he or she was not required to answer the rest of the questions in this part. Two companies are not currently using benchmarking. As it can be seen from table 10 below, benchmarking is used more internally (avg 1.59) than externally (avg 3.73). Since the standard deviations remain fairly low, the current usage of benchmarking is commonly agreed upon. However, as can be seen from the table, some companies use benchmarking only for internal or external purposes. The average for the importance of benchmarking in short-term planning was relatively low, only 3.95. As the standard deviation stays also fairly low, it can be stated that most of the companies do not value benchmarking as an important tool or method for short-term planning.

Table 10. Overview of benchmarking

To what extent does the company use the following?	n	Average	SD	Min	Max
Internal benchmarking	22	4.64	1.59	1	7
External benchmarking	22	3.73	1.78	1	7
How important is benchmarking in short-term planning?	20	3.95	1.57	1	7

In table 11 below, the purposes of benchmarking are presented. As it can be seen, the three most important purposes of benchmarking are goal setting (avg 4.35), following up the performance of the company (avg 4.10), and adapting to external factors (avg 3.85). The standard deviation for all three remains under 2 which implies that companies are quite coherent with the answers. The lowest averages are for using benchmarking as a basis for incentives (avg 2.35) and using benchmarking to divide the responsibilities internally (avg 2.80). Standard deviations for both purposes remain around 1.5-1.6 which means that most of the companies do not value these purposes important for benchmarking.

When looking at the future, one can see that the average has increased for all purposes. However, two of the three most important purposes remain the same. The three most important purposes in the future are following up the company's performance (avg 4.58), goal setting and identifying

development areas (avg 4.47). The standard deviation also stays somewhat the same (under 2) which means that companies are fairly coherent in this matter. Also, the two purposes with the least importance stay the same even though the average is increased (as a basis for incentives avg 3.21 and dividing responsibility internally avg 3.32). The standard deviation for these two is increased to nearly 2 which implies that companies are not as coherent about it as they were before. The largest increase in average (+0.86) is for using benchmarking as a basis for an incentive system. Even though the standard deviation went up by 0.3, it can be seen that this clearly will become more important in the future.

Table 11. Purposes of benchmarking

	Current					Future				
	n	Average	SD	Min	Max	n	Average	SD	Min	Max
Planning	20	3.50	1.79	1	6	18	4.06	2.18	1	7
Resource allocation	20	3.70	1.66	1	7	19	4.42	1.57	2	7
Dividing responsibility	20	2.80	1.58	1	6	19	3.32	1.92	1	7
The basis for follow-ups	20	4.10	1.77	1	7	19	4.58	1.74	1	7
Communicating goals	20	3.65	1.53	1	7	19	4.37	1.80	1	7
Communicate the link between finance and operations	20	3.65	1.81	1	7	19	4.32	1.95	1	7
Setting goals	20	4.35	1.50	2	7	19	4.47	1.50	2	7
The basis for an incentive system	20	2.35	1.63	1	7	19	3.21	1.93	1	7
Adapting to external factors	20	3.85	1.79	1	7	19	4.32	1.77	1	7
Implementing the company's strategy	20	3.50	1.64	1	7	19	3.95	1.65	1	7
Identifying development areas	20	3.70	1.72	1	7	19	4.47	1.95	1	7

4.5. Performance measures

All the participants answered this question regarding if they use performance measures. As it can be seen from table 12 below, financial performance measures are the most common measure that is used in short-term planning with a usage rate of almost 82 percent and with an average of 5.36 regarding the extent to which financial performance measures are used. Comparing this to the results for the non-financial performance measures one can see that it is not used to the same extent as financial performance measures. The usage rate for non-financial performance measures is 64 percent with a usage extent average of 3.45 which indicates that when non-financial performance measures are used it is used to a lower extent. Moreover, looking at KPIs, only 68 percent of the companies are using it in short-term planning. With a usage extent average of 4.68. However, the

high standard deviation for KPI indicates that the extent of use is not consistent for the sample. Hence, several companies use KPI to a large extent and other companies use it not at all or to a low extent. Looking at the BSC, only 41 percent are using this in their short-term planning. Furthermore, the average of 2.95 indicates that those who use a BSC do not use it to any large extent in their short-term planning. Looking at the general importance of performance measures one can see that the importance is high on the 1-7 scale (5.47) this combined with the low standard deviation of 1.37 indicates that the users of performance measures agree that the importance of using performance measures is fairly high.

Table 12. Overview of performance measures

Which of the following performance measures are used in the company?	n	Use	Don't use	Average	SD	Min	Max
Financial measures	22	81.82 %	18.18 %	5.36	2.19	1	7
Non-financial measures	22	63.64 %	36.36 %	3.45	2.02	1	7
Key performance indicators (KPIs)	22	68.18 %	31.82 %	4.68	2.46	1	7
Balanced scorecard (BSC)	22	40.91 %	59.09 %	2.95	2.36	1	7
How important are performance measures in short-term planning?	17	-	-	5.47	1.37	2	7

In table 13, the purpose of the performance measures in current and future business settings are presented. As one can see, the main purposes of using performance measures in short-term planning are to use it as a tool for following up the business both currently and in the future, with an average of 5.58 and 5.79. Hence using performance measures of following up the business will increase in the future. Moreover, one can see that both setting and communicating goals score high both in the current and future.

When comparing the current and future purposes one can see that adapting to external factors is a single purpose that changes the most, it increases from an average of 4 currently to a future average of 4.95. Hence according to the data, the purpose of adapting to external factors will increase with one unit on the seven-unit scale. In contrast, identified development areas are the purpose that has the smallest change, with only an increase of 0.11. Going from a current average of 4.95 to an average in the future of 5.05. Thus, although the change differs among the purposes, all purposes have an increasing average going from current to future purpose. However, adapting to external factors is the second-lowest ranking purpose. It is only using performance measures for dividing responsibility internally that has a lower purpose in the current setting, with an average of 3.95.

But the average only reaches 4.68 in the questions regarding the future purpose. Furthermore, a fairly low standard deviation for all of the purposes indicates that businesses using performance measures, in general, agree to a large extent on how important these purposes are for short-term planning.

Table 13. Purposes of performance measures

	Current					Future				
	n	Average	SD	Min	Max	n	Average	SD	Min	Max
Planning	19	4.95	1.84	1	7	19	5.58	1.50	1	7
Resource allocation	19	4.32	1.86	1	7	19	5.00	1.83	1	7
Dividing responsibility	19	3.95	2.07	1	7	19	4.68	1.89	1	7
The basis for follow-ups	19	5.58	1.54	2	7	19	5.79	1.40	2	7
Communicating goals	19	5.16	1.61	1	7	19	5.58	1.43	1	7
Communicate the link between finance and operations	19	4.74	2.00	1	7	19	5.00	1.91	1	7
Setting goals	19	5.26	1.56	1	7	19	5.47	1.39	1	7
The basis for an incentive system	19	4.63	2.14	1	7	19	5.21	1.72	1	7
Adapting to external factors	19	4.00	1.89	1	7	19	4.95	1.72	1	7
Implementing the company's strategy	19	4.84	1.68	1	7	19	5.47	1.43	1	7
Identifying development areas	19	4.95	1.87	1	7	19	5.05	1.65	1	7

4.6. Other tools

In this section, empirical findings regarding tools/methods that were not included in the survey but instead proposed by the respondents will be discussed. The additional tools and methods identified by the respondents are:

- (1) Environmental, Social, and Governance (ESG) targets¹
- (2) Target setting²
- (3) Lean management³
- (4) Integrated reporting⁴,
- (5) Using enterprise resource planning (ERP) systems for analysing and following up KPIs,
- (6) Using digital tools for analysing and following up strategy activities/projects.

¹ Environment encompasses carbon emissions and climate change connected to the company's targets. Social is the connection between labor relations and diversity. Governance is the internal system of practices, controls, and procedures your company adopts to govern itself (Henisz, Koller, & Nuttall, 2019).

² A strategic process to establish performance goals for the business and works as a tool for management.

³ A five-step process: first, you identify value, secondly, you map the value stream, thirdly you create a continuous workflow, fourthly and finally you create a pull system (Emiliani, 2006).

⁴ A process that tools for communicating both financial and non-financial performance and thus value creation over time through only one annual integrated report

There are three common themes for these additional tools and methods: the first one is a focus target or target setting which can be seen in (1), (2) and (5). The second theme is that digitalisation will generate better systems for analysing and following up the company's short-term plan, which can be seen in (5) and (6). The third theme which is in line with the current corporate trends is a sustainable focus that can be seen in (1) and (4).

4.7. Usage of all the tools on a company level

In table 14, an overview of what tools and methods every company uses is presented. For budgeting, benchmarking, and performance measure the usage extent rate is presented. Moreover, if the cell for these tools is red this means that the company's usage rate is below 3, if the cell is yellow the usage rate is above 3 but below 5, and if the cell is green the usage rate is above 5. However, for RFs, only a yes or no is presented as an indication regarding if the company is using the tool.

