

Better Budgeting methods – a comparative effect analysis on traditional budgeting problems

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Abstract: *In today's business environment, companies are forced to constantly adapt to ever changing internal and external influences. Yet, the traditional budgeting process with its inherent flaws has remained relatively stable for decades. In order to stay competitive, companies need to improve their budgeting process by implementing Better Budgeting methods. The aim of this research was to develop a framework that helps companies to identify their budgeting problems and address them more efficiently with fitting Better Budgeting methods.*

Through a detailed literature review, a comprehensive list of budgeting problems was developed and explained, which can act as a checklist for companies to evaluate which problems they are facing. In addition, a theoretical framework was developed that matches Better Budgeting methods and the respective traditional budgeting problems they are able to solve/decrease. A survey that tested the framework with actual organizations was used to validate the theoretical results.

The results proved a strong correlation between the implementation of certain Better Budgeting methods and the reduction of certain traditional budgeting problems and therefore supported the managerial and academic value of the developed framework; however additional layers, such as company size, industry, or quality of method implementation need to be evaluated in order to increase precision of the framework.

Key words: *Traditional budgeting; Better Budgeting; Beyond Budgeting; Activity Based Budgeting; Rolling Forecast; Budgeting for Outcomes; External Benchmarking; Balanced Scorecard*

Métodos Melhoria de Orçamento – uma análise comparativa sobre efeito problemas orçamentários tradicionais

pelo Marcus Wienhold

Resumo: *No ambiente de negócios de hoje, as empresas são forçadas a adaptar-se constantemente para influências internas e externas sempre em mudança. No entanto, o processo orçamentário tradicional, com suas falhas inerentes, manteve-se relativamente estável ao longo de décadas. De forma a se manterem competitivas, as empresas precisam melhorar o seu processo orçamentário, através da aplicação de métodos de Melhoria de Orçamento. O objetivo desta pesquisa foi desenvolver uma estrutura, que auxilia as empresas a identificar os seus problemas de orçamento e resolvê-los de forma mais eficiente, com métodos de Melhoria de Orçamento apropriados.*

Através de uma revisão bibliográfica detalhada, uma lista abrangente de problemas de orçamento foi desenvolvida e explicada, que pode atuar como uma lista de verificação para as empresas para avaliar quais os problemas que eles estão enfrentando. Além disso, um quadro teórico de métodos foi desenvolvido, que corresponde os métodos de Melhoria de Orçamento e os problemas orçamentários tradicionais que são capazes de resolver/diminuir. Uma pesquisa que testou o quadro com organizações reais foi usada para validar os resultados teóricos.

Os resultados comprovaram uma forte correlação entre a implementação de certos métodos de Melhoria de Orçamento e redução de certos problemas de orçamento tradicionais e portanto, apoiaram o valor gerencial e acadêmico do quadro desenvolvido; no entanto camadas adicionais, tais como o tamanho da empresa, a indústria, ou a qualidade de implementação do método, precisam ser avaliados, a fim de aumentar a precisão do enquadramento.

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III) LIST OF ABBREVIATIONS

ABB	Activity Based Budgeting
ABC	Activity Based Costing
ABIM	Advanced Budgetary Incentive Methods
ABS	Advanced Budgeting Software
BB	Beyond Budgeting
BBRT	Beyond Budgeting Roundtable
BCT	Budget communication and training
BSC	Balanced Scorecard
CLM	Closed Loop Model
EB	External Benchmarking
ERP	Enterprise Resource Planning
GL	General Ledger
RF	Rolling Forecast

1 INTRODUCTION

This chapter will briefly present the topic of the thesis and highlight why it is of managerial and academic relevance. Afterwards the problem statement will be defined and, derived from this problem statement, the key research questions will be listed and described. Lastly, a short overview about the overall structure of the thesis will be given.

1.1 TOPIC PRESENTATION

In today's business environment, companies are forced to constantly adapt to ever changing internal and external influences. Yet, the practice of setting, enforcing and adjusting budgets has remained relatively stable for decades: A budget is set at a certain point in time as a fixed performance contract, its compliance is controlled, and variations are accounted for by an adjustment at the beginning of the next fiscal year (Hope & Fraser, 2003; Radu, 2011). Even though several studies questioned the efficiency of this process, it stays in place in the vast majority of companies across varying industries and company sizes (Centage/IOMA, 2007; Drury, 2011; Gary, 2003; Hope & Fraser, 1999, 2003; Sandison, Hansen, & Torok, 2003). There is no larger tendency to abandon budgets (Centage/IOMA, 2007) but several companies are actively evaluating how to improve their traditional budgeting process (Hansen, 2011; Neely, Sutcliff, & Heyns, 2001).