Looking at the data it can be seen that if the company employs RFs as a short-term planning tool, it tends to also use performance measures to a large extent. Further, only companies S and V use RFs and say that they use performance measures to a low extent. Hence, they have an average below 3. Moreover, the data indicates that if a company is using RFs, they also tend to use benchmarking to a larger extent. In the data, one interesting observation is that only two companies use budgeting to a large extent. Moreover, companies that have a low average for the use of budgets do not use RFs. This is true for all companies except for company D that does not use any type of budgeting at all. They explain in a comment in the budget section that budgeting has been abandoned in favour of RF.

Another observation is that the extent to which companies use benchmarking seems to have the same usage for performance measures. Hence, we see an indication that there is a correlation between benchmarking and performance measures. Regarding the other tools, one can see that companies do not use the same tools. In addition, the data shows that only company D uses more than one “other tool” in addition to the predefined tools in this study. Moreover, looking at the data in more general terms, one can see that modifications to budgeting are used to a larger extent than traditional budgeting and BB is used to a larger extent than modifications to budgeting. Hence,

a pattern can be observed where the larger the development from budgeting is, the more it is used in short-term planning.

Table 14. Use of tools by the company

(B - budgets, RF - rolling forecast, BM - benchmarking, PM - performance measures)

	B	RF	BM	PM	Other tools
A	4.6	Yes	5.0	5.5	(1)
B	3.6	No	2.5	3.5	
C	2.9	No	3.5	4.0	
D	1.0	Yes	3.5	5.0	(2) & (4)
E	3.1	No	4.0	5.0	
F	3.0	No	4.0	4.0	
G	3.3	No	5.0	6.3	
H	3.4	No	3.5	5.3	
I	3.7	Yes	6.0	6.3	(5)
J	2.4	No	1.0	1.0	
K	3.1	Yes	3.0	5.5	
L	1.6	No	2.0	1.3	
M	3.4	No	4.0	3.3	
N	2.7	No	4.0	4.0	
O	2.9	No	3.5	1.0	
P	1.1	No	5.5	5.5	
Q	4.6	Yes	6.0	5.8	(6)
R	4.1	Yes	7.0	5.5	
S	5.0	Yes	5.0	1.0	
T	5.0	Yes	4.5	4.8	
U	3.4	Yes	4.5	4.8	(3)
V	3.3	Yes	5.0	2.5	
Number of Green	2	10	8	10	-
Number of Yellow	13	0	11	7	-
Number of Red	7	12	3	5	-

4.8. The use of budgeting and other methods in the future

In this section, the empirical findings related to the future use of the different tools and methods discussed in the thesis will be presented. Table 15 shows the answer to question 8.1, "To what extent will you use the following types of tools/methods for short-term planning in the future (1-5 years)". The findings suggest that financial performance measures will be the most used tool for short-term planning in the future with an average of 5.85. This average can be legitimized by the low standard deviation of 1.46. Together with the second-highest average of 5.45 for KPI, one can see that these are the two main tools that are regarded as the future with short-term planning. Looking at the tools and methods that received the lowest average we can see that both ZBB and flexible budget have an average below 2, hence they receive 1.65 and 1.75 respectively. Moreover, this average can also be legitimized by their low standard deviations of 1.35 for ZBB and 1.55 for the flexible budget. In addition to the predefined answers, one respondent answered that follow up of strategic activity and projects is something that will be an increasingly important method for managing the short-term plan in the future.

Table 15. Future use of short-term planning tools

	n	Average	SD	Min	Max
Traditional budgeting	20	4.20	2.44	1	7
Revised budget	20	3.75	2.29	1	7
Rolling budget	20	3.20	2.40	1	7
Flexible budget	20	1.75	1.55	1	7
Activity-based budgeting (ABB)	20	3.20	2.28	1	7
Zero-Based Budgeting (ZBB)	20	1.65	1.35	1	6
Rolling forecast (RF)	20	4.80	2.50	1	7
Benchmarking	20	4.75	2.00	1	7
Financial performance measures	20	5.85	1.46	1	7
Non-financial performance measures	20	4.95	2.01	1	7
Key performance indicators (KPIs)	20	5.45	2.14	1	7
Balanced scorecard (BSC)	20	3.55	2.52	1	7

5. Analysis and Discussion

In this section, the empirical findings of this study will be discussed and analysed together with theoretical findings and results from previous studies. The discussion focuses mainly on the purpose and research questions of this study. Thus, the authors aim to understand the current state of short-term planning in large Swedish companies and find out the purposes of these tools and methods in short-term planning.

5.1. Short-term planning tools and methods

In table 16, the usage extent for all the tools and methods included in the study is presented. For all the tools and methods, except RF, the usage extent rate is presented. Instead, the usage percentage for RF is shown. Moreover, if the cell for these tools is red it means that the company's usage rate is below 3, if the cell is yellow the usage rate is above 3 but below 5, and if the cell is green the usage rate is above 5. However, for RF, red means that the percentage is below 30, yellow means that the percentage is between 30 and 70, and green means that the percentage is over 70.

One of the most interesting findings in table 16, is that traditional budgeting is the second most used tool which is unexpected in regard to the large critique against budgeting brought up by several academics such as Jensen (2002), Hope & Fraser (2003c), Hansen, Otley & Van der Stede (2003), and Bogsnes (2008). Moreover, the high usage of budgeting is in line with Libby and Lindsay (2010) findings that companies are not going to abandon traditional budgeting. One reason for still using traditional budgeting might be the time aspect, even though traditional budgeting is criticized for taking much time it is more time-efficient than rolling forecasts which needs to be updated on a regular basis.

The high usage of traditional budgets can be analysed together with another interesting finding, the low usage of flexible budgets, ABB, and ZBB. These three methods were developed as an improvement for traditional budgeting. However, Popesko & Novak (2008) have earlier concluded that ABB is not used to any larger extent and our data supports this finding. The data also indicates that a flexible budget and ZBB has the same low usage as ABB. The low extent of usage of these

tools can be explained by the main issues identified with ABB. Firstly, it does not combine financial and non-financial measures (Franco-Santos et al., 2012). Secondly, it requires the acting managers to understand how the ABB numbers are being calculated. Thus, this combined with our data might indicate that if traditional budgeting is abandoned or not used to the same extent, companies will instead use the more developed BB (benchmarking, KPI, and other performance measures) tools than the updated versions of the traditional budget. However, one of the updated versions of traditional budgeting that is used to almost the same extent as traditional budgeting is the revised budget. This is surprising since academics argue that revised and flexible are the same thing (Tucker, 1982). Although one interpretation of the difference might be that revised budgets are updated on a fixed time frame e.g., every month or every quarter. While flexible budgets are updated when it is needed. This difference in interpretation might be the explanation for the difference in usage between revised and flexible budgeting.

The third finding is the extent of the usage of RF. One can see that it is not used to the same extent as expected when compared to the current academic literature within this topic. One explanation for this can be that it requires more active work as they are updated more often (Bergstrand, 2009). Thus, being too time-consuming to run and implement. However, the ones that use RF value it as very important, this will be discussed in further detail in section 6.2. Hence, this might indicate that the extent of usage is high among the few users of RF.

The most interesting finding is that only financial performance measures are used to a high extent when looking at the whole sample. This together with the medium-high average for internal benchmarking indicates that the most important factor when making a short-term plan is to have both an internal and financial focus on the short-term plan. These findings are in line with (Kald & Nilsson, 2000) but contradict both the current trends that focus more on non-financial measures and Kaplan and Norton (1992, 1996) who introduces BSC with the purpose of putting more emphasis on non-financial performance indicators. Thus, creating a better balance between both financial and non-financial aspects as well as internal and external factors in the short-term plan. One explanation might be that the company's shareholders still regard financial measures as superior to non-financial performance measures since they are easier to benchmark and understand.

Table 16. Tools total usage extent rate

	Total
n	22
Traditional budgeting	4.8
Revised budget	4.3
Rolling budget	2.5
Flexible budget	1.6
Activity-based budgeting	3.0
Zero-Based Budgeting	1.6
Benchmarking internal	4.6
Benchmarking external	3.7
Financial performance measures	5.4
Non-financial performance measures	3.5
Key performance indicators (KPI)	4.7
Balanced scorecard	3.0
Rolling forecast (usage rate not average)	45%

As seen in section 4.6, several tools were identified in addition to the ones used in this study, more than what the authors in this thesis had expected. Moreover, three main themes were identified in the empirical section: target setting, digitalisation, and sustainability. Finding tools connected to digitalization and sustainability are not unexpected since these are the largest trends in the current corporate climate. The use of target setting is further in line with the pre-defined tools: benchmarking, performance measures, and KPIs which have a high or medium-high extent of usage and importance as short-term planning tools and methods.

5.1.1. Tools and methods in regards to how often the plan is updated

Table 17 shows the usage extent for all the tools and methods included in the study, split by how often the short-term plan is updated. For all tools and methods, except RF, the usage extent rate is presented. Instead, RF is shown as a percentage of the number of users for the specific short-term plan updating time frame.

The most interesting finding for this section is that we were able to identify one pattern - a relationship between how often the plan is updated and the use of RF and BB tools (benchmarking, financial and non-financial performance measures, KPIs, and BSC). Hence, companies updating their short-term plan every quarter tend to use RF and BB tools to a larger extent than companies

updating their plan every six months. Furthermore, companies that update their short-term plan every month tend to use RF and BB tools to a larger extent than companies updating their plan every quarter. Thus, shorter updating periods seem to have a positive effect on the usage rate of RF and BB tools. The company that updates the short-term plan once a week and once every 4 months do not follow this pattern. However, these observations can be regarded as outliers since there is only one company per updating period. Thus, these answers can be disregarded from the analysis.

As it can be seen, the budgeting tools do not have a similar pattern. However, traditional and revised budgets seem to be more used despite how often the short-term plan is updated. Still, it seems that most companies that use traditional and revised budgets update them once every quarter. This could be explained by the critique against budgeting. If the budget would be updated more often, it would be very time-consuming ([Hansen, Otley & Van der Stede, 2003](#)), and if the budget would be updated more rarely, it would lack updates ([Tucker, 1982](#)). It is interesting to see that other budgeting tools (rolling budget, flexible budget, ABB, and ZBB) are not used to large extent despite the updating frequency. This can be explained by the low overall extent of usage rates. However, one exception is when ABB is updated every month. This can be explained by Cooper & Kaplan ([1991](#)) who argue that ABB requires the managers to understand how the activity-based budgeted numbers are being calculated. Therefore, if the short-term plan is updated more frequently, managers might have a better understanding of the numbers. Hence, increasing the effectiveness of ABB.

Going into more details with BB tools, an interesting observation is that financial performance measures are very important for companies that update the short-term plan monthly or quarterly. However, when the short-term plan is updated every half year it is only of medium importance with an average of 3. Thus, there is a large drop in the importance of financial performance measures when the plan is only updated every half year. One explanation can be that when the plan is only updated every half year the differences in financial performance might be cancelled out during the longer period compared to having the shorter updating period. The other explanation can be that financial measures are still regarded as more important than non-financial measures ([Kald & Nilsson, 2000](#)). When comparing internal and external benchmarking, it can be seen that

internal benchmarking is used to a larger extent and updated usually once a month. One reason for favouring internal benchmarking might be that company's internal data is more available than competitors' data. Thus, it is easier to benchmark internally. A possible reason for companies to update the internal benchmarks every month is that it allows companies to identify improvement areas more frequently (Clarke & Manton, 1997; Lindberg et al., 2015). Thus, they can react faster to internal and external changes.

Table 17. Tools usage extent rate split on often the short-term plan is updated

	Total	Once a week	Once a month	Once every quarter	Once every 4 months	Once every 6 months
n	22	4.55%	27.27%	50.00%	4.55%	13.64%
Traditional budgeting	4.8	2.0	4.8	5.2	7.0	3.3
Revised budget	4.3	6.0	4.0	4.3	7.0	3.3
Rolling budget	2.5	6.0	3.5	1.7	7.0	1.0
Flexible budget	1.6	1.0	2.5	1.4	1.0	1.0
Activity-based budgeting	3.0	1.0	5.2	2.3	1.0	2.3
Zero-Based Budgeting	1.6	1.0	2.7	1.4	1.0	1.0
Benchmarking internal	4.6	5.0	5.8	3.8	7.0	4.3
Benchmarking external	3.7	3.0	4.0	3.7	7.0	2.3
Financial performance measures	5.4	6.0	6.7	5.1	7.0	3.0
Non-financial performance measures	3.5	1.0	5.0	3.2	7.0	1.0
Key performance indicators (KPI)	4.7	1.0	6.3	4.4	7.0	3.0
Balanced scorecard	3.0	5.0	3.5	2.6	1.0	3.0
Rolling forecast (usage rate)	45%	0.00%	83%	36%	100%	0%

5.1.2. Tools and methods in regards to the goal-setting approach

Table 18 below shows the average to what extent each tool is used with the company's goal-setting approach. However, for RFs the usage rate will be shown. Moreover, no company used a full bottom-up approach. When examining the extent to which traditional budgeting is used one can see that it is used to a large extent by companies that use the full top-down approach. This is in line with both Goode & Malik (2011), and Raghunandan, Ramgulam and Raghunandan-Mohammed (2012) who argue that traditional budgets give the top management extensive control over the company. Looking at the revised budget, companies using the combination approach to goal setting uses revised budgets to a larger extent than the traditional. This is in line with the expectations since the combination approach is where negotiations between top management and low-level managers are the approach for making the short-term plan.

For RF, the usage rate has a steady decrease rate from 100 percent with the top-down approach to a 25 percent usage with the mainly bottom-up approach. With the exception of the combination approach, which had a usage rate of 0 percent. This pattern is in line with Kramer and Hartman (2014) who argue that using a top-down budgeting process will reduce the budget slack. Hence, the RF can be used as a tool for reducing the budget slack since it is continuously followed up and updated and thus giving the short-term plan more reliability. Moreover, Neely, Bourne and Adams, (2003) found that when using RF, management does not need to worry about pre-set targets that might be tied to employees' rewards. This is in line with the findings that RF is used more extensively by companies that apply a top-down approach in their short-term planning.

Furthermore, companies using the top-down approach do not seem to use the BSCs at all. There also seems to be a trend in the data implying that the closer to a pure bottom-up approach the higher the usage of a BSC is. This supports the argument by Banker, Chang and Pizzini (2004) who concluded that using BSC requires managers to have detailed information about each business unit's strategies. Further, Mooraj, Oyon & Hostettler (1999) emphasise the BSCs are used for providing information. Hence, that top management interacts and discusses the goals in the short-term plan with lower-level managers.

Looking at the data in more general terms, one additional pattern that can be observed is that the BB tools are used to a larger extent by companies that have a bottom-up approach compared to the companies that have more of a top-down approach. This can be compared to Pilkington & Crowther (2007) who found that BB is most commonly adopted by large companies. They continue and say that this is likely due to the size, management style, and ability to train staff in unfamiliar concepts. Moreover, looking at the data some general correlation between having a bottom-up approach and size can be observed thus being in line with Pilkington & Crowther (2007) findings which is acknowledged by Goode and Malik (2011).

Table 18. Goal-setting and tools usage

	Total	Full Top-down	Mainly top-down	Combination	Mainly bottom-up
n	22	9.09%	45.45%	9.09%	36.36%
Traditional budgeting	4.8	6.0	4.8	4.5	4.5
Revised budget	4.3	6.0	3.7	6.5	4.0
Rolling budget	2.5	6.0	2.5	3.5	1.5
Flexible budget	1.6	3.0	1.9	1.0	1.0
Activity-based budgeting	3.0	3.0	3.6	1.0	2.6
Zero-Based Budgeting	1.6	3.0	1.8	1.0	1.3
Benchmarking internal	4.6	6.0	4.0	4.0	5.3
Benchmarking external	3.7	6.0	3.9	2.5	3.3
Financial performance measures	5.4	4.0	5.6	5.0	5.5
Non-financial performance measures	3.5	4.0	4.2	3.0	2.5
Key performance indicators (KPI)	4.7	4.0	4.9	2.5	5.1
Balanced scorecard	3.0	1.0	3.0	3.0	3.4
Rolling forecast (usage rate)	45%	100%	60%	0%	25%

5.2. Importance of short-term planning tools and methods

Table 19 below shows the average and standard deviation of how important each tool is for short-term planning. Although considering all the academics (eg., [Jensen, 2002](#); [Hansen, Otley & Van der Stede, 2003](#); [Hope and Fraser, 2003c](#); [Bogsnes, 2009](#)) arguing that budgeting is an old tool with many significant flaws. Our data suggest that budgets are still important today in larger companies as a tool for short-term planning. However, the standard deviation for budgeting is the largest among all tools, which indicates that disagreement on how important budgeting is for short-term planning exists. This argument is further strengthened by the minimum and maximum value being the absolute minimum value of 1 and the absolute maximum value of 7.

When looking at how important companies consider RFs to be, one can see that it is regarded as having higher importance in short-term planning than its ancestor, traditional budgeting. Furthermore, as stated in section 6.1 only 45 percent of the companies use RFs which is substantially lower than [Lorain \(2010\)](#) findings of a usage rate of 84 percent for Spanish. The low usage rate combined with the high importance suggests that the ones using RF regard it as an important tool for short-term planning. This can further be explained by [Østergren & Stensaker \(2011\)](#) who argue that forecasting has become the most important aspect of planning when

companies have abandoned budgeting. Hence, the data indicates that for companies that use RFs, it has taken the budgets' place as being the centre of the short-term plan.

Benchmarking has the lowest average importance for all the tools. Combining this with the higher usage extent average shown in table 18, it can be concluded that benchmarking is used to a large extent in short-term planning, but it is not a crucial tool. Further, benchmarking is used by approximately 90 percent of companies that participate in our study. This can be compared to Rigby (2001) findings that almost 80 percent of companies worldwide used benchmarking in the late 1990s. Although not shown explicitly by our data, combining table 18 and 19 suggests that internal benchmarking is more important than external benchmarking. However, the minimum and maximum values combined with the second-highest standard deviation, suggests that there are large differences between how important different companies regard benchmarking in their short-term planning.