There is a wide range of methods available to reduce the weaknesses of traditional budgets; these range from Budgeting for Outcomes (also known as Priority Budgeting) (Barnett & Atteberry, 2007; Center for Priority Based Budgeting, 2015) over Activity Based Budgeting and the Closed Loop Model (Hansen & Torok, 2004) to Rolling Forecasts, new technology (CIMA / ICAEW, 2004; Giannetto, 2006; Reiff, 2001) and several more. The initial challenge for improving the traditional budget process is that there is no perfect process and no best practice that can be applied comprehensively to every type of company – each organization needs to design its system to address its most important problems, needs and wants (CIMA / ICAEW, 2004; Hansen, 2011). Not all methods fit to the organization in focus, and not all of them might be applicable either.

This thesis will cover a literature research on the development of traditional budgeting and current methods that are available for decreasing traditional budgeting problems; in addition, it will conduct a survey to research which of these methods are actually used in organizations

and which of the traditional budgeting problems have been reduced or solved by them. The aim is to develop a framework that helps companies to identify their traditional budgeting problems and address them more efficiently with fitting Better Budgeting methods.

1.2 ACADEMIC AND MANAGERIAL RELEVANCE

Academic relevance is given by the need to create a comprehensive overview of current Better Budgeting methods as well as to create a clear link between these methods and the traditional budgeting problems they solve. It also needs to be analyzed how frequently these methods are already applied by organizations, and which methods are not used at all. From these findings, conclusions can be drawn as to where academic research needs to focus in order to facilitate the implementation of new budgeting methods, or where these theoretical methods still lack aspects that are necessary to solve existing budgeting problems.

Managerial relevance clearly arises out of the academic relevance described above. The thesis provides a guideline for identifying budgeting problems, suggests which methods might be helpful in solving which particular problems and how these methods work in theory and practice. Credibility will result from both the theoretical research and the practical cross-check of the findings through the survey.

1.3 PROBLEM STATEMENT

Even though organizations want and need to adjust their budgeting approaches, and methods for improvement are available, current research suggest that many of the most common traditional budgeting problems still persist. The problem addressed in this thesis is the lack of develop a framework that helps companies to identify their traditional budgeting problems and address them more efficiently with fitting Better Budgeting methods.

1.4 RESEARCH QUESTIONS

Four main research questions will be addressed during the course of the thesis:

1. Which problems exist with traditional budgeting in today's economic environment?

To answer the first research question, the thesis will analyze the existing budgeting literature and create a list with the main budgeting problems, as well as give a brief description for each of them.

2. *Which methods exist to improve traditional budgeting?*

This question focuses on generating an exhaustive list of methods exist in academic literature to reduce traditional budgeting problems. The methods will be described and analyzed with regards to their benefits and drawbacks.

3. *Which of these methods are currently applied by companies?*

The theoretical knowledge from the first two research questions will be transferred into practice by conducting a survey with a number of companies. Participants will be asked to name their budgeting problems, their advanced budgeting methods, and the effect of these methods. The responses will be analyzed in order to answer the research question.

4. *Which methods are best suited to address which budgeting problems?*

The theoretical findings will be used to generate a framework that allocates methods to budgeting problems. This framework will be tested against practical results by validating or disproving a set of hypotheses.

1.5 THESIS ORGANIZATION

Chapter 2 – Literature Review: Chapter 2 will give a definition of budgets and describe their overall purpose. Afterwards, the most common problems with budgets will be explained, and the development of traditional budgeting will be outlined. Then, it will describe the opposing theories of Better Budgeting and Beyond Budgeting, and will give an explanation why this thesis focuses on Better Budgeting. Lastly, it will summarize a comprehensive literature review over eight different academic approaches to improve the traditional budgeting process.

Chapter 3 – Methodology and Data Collection: This chapter will completely focus on how all input for writing this thesis was collected. It will go into detail about the data gathering approach during the literature review in chapter two, as well as precisely outline the survey structure, sample selection, and analysis methods.

Chapter 4 – Results' Analysis: Chapter 4 will analyze and summarize the theoretical research and develop a set of hypotheses. These hypotheses will then be validated against the survey findings in order to test if theoretical and practical input give conclusive results.