When looking at performance measures, our data suggests that it is the most important method for short-term planning. The higher importance for the BB tools might indicate that the shift from traditional budgeting to BB is occurring. However, since traditional budgeting still holds fairly high importance this move has not occurred to the same extent as predicted by academics (eg., Jensen, 2002; Hansen, Otley & Van der Stede, 2003; Hope & Fraser, 2003c; Bogsnes, 2009) who criticized the budget in the early 2000s. Moreover, the minimum value of 2 indicates that all users of performance measurement regard it to at least have some importance in short-term planning.

Table 19. Importance of tools and methods in short-term planning

<i>How important are the tools in short-term planning?</i>	n	Average	SD	Min	Max
Budget	22	4.91	1.85	1	7
Rolling forecast (RF)	10	5.30	1.25	3	7
Benchmarking	20	3.95	1.57	1	7
Performance measures	17	5.47	1.37	2	7

5.3. Purpose of using the different short-term planning tools

In table 20 below, the main purposes of each tool are combined. X:s show the main purposes of each tool and method based on the averages calculated in the empirical findings section. As it can be seen, there is one purpose which is one of the main purposes for all the tools - a basis for follow-ups. This is an expected outcome as companies would not benefit from short-term planning that much if they would not follow them up. However, it was interesting that the basis for follow-ups was the only one that was the main purpose for all the tools and methods.

Some purposes are not included in any tool's main purposes. These purposes are dividing responsibility, communicating the link between finance and operations, a basis for the incentive system, and implementing the company's strategy. What was surprising is that companies gave relatively low scores when evaluating all these tools as being a basis for incentive systems. This raises questions about whether the companies have any incentive systems or on what the companies base their incentive systems. Also, one benefit of BB tools is that they direct the focus of rewards to strategic aspects instead of fixed targets set in the traditional budgets (Hong et al., 2012). It is also interesting that the strategy implementation is not that important in any of the tools as it could be assumed that the companies rely heavily on their strategy when planning the short-term future. However, companies might take this for granted or include the strategies unconsciously. One possible reason why dividing responsibility and communicating the link between finance and strategy are not that important is that they are the by-products of the tools. Thus, other purposes might be the priority and these two are a positive addition.

When looking at the data more closely, one can see that planning is one of the main purposes of budgeting in short-term planning. This is in line with Raghunandan, Ramgulam and Raghunandan-Mohammed (2012) as they argued that planning is one of the six purposes of budgeting. Interestingly, companies report that they are using budgets to implement the company's strategy to some extent whereas most of the critique says that there is a weak link between strategy and budgets (Jensen, 2002; Hansen, Otley & Van der Stede, 2003; Bogsnes, 2008). When looking at the strategy implementation as a purpose, budgeting has the highest average in the current situation

and the second highest in the future. This implies that the academic critique against budgeting is not in line with the practice, at least not yet.

Interestingly, RF has very similar main purposes and other budgeting forms. The only difference is that companies have highlighted the usage of RFs as a tool for adapting to external factors. This implies that RFs are more flexible than more traditional budgets, which is in line with the academic literature (Hope & Fraser, 2003a; Neely, Bourne & Adams, 2003; Cardoso, 2014). However, it is interesting to see that companies do not value the same purposes as the most important ones with the literature. For example, Hope and Fraser (2003a) and Cardoso (2014) argue that resource allocation is one of the benefits of RFs, sample companies valued budgets over RFs when allocating resources.

Benchmarking, in turn, has very different purposes compared to budgets and RFs. In addition to being a basis for follow-ups, benchmarking is used to set goals and help in adapting to external factors. This is an interesting result since theory suggests other purposes for benchmarking such as to help identify improvement areas (Clarke & Manton, 1997; Lindberg et al., 2015) and link the strategy to short-term planning (Hong et al., 2012). Linking the strategy to the planning can be parallelized with implementing the company's strategy. The most interesting finding is that benchmarking had the lowest averages in all the purposes currently and most of the purposes in the future. However, this could be explained by two aspects. Firstly, the companies did not regard benchmarking as an important tool in short-term planning (see section 5.2) which might reflect this result. Secondly, there can be different organizational structures and large differences with competitors which do not enable all the companies to use benchmarking. The averages for benchmarking purposes increase in the future the most compared to other tools, which might indicate a change in the management style away from more traditional short-term planning tools and methods.

The averages for performance measurement tools and methods support the indication of the change. When examining the future averages, performance measurement tools and methods have the highest average in six out of eleven purposes. When investigating current purposes, one can see that setting and communicating goals are the main purposes of performance measurement tools

and methods along with being a basis for follow-ups. This was a little bit surprising since theory suggests that KPIs (Eckerson, 2009) and BSCs (Kaplan & Norton, 1996; Banker, Chang & Pizzini, 2004) are used to link the company's strategies to their short-term planning. The averages for implementing the company's strategy are relatively low compared to other purposes' averages. However, there is a large increase in the average which might indicate that the companies are moving towards the direction suggested in the academic literature.

Table 20. Comparison of purposes

(B - budgets, RF - rolling forecast, BM - benchmarking, PM - performance measures)

	Current				Future			
	B	RF	BM	PM	B	RF	BM	PM
Planning	X	X			X	X		X
Resource allocation	X				X			
Dividing responsibility								
The basis for follow-ups	X	X	X	X	X	X	X	X
Communicating goals				X				X
Communicate the link between finance and operations								
Setting goals			X	X	X		X	
Use as a basis for an incentive system								
Adapting to external factors		X	X					
Implementing the company's strategy								
Identifying development areas							X	

5.4. Future of short-term planning

Even though most of the sample companies are still using more traditional short-term planning tools such as budgets, there can be seen the change towards other tools and methods. Still, there are also some interesting and surprising results. Firstly, traditional fixed budgets are still valued as more important than more advanced budgets such as revised budgets and rolling budgets. However, this might be explained by the lack of definitions in the survey as companies might have a different understanding of different budgeting types as the authors intended. If the possible limitation is disregarded, it is interesting that companies still rather base their budgets on last year's results than, for example, on individual justifications or activities. Secondly, it is surprising that

companies estimate that the RFs are going to be used to that large extent even though they value the purposes of RFs relatively low in the future. However, the importance of RF in short-term planning was relatively high which might explain the importance of it in the future too. Lastly, the companies do not think that BSCs will be used in the near future (1-5 years) to a large extent. It is still surprising as it has been quite a long time since the first appearance of BSC so it could have been expected to be more widely implemented in the future. It raises several questions such as are companies aware of this tool, are there already better tools to replace the BSC, or is the BSC still too non-specific for most of the companies. According to the authors of this paper, the most probable reason for such a low average in the future use of BSC is that companies might use similar tools but not explicitly call it BSC, so companies might have preferred financial and non-financial performance measures when answering the survey.

6. Conclusion, limitations, and future research

6.1. Conclusion

This thesis investigated the short-term planning tools and methods used in large Swedish companies. The first research question was to what extent the different short-term planning tools and methods are used in the companies currently. This study found that large Swedish companies still use budgets to a large extent. Quite surprisingly, the main type of budget is the traditional budget. In contradiction to theory, RFs were not used to the same extent as expected since less than half of the sample companies used RFs. However, most of the sample companies have adopted other short-term planning tools and methods in addition to traditional budgeting. For example, benchmarking, and especially internal benchmarking, is widely used but it is not very important for short-term planning. Companies also use financial performance measures to a high extent and regard them as fairly important. Other BB tools such as KPIs, non-financial performance measures, and BSC are used to a medium or low extent. Some companies also mentioned that they use other tools focusing mostly on online tools. However, these were not the priority in their short-term planning.

The second research question focused on the purposes of the tools and methods. It was found that the purposes of the different tools and methods varied. Budgets and RFs were mainly used for planning, resource allocation, and as a basis for follow-ups. Whereas benchmarking and performance measures (financial, non-financial, KPIs, and BSC) were used as a basis for follow-ups, setting and communicating goals, and adapting to external factors. Yet, no tool or method's main purpose was to implement the company's strategy or use it as a basis for an incentive system, which was an interesting finding. The purposes for tools and methods remained fairly the same when the companies were asked what purposes they are going to use these tools and methods in the future.

The third research question investigated the future use of the tools and methods. There can be seen a change towards modified budgeting tools and BB in the future. However, it was interesting to see that companies are still going to use traditional budgets rather than flexible budgets in the future.

6.2. Contribution

This study has two main contributions. Firstly, we contribute to the literature by adding a study examining the reasons why companies use certain tools and methods. We could not find other studies that would have investigated the reasons why companies use different short-term planning tools and methods. Secondly, finding the reasons for the use of different tools and methods benefits the academic community as this increases the understanding of the different tools and methods in short-term planning and provides valid future research areas on this topic. This paper is also beneficial to practitioners at companies that are thinking about changing the tools and methods used in short-term planning.

6.3. Limitations

This thesis is constrained by some limitations and restrictions. Limitations related to research design are discussed in the methodology section. Other limitations and restrictions related to this empirical study will be presented in this section.