Chapter 5 – Conclusions and Future Research: The last chapter will summarize the main conclusions from this research; in addition, it will give an outlook on future research possibilities based on the limitations and results of this thesis.

2 LITERATURE REVIEW

Budgeting is the foundation of management control in almost all firms (Hansen & Torok, 2004). This literature review will evaluate claims that “budgeting is evolving, rather than becoming obsolete” and that traditional budgets are being supplemented by new tools and techniques rather than being abandoned completely (CIMA / ICAEW, 2004). It will also highlight why traditional budgeting is the cause for a wide range of criticism, and why the movement around the Beyond Budgeting Roundtable (BBRT) advocates for abandoning budgets altogether (Hope & Fraser, 2003).

In chronological order, the chapter will first give a definition of budgets and describe their overall purpose. Afterwards, it will list and explain the most common problems with budgets, in order to give detailed insights into the sources of criticism. Based on this list of problems, it will outline the development of traditional budgeting to show why companies still use budgets after all. Then it will describe the opposing theories of Better Budgeting and Beyond Budgeting, and will give an explanation why this thesis focuses on Better Budgeting. The last part of this chapter will focus on giving a comprehensive literature review over eight different academic approaches to improve the traditional budgeting process.

2.1 DEFINITION AND PURPOSE OF BUDGETS

In the academic and corporate world, there is a unison opinion about the core purpose and function of traditional budgets: it is a control system for management (Armstrong, Marginson, Edwards, & Purcell, 1996; Ekholm & Wallin, 2000; Libby & Murray, 2010). This control system includes the “managerial motivation as a standard for performance evaluation” (Libby & Murray, 2010), the delegation of duties and allocation of incurred expenses (Vazoniene & Stončiuvienė, 2012), and the achieving of budget results in exchange for the authority to dispose over scarce resources (Radu, 2011). However, there is one other important function that the budget must serve in modern companies which act in fast-changing environments: It must translate the strategic goals of the business plan into quantifiable, measurable values; these transform strategic ideas into operational initiatives with the aim to fulfill the set of goals of the organization (Hanninen, 2013; Vazoniene & Stončiuvienė, 2012). This function is on its way to become even more important than the function of management control as the business environment has shifted significantly in the last decades from “steady, continuous change” to “unpredictable, discontinuous [...] change” (Hope & Fraser, 2003). The

organization needs a budget that is able to reflect the non-financial behavior of the organization in financial terms, and therefore supports management to adjust operational processes in accordance with current environmental circumstances (Cokins, 2008). This purpose however might not be fulfilled by only using traditional budgeting, as the problem analysis in the following subsection will show.

2.2 PROBLEMS WITH TRADITIONAL BUDGETING

Organizations still struggle to use the budget for the purposes described above. Instead, the process of creating the annual budget in the first place is such a tiresome exercise for employees that it causes great dissatisfaction, instead of being beneficial; this leads to limited accuracy and low quality results (Radu, 2011). The discussion of budgeting weaknesses has gathered the interest of several academics, including Hope & Fraser (2003), Parmeter (2003), Cokins (2008), and Radu (2011). All of them have identified reasons for budget dissatisfaction, ranging from the “tendency to spend it on anything, to avoid reducing the budget for the next period at the amount actually spent so far” (Radu, 2011), which is more commonly known as budgetary gaming (Jensen, 2003), over the silo-based mentality that prevents cross-departmental improvements (Parmeter, 2003), to the elimination of key strategic projects in order to fulfil budget expectations (Cokins, 2008). A comprehensive list of 12 major issues with budgets has been developed by Cranfield University and Accenture’s Finance and Performance Management Service Line already in 2001 (Neely et al., 2001). The literature research suggests that this list inherits all major budgeting problems that have since been discussed in more detail by other authors. For this reason, the list will be used as a main structural orientation, and the 12 mentioned weaknesses will be cross-examined with more recent findings from other researchers for detailed explanations; no sources pre-dating the Cranfield University study from 2001 will be used to avoid circular referencing. The problems will be structured logically into three parts: “Competitive strategy”, “Business Process”, and “Organizational Capability” (Yakhou & Sulzen, 2010).

2.2.1 PROBLEMS REGARDING COMPETITIVE STRATEGY

Budgets constrain responsiveness and flexibility and are often a barrier to change.

Hope and Fraser (2003) see the budget as a fixed performance contract and consequently, organizational focus is set to achieve the budget. In traditional budgeting, possibilities to adjust the budget in the face of changing conditions are limited, and the incentive structure

works along outperforming the budget instead of making it as accurately as possible (Libby & Murray, 2010). It can therefore be said that traditional budgeting provides a barrier for improvement and success (Coulmas & Law, 2010).

Budgets are rarely strategically focused and are often contradictory.

This critique aims at the missing link between the company budget and the company strategy. An international survey showed that almost 90% of CFO's said that "there was often no link between the annual budget and the organizational strategy" (Parmeter, 2003). Hope and Fraser (2003) found in a study that "66% of respondents believed that their planning progress was influenced more by politics than by strategy" and Cokins (2008) states that "accountants administer the budgeting process as a fiscal exercise that's typically disconnected from the executive team's strategic intentions". However, a study from Centage/IOMA in 2007 contradicts these findings; according to the study, 75% of participants link their operating budget to their strategic plans. Still, the problem that budgets are internally driven and not focused enough on the actual added value for the customers is an undisputed problem in the academic world (Hope & Fraser, 2003; Libby & Murray, 2010; Parmeter, 2003; Radu, 2011).

Budgets add little value, especially given the time required to prepare them.

When taking into consideration that a budget takes up to 30% of the working time of an employee who is directly involved in the budgeting process (Neely, Bourne, & Adams, 2003; Hansen, 2011), significant added value should be derived from it. However, several factors that are mentioned in this list, for example the missing link between budgets and strategy, limit the added value of traditional budgeting. Another problem is that the information required by management during the budget process is often too detailed, and does not reflect what is actually used during the information analysis (Player, 2009; Radu, 2011). Also, budgets are often rather seen as "a political decision" about power over scarce resources in the organization (Cassell, 2003).

Budgets concentrate on cost reduction and not on value creation.

There is a wide spread opinion in organizations that "budgets can stifle the entrepreneurial, risk-taking culture that, ultimately, can be responsible for value creation" (CIMA / ICAEW, 2004). In this context, Cokins (2008) mentions the risk of abandoning strategically critical projects because of budgetary limits. Also, incentives linked to budgets motivate employees

more towards budgetary gaming instead of promoting change and best practice developments for overall value creation (Jensen, 2003).

2.2.2 PROBLEMS REGARDING THE BUSINESS PROCESS

Budgets are time-consuming and costly to put together.

This problem addresses the time and resources an organization needs to invest in creating a budget. A study conducted in 2003 showed that budgeting takes between 20% and 30% of the working time of an employee who is directly involved in the budgeting process (Neely, Bourne, & Adams, 2003; Hansen, 2011). However, there is no unison opinion in the academic world about how long it takes companies to prepare a budget. While Libby and Murray (2010) indicate that it should only take two months, Gary (2003), Jensen (2003), and Player (2009) estimate the time horizon to be approximately half a year. Radu (2011) notes that there seems to be a direct link between revenue increase and the period for budget construction, which is supported by Parmeter (2003), who estimates that 25,000 person days are invested for every US\$1 billion of revenue. A budgeting study from 2007 (Centage/IOMA, 2007) also shows a strong relation between company size and needed time (see appendix 1). In all cases, the time and money invested into budgeting is a serious burden for organizations.

Budgets encourage 'gaming' and dysfunctional behaviors.

Budgetary gaming is a widely studied problem in the academic world (Collingwood, 2001; Fisher, Maines, Peffer, & Sprinkle, 2002; Locke & Latham, 2002). In 2003, M.C. Jensen published a detailed paper about budgetary gaming – the title “Paying people to lie” gives a fitting impression about his view on traditional budgeting and the linked incentive schemes of employees. The paper gives several examples of how budgetary targets are met by actions that are not value-adding or straightforward harmful to the organization. Employees shifted revenues between quarters by backdating sales, entered secret side agreements with customers or suppliers, or even shipped “fruit baskets that weighted exactly the same amount as their product and booked them as sales” (Jensen, 2003). The author estimates that the removal of budgetary gaming could increase productivity in affected areas by 50-100%.

Budgets are developed and updated too infrequently, usually annually.