Firstly, due to the time limitations, the authors were unable to conduct a thorough literature search before starting to compile the survey. This had affected the depth of questions as well as chosen options for answers. The authors also acknowledge that the survey may also lack some interesting questions that could have been relevant to the study. Secondly, this study investigated only short-term planning practices at the corporate level. Thus, the answers are not generalizable to the whole short-term planning process. Also, the low response rate has decreased the generalizability. However, as concluded in the non-response analysis the findings in this study still hold strong reliability. Thirdly, as this study indicates, the companies' short-term planning tools and methods may differ from the ones discussed in the academic literature. For example, when discussing budgeting, companies might base some fixed and indirect costs on zero (ZBB) or last year's actual numbers (traditional way), and some product-related items on activities (ABB). This means that the result can vary from theory and previous studies. Companies might also use some variations of these common tools which may have led to distorted answers if the companies have not identified themselves as users of a specific tool mentioned in the survey.

6.4. Future research

As this study focuses on individual tools rather than specific combinations, we suggest that one possible future research could be focusing on the reasons why companies use different combinations of tools and methods. This would widen the understanding of short-term planning processes in modern times as companies have started to use more than one short-term planning tool and method simultaneously. The other possible idea for future research is to study the situation in 5 to 10 years. Is the situation similar to what companies have estimated in this study or has the movement been towards more modern tools and methods such as benchmarking and performance measures? Future research could also focus on the role of digital tools, as our findings suggest that digital tools are the tools used in addition to the ones investigated in this study. One example would be whether the share of digital tools in short-term planning has increased or not and more explicitly what digital tools are used by companies today.

List of references

- Ahmad, N. N. N., Sulaiman, M., & Alwi, N. M. (2003). Are budgets useful? A survey of Malaysian companies. *Managerial Auditing Journal*, 18(9), 717–724. <https://doi.org/10.1108/02686900310500479>
- Ammons, D. N. (1999). A Proper Mentality for Benchmarking. *Public Administration Review*, 59(2), 105. <https://doi.org/10.2307/977630>
- Andersen, I., (1998) Den uppenbara verkligheten. Val av samhällsvetenskaplig metod. Lund: Studentlitteratur.
- Ansari, S., Bell, J., & Klammer, T. (1999). *Activity-Based Budgeting, Modular Series: Management Accounting*. McGraw-Hill Education - Europe.
- Atanasijevic, J., Aleksic, D., & Stimac, V. (2015). The role of economic planning in public sector: Principles, evidence and lessons for Serbia in the context of EU integration. *Ekonomika Preduzeca*, 63(1–2), 145–153. <https://doi.org/10.5937/ekopre1502145a>
- Athiyaman, A., & Robertson, R. (1992). Time Series Forecasting Techniques: Short-term Planning in Tourism. *International Journal of Contemporary Hospitality Management*, 4(4). <https://doi.org/10.1108/09596119210018864>
- Bangs, D. H. (1998). The Business Planning Guide: Creating a Plan for.
- Banham. (2000). Better budgets. *Journal of Accountancy*. Published.
- Banham, R. (2011, May 1). *Let It Roll*. CFO. <https://www.cfo.com/strategy/2011/05/let-it-roll-2/>
- Banker, R. D., Chang, H., & Pizzini, M. J. (2004). The Balanced Scorecard: Judgmental Effects of Performance Measures Linked to Strategy. *The Accounting Review*, 79(1), 1–23. <https://doi.org/10.2308/accr.2004.79.1.1>
- Banker, R. D., Potter, G., & Srinivasan, D. (2000). An Empirical Investigation of an Incentive Plan that Includes Nonfinancial Performance Measures. *The Accounting Review*, 75(1), 65–92. <https://doi.org/10.2308/accr.2000.75.1.65>
- Bassi, L. J., & Cheney, S. (1997). Benchmarking the best. *Training and Development*. Published.
- Bell, E., Bryman, A., & Harley, B. (2011). *BUSINESS RESEARCH METHODS 3E* (3rd ed.). Oxford University Press.
- Bell, E., Bryman, A., & Harley, B. (2019). *BUSINESS RESEARCH METHODS 5E* (5th ed.). Oxford University Press.

- Bergstrand, J. (2009). *Accounting for Management Control*. Studentlitteratur AB.
- Bogsnes, B. (2008). *Implementing Beyond Budgeting: Unlocking the Performance Potential* (1st ed.). Wiley.
- Bogsnes, B. (2010). *Beyond Budgeting in Statoil*. Springer Nature.
- Bunce, P., Fraser, R., & Woodcock, L. (1995). Advanced budgeting: a journey to advanced management systems. *Management Accounting Research*, 6(3), 253–265. <https://doi.org/10.1006/mare.1995.1017>
- Campbell, I.J. (1985). 'Budgeting is it a Technical or Behavioural Process?', *Management Accounting*, February, pp. 66-70.
- Cardoş, I. R. (2014). New Trends in Budgeting – A Literature Review. *SEA - Practical Application of Science, II*, 483–489.
- Cardoş, I. R., Pete, Ş., & Cardoş, V. D. (2014). TRADITIONAL BUDGETING VERSUS BEYOND BUDGETING: A LITERATURE REVIEW. *Annals of the University of Oradea, Economic Science Series*. Published.
- CIMA. (2007, October). *Beyond Budgeting Topic Gateway Series No. 35*. https://www.cimaglobal.com/Documents/ImportedDocuments/cid_tg_beyond_budgeting_oct07.pdf
- Clarke, A., & Manton, S. (1997). A benchmarking tool for change management. *Business Process Management Journal*, 3(3), 248–255. <https://doi.org/10.1108/14637159710192293>
- Cleverley, W. O. (1989). *Handbook of Health Care Accounting and Finance*. Macmillan Publishers.
- Collis, J., & Hussey, R. (2014). *Business research: A practical guide for undergraduate & postgraduate students* (4th ed.). Basingstoke: Palgrave Macmillan.
- Cooper, R., & Kaplan, R. S. (1991). Profit Priorities from Activity-Based Costing. *Harvard Business Review*. Published.
- Cooper, R., & Kaplan, R. S. (1992). Activity-based systems: Measuring the costs of resource usage. *Accounting Horizons*. Published.
- Corporater. (2020). THE HISTORY OF KPIs (KEY PERFORMANCE INDICATORS). <https://corporater.com/en/wp-content/uploads/2019/03/KPI-history.pdf>

- Dattakumar, R., & Jagadeesh, R. (2003). A review of literature on benchmarking. *Benchmarking: An International Journal*, 10(3), 176–209. <https://doi.org/10.1108/14635770310477744>
- Denrell, J. (2014, August 1). *Selection Bias and the Perils of Benchmarking*. Harvard Business Review. <https://hbr.org/2005/04/selection-bias-and-the-perils-of-benchmarking>
- Dugdale, D., & Lyne, S. (2006). *Budgeting*. https://www.cimaglobal.com/Documents/ImportedDocuments/fm_nov06_budgeting.pdf
- Durfee, D. (2006, June 1). *Alternative Budgeting*. CFO. <https://www.cfo.com/2006/06/alternative-budgeting/>
- Eckerson, W. W. (2009). PERFORMANCE MANAGEMENT STRATEGIES - How to Create and Deploy Effective Metrics. *TDWI BEST PRACTICES REPORT*. Published.
- Ekholm, B. -G., & Wallin, J. (2000). Is the annual budget really dead? *European Accounting Review*, 9(4), 519–539. <https://doi.org/10.1080/09638180020024007>
- Ekholm, B.-G., & Wallin, J. (2006). Flexible budgeting under uncertainty: a real options perspective. *Svenska Handelshögskolan*. Published. <https://helda.helsinki.fi/handle/10227/74>
- Emiliani, M. L. (2006). Origins of lean management in America. *Journal of Management History*.
- Franco-Santos, M., Lucianetti, L., & Bourne, M. (2012). Contemporary performance measurement systems: A review of their consequences and a framework for research. *Management Accounting Research*, 23(2), 79–119. <https://doi.org/10.1016/j.mar.2012.04.001>
- Frow, N., Marginson, D., & Ogden, S. (2010). “Continuous” budgeting: Reconciling budget flexibility with budgetary control. *Accounting, Organizations and Society*, 35(4), 444–461. <https://doi.org/10.1016/j.aos.2009.10.003>
- Goode, M., & Malik, A. (2011). Beyond budgeting - A way forward. *Pakistan Journal of Sciences*. Published.
- Govindarajan, V. (1986). Decentralization, Strategy, and Effectiveness of Strategic Business Units in Multibusiness Organizations. *Academy of Management Review*, 11(4), 844–856. <https://doi.org/10.5465/amr.1986.4284099>

- Hansen, S. C. (2011). A Theoretical Analysis of the Impact of Adopting Rolling Budgets, Activity-Based Budgeting and Beyond Budgeting. *European Accounting Review*, 20(2), 289–319. <https://doi.org/10.1080/09638180.2010.496260>
- Hansen, S. C., Otley, D. T., & Van der Stede, W. A. (2003). Practice Developments in Budgeting: An Overview and Research Perspective. *SSRN Electronic Journal*. Published. <https://doi.org/10.2139/ssrn.410544>
- Hansen, S. C., & Torok, R. G. (2004). *The Closed Loop: Implementing Activity-Based Planning and Budgeting*. Bookman Publishing.
- Henisz, W., Koller, T., & Nuttall, R. (2019). Five ways that ESG creates value. *McKinsey Quarterly*, 4, 1–12.
- Henttu-Aho, T. (2018). The role of rolling forecasting in budgetary control systems: reactive and proactive types of planning. *Journal of Management Control*, 29(3–4), 327–360. <https://doi.org/10.1007/s00187-018-00273-6>
- Henttu-Aho, T., & Järvinen, J. (2013). A Field Study of the Emerging Practice of Beyond Budgeting in Industrial Companies: An Institutional Perspective. *European Accounting Review*, 22(4), 765–785. <https://doi.org/10.1080/09638180.2012.758596>
- Hong, P., Hong, S. W., Jungbae Roh, J., & Park, K. (2012). Evolving benchmarking practices: a review for research perspectives. *Benchmarking: An International Journal*, 19(4/5), 444–462. <https://doi.org/10.1108/14635771211257945>
- Hope, J., & Fraser, R. (2003a). Who needs budgets? *Harvard Business Review*, 108–115.
- Hope, J., & Fraser, R. (2003b). New Ways of Setting Rewards: The beyond Budgeting Model. *California Management Review*, 45(4), 104–119. <https://doi.org/10.2307/41166190>
- Hope, J., & Fraser, R. (2003c). *Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap*. Harvard Business Review Press.
- Horngren, C., Datar, S., and Rajan, M. (2012) *Cost Accounting: A Managerial Emphasis*, Upper Saddle River: Prentice-Hall
- Horvath P., and Sauter R. (2004) ‘Why budgeting fails: one management system is not enough?’. *Balanced Scorecard Report*, vol.6, no.5, pp. 8-11
- Ittner, C. D., & Larcker, D. F. (1998a). Innovations in Performance Measurement: Trends and Research Implications. *Journal of Management Accounting Research*. Published.

- Ittner, C. D., & Larcker, D. F. (1998b). Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction. *Journal of Accounting Research*, 36, 1. <https://doi.org/10.2307/2491304>
- Jensen, M. C. (2002). Corporate Budgeting Is Broken, Let's Fix It. *SSRN Electronic Journal*. Published. <https://doi.org/10.2139/ssrn.321520>
- Kald, M., & Nilsson, F. (2000). Performance measurement at Nordic companies. *European Management Journal*, 18(1), 113–127. [https://doi.org/10.1016/s0263-2373\(99\)00074-2](https://doi.org/10.1016/s0263-2373(99)00074-2)
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard - Measures that drive performance. *Harvard Business Review*. Published.
- Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*. Published.
- Kopecka, N. (2015). The Balanced Scorecard Implementation, Integrated Approach and the Quality of Its Measurement. *Procedia Economics and Finance*, 25, 59–69. [https://doi.org/10.1016/s2212-5671\(15\)00713-3](https://doi.org/10.1016/s2212-5671(15)00713-3)
- Kramer, S. and Hartmann, F. (2014) 'How Top-down and Bottom-up Budgeting Affect Budget Slack and Performance through Social and Economic Exchange', *Abacus*, 50(3), pp. 314–340. DOI: 10.1111/abac.12032.
- Lamoreaux, M. G. (2011). Planning for Uncertainty. *Journal of Accountancy*, 32–36.
- Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research*, 21(1), 56–75. <https://doi.org/10.1016/j.mar.2009.10.003>
- Lindberg, C. F., Tan, S., Yan, J., & Starfelt, F. (2015). Key Performance Indicators Improve Industrial Performance. *Energy Procedia*, 75, 1785–1790. <https://doi.org/10.1016/j.egypro.2015.07.474>
- Lipe, M. G., & Salterio, S. E. (2000). The Balanced Scorecard: Judgmental Effects of Common and Unique Performance Measures. *The Accounting Review*, 75(3), 283–298. <https://doi.org/10.2308/accr.2000.75.3.283>
- Lorain, M. A. (2010). Should rolling forecasts replace budgets in uncertain environments? *Studies in Managerial and Financial Accounting*, 20, 177–208. [https://doi.org/10.1108/s1479-3512\(2010\)0000020010](https://doi.org/10.1108/s1479-3512(2010)0000020010)

- Mooraj, S., Oyon, D., & Hostettler, D. (1999). The balanced scorecard: a necessary good or an unnecessary evil? *European Management Journal*, 17(5), 481–491. [https://doi.org/10.1016/s0263-2373\(99\)00034-1](https://doi.org/10.1016/s0263-2373(99)00034-1)
- Morlidge, S., & Player, S. (2010). *Future Ready: How to Master Business Forecasting* (1st ed.). Wiley.
- Neely, A., Bourne, M., & Adams, C. (2003). Better budgeting or beyond budgeting? *Measuring Business Excellence*, 7(3), 22–28. <https://doi.org/10.1108/13683040310496471>
- Østergren, K., & Stensaker, I. (2011). Management Control without Budgets: A Field Study of ‘Beyond Budgeting’ in Practice. *European Accounting Review*, 20(1), 149–181. <https://doi.org/10.1080/09638180903487842>
- Patel, R. & Davidson, B., (2003) Forskningsmetodikens grunder. Att planera, genomföra och rapportera en undersökning. 3rd ed. Lund: Studentlitteratur.
- Pietrzak, A. (2014). Traditional versus Activity-based Budgeting in Non-manufacturing Companies. *Social Sciences*, 82(4). <https://doi.org/10.5755/j01.ss.82.4.6604>
- Pilkington, M., & Crowther, D. (2007). Budgeting and control. *Financial Management*, 29-30.
- Pinson, L. (2008). Anatomy of a Business Plan: A Step-by-step Guide to Building the Business and Securing Your Company's Future. *Aka associates*.
- Popesko, B., & Novak, P. (2008). Activity-based costing applications in Czech Republic. *Lex ET Scientia International Journal*. Published.
- Raghunandan, M., Ramgulam N. and Raghunandan-Mohammed, K. (2012) ‘Examining the behavioural aspects of budgeting with particular emphasis on public sector/service budgets’, *International Journal of Business and Social Science*, vol. 3, no. 14, pp. 110 – 117
- Rickards, R. C. (2006). BEYOND BUDGETING: BOON OR BOONDOGGLE? *Investment Management and Financial Innovations*. Published.
- Rigby, D. (2001). Management Tools and Techniques: A Survey. *California Management Review*, 43(2), 139–160. <https://doi.org/10.2307/41166079>
- Rivero, E. J. R. (2013). In which direction is budgeting moving? A report in large firms of Spain. *Contaduría y Administración*, 58(4), 59–93. [https://doi.org/10.1016/s0186-1042\(13\)71234-8](https://doi.org/10.1016/s0186-1042(13)71234-8)

- Tucker, M. W. (1982). Flexible Budgeting as a Management Tool. *American Journal of Small Business*, 6(4), 10–18. <https://doi.org/10.1177/104225878200600403>
- Wallace, J. S. (2003). VALUE MAXIMIZATION AND STAKEHOLDER THEORY: COMPATIBLE OR NOT? *Journal of Applied Corporate Finance*, 15(3), 120–127. <https://doi.org/10.1111/j.1745-6622.2003.tb00466.x>
- Wallander, J. (1999). Budgeting — an unnecessary evil. *Scandinavian Journal of Management*, 15(4), 405–421. [https://doi.org/10.1016/s0956-5221\(98\)00032-3](https://doi.org/10.1016/s0956-5221(98)00032-3)
- Wetherbe, J. C., & Montanari, J. R. (1981). Zero based budgeting in the planning process. *Strategic Management Journal*, 2(1), 1–14. <https://doi.org/10.1002/smj.4250020102>
- Wohlers, B., Dziwok, S., Pasic, F., Lipsmeier, A., & Becker, M. (2020). Monitoring and control of production processes based on key performance indicators for mechatronic systems. *International Journal of Production Economics*, 220, 107452. <https://doi.org/10.1016/j.ijpe.2019.07.025>
- Zeller, T. L., & Metzger, L. M. (2013). Good Bye Traditional Budgeting, Hello Rolling Forecast: Has The Time Come? *American Journal of Business Education (AJBE)*, 6(3), 299–310. <https://doi.org/10.19030/ajbe.v6i3.7810>

Appendices

Appendix 1. The letter sent out with the survey (Swedish original)



LUND UNIVERSITY
School of Economics and Management

Lund 2021-04-18

Budgetering och andra mått och metoder som används vid kortsiktig planering

Hej

Budgetering och prognoser har under den senaste 20 årsperioden varit ett område inom ekonomistyrningen som inte tilldragit sig stor uppmärksamhet. Den senaste forskningen pekar på att företag idag i större utsträckning använder sig av flera olika mått och metoder i sin kortsiktiga planering. Då majoriteten av dessa studier är 10–15 år gamla vill vi göra ett inlägg i debatten mellan budgetering och andra mått och metoder som används för kortsiktig planering. Vi undersöker i vilken utsträckning stora svenska koncerner använder sig av andra mått och metoder utöver traditionell budget och jämfört med vad tidigare studier har kommit fram till.

Vi vill därför be er att klicka på länken nedan för att fylla i enkäten. Enkäten har skickats ut till Sveriges 200 största koncerner. De företag som besvarar enkäten erhåller naturligtvis resultatet av studien. Resultatet är viktigt dels för framtida studier inom ekonomistyrning, dels vid utbildning av kommande generationers ekonomer. Resultatet kommer att publiceras som en Magisteruppsats vid Ekonomihögskolan vid Lunds universitet.

Vi vill poängtera vikten av just ert företags deltagande. Har inte just du tid att besvara enkäten vidarebefordra den gärna till någon annan som är väl insatt i vilka ekonomistyrningsverktyg som används i företaget/koncernen. Naturligtvis garanteras fullständig anonymitet. Ingen koppling kommer att finnas mellan respondent, företag och enkätsvar. De insamlade uppgifterna kommer endast att användas för statistiska ändamål.

Det tar ca 10 minuter att besvara enkäten och ni når den genom länken nedan:
https://docs.google.com/forms/d/e/1FAIpQLSfkhMY_aUwtbN7DIrSj7YWeVJa3rk9U-pTNjJAP3vW41YNjw/viewform?usp=sf_link

Vi behöver era svar senast **fredagen den 30 april 2021**

Har ni några frågor om enkäten eller om studien är ni välkomna att höra av er till:

Lukas Gotthardsson: lukas.gotthardsson@gmail.com

Nea Sipola: nea.sipola@hotmail.com.

Handledare för studien är universitetslektor Johan Dergård (johan.dergard@fek.lu.se).

STORT TACK FÖR ER MEDVERKAN

Med vänliga hälsningar, Lukas Gotthardsson och Nea Sipola

Appendix 2. The letter sent out with the survey (free English translation)



LUND UNIVERSITY
School of Economics and Management

Lund 2021-04-18

Budgets and other methods that are used in short-term planning

Hi

During the last 20 years, budgets and forecasts have been a research area within management control that has not had much attention. The latest research indicates that companies today use several different tools and methods to a larger extent in their short-term planning. Since the majority of studies are 10-15 years old, we want to contribute to the dissection regarding the use of budgets and other tools in short-term planning. Our investigation regards to what extent large Swedish firms use other tools and methods in addition to traditional budgeting, and we will compare our results with previous studies.

Therefore, we ask you to use the link below to answer our survey. The survey has been sent out to Sweden's 200 largest companies. The firms that answer the survey will get a copy of the finished report. The result of this study is important for future studies within management accounting as well as the education of new business students. The results will be published as a master thesis at Lund University school of economics and management.

We want to highlight the importance of your company's participation. If you don't have time to answer the survey, please forward it to someone with knowledge regarding how management accounting tools are used at your firms. Of course, we guarantee anonymity when you participate. There will be no connection between the respondent, the company and the answers. The data will only be used for statistical purposes.

It takes approximately 10 minutes to answer the survey thru the link:
https://docs.google.com/forms/d/e/1FAIpQLSfkhnMY_aUwtbN7DlrSj7YWeVJa3rk9U-pTNjJAP3vW41YNjw/viewform?usp=sf_link

We need your answers the latest on **Friday the 30 April 2021**

If you have any questions, you are more than welcome to reach out to:

Lukas Gotthardsson: lukas.gotthardsson@gmail.com

Nea Sipola: nea.sipola@hotmail.com.

The supervisor for the study is Johan Dergård (johan.dergard@fek.lu.se).

Thank you for your participation!

Best regards, Lukas Gotthardsson and Nea Sipola

Appendix 3. The survey questions (Swedish original)

Introduktion till enkäten.

Enkäten handlar om mått och metoder som ni använder er av i er kortsiktiga planering. Huvudsyftet är att se i vilken utsträckning svenska företag använder sig av traditionell budget samt vilka andra mått/metoder som används som komplement eller istället för traditionell budget.

Det tar ca 10 minuter att genomföra. Frågeformuläret har i huvudsak fasta svarsalternativ och består av 8 delar. Den första delen handlar om allmänna frågor, dessa frågor är endast till för att vi ska kunna hålla reda på vem som har svarat på studien och kommer hanteras med full anonymitet och inte publiceras i studien. Del 2 handlar om kortsiktig planering, del 3-7 handlar om olika typer av mått/metoder som ni kanske använder i den kortsiktiga planeringen. Om ni inte använder er av det specifika måttet/metoden i del 3-7 så kommer ni inte behöva svara på frågor kring det måttet/metoden. Del 8 handlar om vilka mått/metoder ni kommer använda er av i framtiden.

Del 1- Allmänna frågor

Del 2- Kortsiktig planering

Del 3- Budget

Del 4- Rullande prognos (Rolling forecast)

Del 5- Benchmarking

Del 6- Prestationsmätning

Del 7- Andra verktyg

Del 8- Framtiden

1 - Allmänna frågor

1.1 Ange ditt namn? (Kommer endast användas för att veta vem som har svarat)

1.2 Ange namn på företaget du arbetar på?

1.3 Vilken är din position på företaget?

1.4 Hur länge har du jobbat på företaget?

1.5 Hur länge har du jobbat i din nuvarande position? (open ended)

1.6 Vilken industri är ni verksamma i?

1.7 Vill du ta del av den färdiga studien via email? Ja eller nej?

2 - Kortsiktig planering

2.1. Markera det alternativ som bäst beskriver hur ni fastställer målsättningar?

- Högsta ledningen fastställer målsättningar och vidarebefordrar till underordnade
- Högsta ledningen fastställer målsättningar och diskuterar dem med underordnade
- Målsättningar fastställs efter långa förhandlingar mellan enheter på olika organisatorisk nivåer
- Underordnade fastställer på egen hand målsättningar men dessa måste accepteras av högsta ledningen
- Underordnade fastställer på egen hand målsättningar och högsta ledningen blandar sig (nästan) inte i

2.2 Markera det alternativ som bäst stämmer in på hur ofta ni följer upp er kortsiktiga planering?

- Dagligen
- En gång i veckan
- Varannan vecka
- En gång per månad
- En gång per kvartal
- En gång i halvåret
- Årligen
- Inte alls
- Annan tidsperiod ([ange vilken i så fall](#))

2.3. Markera det alternativ som bäst stämmer in på hur ofta ni uppdaterar er kortsiktiga planering?

- En gång i veckan
- Varannan vecka
- En gång per månad
- En gång per kvartal
- En gång i halvåret
- Årligen
- Annan tidsperiod ([ange vilken i så fall](#))

3 - Budget

3.1 Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning i vilken utsträckning ni använder er av följande typer av budgetar (Om ni svarar: 1= inte alls, på alla typer av budgetar då kan ni lämna fråga 3.2 och 3.3 obesvarad)

- Fast budget
- Reviderad budget
- Rullande budget
- Rörlig budget
- Aktivitetsbaserad budgetering
- Noll baserad budget (Zero-Based Budgeting)
- Annat (ange vad i så fall)

3.2a. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning i vilken utsträckning ni **idag** använder budget för följande syften?

- Planering
- Resursallokering
- Fördelning av ansvar till organisatoriska enheter
- Underlag för uppföljning av verksamheten
- Kommunicera mål och budskap ut i organisationen

Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

3.2b. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni i **framtiden** kommer använda er av budget för följande syften?

Planering
Resursallokering
Fördelning av ansvar till organisatoriska enheter
Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

3.3. Ange på en skala 1–7, där 1 = inte viktigt alls och 7 = mycket viktigt, hur viktig budgetering är för er kortsiktiga planering?

4 - Rullande prognos (Rolling forecast)

4.1 Ange om ni använder er av rullande prognos i er kortsiktiga planering? Ja eller nej (Om du svarar nej, kan du lämna fråga 4.2-4.4 obesvarad)

4.2. Markera hur långt fram er rullande prognos sträcker sig?

1 månad

3 månader

6 månader

12 månader

18 månader

2 år

3 år

5 år

Annan period?

4.3a. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni **idag** använder rullande prognos för följande syften? (1-7 scale)

- Planering
- Resursallokering
- Fördelning av ansvar till organisatoriska enheter
- Underlag för uppföljning av verksamheten
- Kommunicera mål och budskap ut i organisationen
- Öka medvetenheten om sambandet mellan verksamhet och ekonomi
- Ta fram målsättning för organisationens enheter
- Används som incitaments verktyg
- Anpassa företagets verksamhet till externa faktorer
- För att implementera företagets strategi
- Bidra till att identifiera de viktigaste utvecklingsområdena
- Andra anledningar (ange vad i så fall)

4.3b. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni i **framtiden** kommer använda er av rullande prognos för följande syften?

- Planering
- Resursallokering
- Fördelning av ansvar till organisatoriska enheter
- Underlag för uppföljning av verksamheten
- Kommunicera mål och budskap ut i organisationen
- Öka medvetenheten om sambandet mellan verksamhet och ekonomi
- Ta fram målsättning för organisationens enheter
- Används som incitaments verktyg
- Anpassa företagets verksamhet till externa faktorer
- För att implementera företagets strategi
- Bidra till att identifiera de viktigaste utvecklingsområdena
- Andra anledningar (ange vad i så fall)

4.4. Ange på en skala 1–7, där 1 = inte viktigt alls och 7 = mycket viktigt, hur viktig rullande prognos är för er kortsiktiga planering?

5 - Benchmarking

5.1. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni använder er av interna och/ eller externa referenser när ni använder er av benchmarking? (Om ni svarar 1 (inte alls) på både interna och externa referenser då kan ni lämna fråga 5.2 och 5.3 obesvarad)

- Interna
- Externa

5.2a. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni **idag** använder benchmarking för följande syften?

- Planering
- Resursallokering

Fördelning av ansvar till organisatoriska enheter
Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

5.2b. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni i **framtiden** kommer använda er av benchmarking för följande syften?

Planering
Resursallokering
Fördelning av ansvar till organisatoriska enheter
Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

5.3. Ange på en skala 1–7, där 1 = inte viktigt alls och 7 = mycket viktigt, hur viktig benchmarking är för er kortsiktiga planering?

6 - Prestationsmätning

6.1 Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning använder ni er av följande typer av mått/metoder i den kortsiktiga planeringen. (Om ni svarar 1 (inte alls) på alla mått/metoder nedan då kan ni lämna fråga 6.2 och 6.3. obesvarad)

1. Finansiella prestationsmått
2. Icke-finansiella prestationsmått
3. Kritiska prestationsindikatorer (Key performance indicators)
4. Balanserat styrkort
5. Andra (ange vilka i så fall)

6.2a. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni **idag** använder prestationsmått för följande syften?

Planering
Resursallokering
Fördelning av ansvar till organisatoriska enheter

Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

6.2b. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni i **framtiden** kommer använda er av prestationsmätt för följande syften?

Planering
Resursallokering
Fördelning av ansvar till organisatoriska enheter
Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

6.4. Ange på en skala 1–7, där 1 = inte viktigt alls och 7 = mycket viktigt, hur viktigt prestationsmätt är för er kortsiktiga planering?

7 - Andra verktyg

7.1. Ange vad för andra verktyg använder ni er av? (Om ni inte anger några andra verktyg då kan ni lämna fråga 7.2 och 7.3 obesvarad)

7.2a. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni **idag** använder andra verktyg för följande syften?

Planering
Resursallokering
Fördelning av ansvar till organisatoriska enheter
Underlag för uppföljning av verksamheten
Kommunicera mål och budskap ut i organisationen
Öka medvetenheten om sambandet mellan verksamhet och ekonomi
Ta fram målsättning för organisationens enheter
Används som incitaments verktyg
Anpassa företagets verksamhet till externa faktorer
För att implementera företagets strategi
Bidra till att identifiera de viktigaste utvecklingsområdena
Andra anledningar (ange vad i så fall)

7.2b. Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning ni i **framtiden** kommer använda er av andra verktyg för följande syften?

- Planering
- Resursallokering
- Fördelning av ansvar till organisatoriska enheter
- Underlag för uppföljning av verksamheten
- Kommunicera mål och budskap ut i organisationen
- Öka medvetenheten om sambandet mellan verksamhet och ekonomi
- Ta fram målsättning för organisationens enheter
- Används som incitaments verktyg
- Anpassa företagets verksamhet till externa faktorer
- För att implementera företagets strategi
- Bidra till att identifiera de viktigaste utvecklingsområdena
- Andra anledningar (ange vad i så fall)

7.3. Ange på en skala 1–7, där 1 = inte viktigt alls och 7 = mycket viktigt, hur viktig andra verktyg är för er kortsiktiga planering?

8 - Framtiden

8.1 Ange på en skala 1–7, där 1 = inte alls och 7 = i stor utsträckning, i vilken utsträckning kommer ni att använda er av följande typer av mått/metoder i den kortsiktiga planeringen i framtiden?

- Fast budget
- Reviderad budget
- Rullande budget
- Rörlig budget
- Aktivitetsbaserad budgetering
- Nollbasbudgetering (Zero-Based Budgeting)
- Rullande prognos
- Benchmarking
- Finansiella prestationsmått
- Icke-finansiella prestationsmått
- Kritiska prestationsindikatorer
- Balanserat styrkort
- Andra (ange vad i så fall)
- Inga nya verktyg

Appendix 4. The survey questions (free English translation)

Introduction to the survey.

The survey is about tools and methods used in your short-term planning. The main purpose is to see to what extent Swedish companies use traditional budgeting as well as what tools/methods are used as a complement to or instead of traditional budgeting.

It takes approx. 10 minutes to complete the survey. The questioner has mainly predefined answers and consist of 8 parts. The first part regards general information, these questions are only asked to keep track of who has answered the study and will be handled with the utmost care for anonymity and will not be published in the study. Part 2 is about short-term planning, parts 3-7 is about different types of tools and methods you may use in short-term planning. If you do not use the specific tool/method in parts 3-7, you will not need to answer the follow-up questions in these sections. Part 8 regards what tools/methods that you will use in the future.

Part 1 - General questions

Part 2 - Short-term planning

Part 3 - Budgeting

Part 4 - Rolling forecasts

Part 5 - Benchmarking

Part 6 - Performance indicators

Part 7- Other tools

Part 8 - The future

1 - General questions

1.1 State your name? (Will only be used to keep track of who has responded)

1.2 State the company you work for?

1.3 What positions do you have at the company?

1.4 How long have you worked at the company?

1.5 How long have you worked in your current position? (open-ended)

1.6 What industry is the company in?

1.7 Do you want to receive a copy of the finished study? Yes or No?

2 – Short term planning

2.1. Mark the alternative that best describes how you set goals?

- Top management sets the goals and forwards them to the subordinates
- Top management sets the goals and discusses them with subordinates
- Goals are determined through long negotiations between units on different management levels
- Subordinates set goals on their own, but they need to be accepted by the top management
- Subordinates set goals on their own, and the top management seldomly involved

2.2 Mark the alternative that best describes how often you follow up your short-term plan

- One a day
- Once a week
- Once every two weeks
- Once a month
- Once every quarter
- Once every six months
- Once a year
- Not at all
- Other

2.3 Mark the alternative that best describes how often you update your short-term plan

- One a day
- Once a week
- Once every two weeks
- Once a month
- Once every quarter
- Once every six months
- Once a year
- Not at all
- Other

3 – Budgeting

3.1 On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you use the following types of budgets (if you answer 1 = not at all, on all budget types, please leave question 3.2 and 3.3 unanswered)

- Traditional budgeting
- Revised budget
- Rolling budget
- Flexible budget
- Activity-based budgeting
- Zero-Based Budgeting
- Other

3.2a. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you **today** use budgeting for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

3.2b. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you in the **future** think you will use budgeting for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

3.3 On a scale of 1-7, where 1 = not important at all, and 7 = very important. Indicate how important budgeting is for your short-term planning.

4 – Rolling forecast

4.1 Do you use rolling forecast in the short-term planning, yes or no (if no, please do not answer questions 4.2-4.4)

4.2 How long is the time frame on your rolling forecast

- 1 month
- 3 months
- 6 months
- 12 months
- 18 months
- 2 years
- 3 years
- 5 years
- Other

4.3a. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you **today** use rolling forecasts for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

4.3b. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you in the **future** think you will use rolling forecasts for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations

- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

4.4 On a scale of 1-7, where 1 = not important at all, and 7 = very important. Indicate how important rolling forecasts are for your short-term planning.

5 – Benchmarking

5.1 On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you use internal and/ or external references when benchmarking. (If you answer 1 = not at all, please do not answer questions 5.2 and 5.3)

Internal

External

5.2a. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you **today** use benchmarking for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

5.2b. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you in the **future** think you will use benchmarking for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups

- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

5.3 On a scale of 1-7, where 1 = not important at all, and 7 = very important. Indicate how important benchmarking is for your short-term planning.

6 – Performance measures

6.1 On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you use the following types of performance measures (if you answer 1 = not at all, on all types of performance measures, please leave question 6.2 and 6.3 unanswered)

- Financial measures
- Non-financial measures
- Key performance indicators (KPI)
- Balanced scorecard
- Other measures

6.2a. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you **today** use performance measures for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

6.2b. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you in the **future** think you will use performance measures for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

6.3 On a scale of 1-7, where 1 = not important at all, and 7 = very important. Indicate how important performance measures are for your short-term planning.

7 – Other tools

7.1 please state what other tools you use (if you do not use any other tools leave questions 7.2 and 7.3 unanswered)

7.2a. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you **today** use other tools for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

7.2b. On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent do you in the **future** think you will use other tools for the following purposes.

- Planning
- Resource allocation
- Dividing responsibility
- The basis for follow-ups
- Communicating goals
- Communicate the link between finance and operations
- Setting goals
- The basis for an incentive system
- Adapting to external factors
- Implementing the company strategy
- Identifying development areas
- Other reasons

7.3 On a scale of 1-7, where 1 = not important at all, and 7 = very important. Indicate how important other tools are for your short-term planning.

8 – The future

8.1 On a scale of 1-7, where 1 = not at all, and 7 = to a large extent. To what extent will you use the following types of tools and methods in the future?

- Traditional budgeting
- Revised budget
- Rolling budget
- Moving budget
- Activity-based budgeting
- Zero-Based Budgeting
- Rolling forecast
- Benchmarking
- Financial
- Non-financial
- Key performance indicators (KPI)
- Balanced scorecard