One of the harshest critics of academics is that a traditional budget is neither adjusted frequently enough, if at all, to changing economic environments nor takes into consideration what-if scenarios (Hanninen, 2013; Hope & Fraser, 2003; Libby & Murray, 2010; Vazoniene & Stončiuvienė, 2012). A company therefore sets a budget at the beginning of the

year and follows through with it until the end of the fiscal year, even though an economic change might have rendered the numbers useless only weeks after the budget has been completed.

Budgets are based on unsupported assumptions and guesswork.

There are multiple reasons for qualitatively low assumptions as base for a company or departmental budget: Employees might not believe in the added value of the budget and are therefore uninterested or they are inadequately trained (Orlando, 2009); in some cases, they are simply not able to translate their operational effort into financial figures - the “cause-and-effect, or action-result, relationship between operational performance and financial results” (Giannetto, 2006) cannot be established. Another problem for misleading assumptions are inaccurate forecasts; S. Player (2009) says about forecasts that “the only certainty about a forecast is that it will be wrong” – however, he also encourages organizations to narrow down the forecast variation through better forecasting processes and a regular quality check of assumptions in order to increase assumption quality.

2.2.3 PROBLEMS REGARDING ORGANIZATIONAL CAPABILITY

Budgets strengthen vertical command and control.

Hanninen (2013) describes the traditional budgeting process as a “back-and-forth movement between top and lower management”, where the budget becomes a tool to exercise power over subordinates. It can lead to dysfunctional behavior within the organization as managers pass on the pressure to meet budget targets to their subordinates, and therefore limit an open communication and feedback culture (Goode & Malik, 2011). However, a study from 2007 (Centage/IOMA) showed that the problem might be less severe, as already 40% of surveyed companies use a bottom-up approach for budgeting.

Budgets do not reflect the emerging network structures that organizations are adopting.

The problem states that traditional budgeting limits companies to decentralize their activities and make use of partnerships, alliances and customer input to best deliver a product or service (Neely et al., 2001). This again addresses vertical command between top and lower management without using the benefit of the whole organization (Hanninen, 2013).

Budgets reinforce departmental barriers rather than encourage knowledge sharing.

Parmeter (2003) describes this problem as the formation of silos, which compartmentalizes a company into small units instead of encouraging interaction. Budgets can also cause conflicts

when departments try to transfer work to other departments in order to meet their budgeting targets; departments work against each other instead of creating value through cooperation (Radu, 2011).

Budgets make people feel undervalued.

Radu (2011) summarizes the findings of various studies that a budget set at a too high performance level is discouraging for employees; even a budget that is set at a level which could be achieved at the cost of great effort has a negative effect on employee morale. On the other side, a too low performance level will still seldom be exceeded as employees adjust their effort to the new target. A feeling of not being valued can also stem from the fact that “general management requires too much information without taking into account the actual usefulness of these tables later” (Radu, 2011), which signals the employee that either his input is of low quality or the management does not value his working time enough to assign purposeful tasks to him.

2.3 THE EVOLUTION OF TRADITIONAL BUDGETING

In the light of the previous subsection, one could assume that budgets are on their way to being banned from organizations; the problems seem too significant, the downside so much heavier than the upside. However, even the study that created the list of the discussed 12 problems highlights that companies which actively take measures to improve their budgeting process tend to outperform competitors (Neely et al., 2001). In addition, there are several recent studies that support this claim for the usefulness of budgets – they are “still alive and kicking” (Dugdale & Lyne, 2006), and the large majority of companies in different countries and regions are still creating and using budgets. In Greece, 94% of surveyed companies use budgets, in Finland this number even comes close to 100%; in Asia, results are similar: 98% of surveyed Indian companies reported to use budgeting, while the percentage of 94% in Turkey is slightly lower (Pietrzak, 2014). Studies in the UK (Dugdale & Lyne, 2006) and in the USA and Canada (Centage/IOMA, 2007; Libby & Murray, 2010) prove that budgets are still widely used by companies for “planning, coordination and evaluation of activities”.

Already in 2000, Ekholm and Wallin found that “budgets have undergone some significant changes in the last 20 or so years”. In 2004, a report from CIMA/ICAEW found that companies started to use various tools to complement the traditional budgeting process to make it more flexible and dynamic. They also reported a “shift from the top-down, centralized

process to a more participative, bottom-up exercise”, which addresses several of the problems described earlier. This approach of improving traditional budgeting by inheriting new methods was defined as “Better Budgeting” (McNally, 2002). It contradicts the claim of Hope and Fraser (2003) that companies should abandon budgets altogether and move on to “Beyond Budgeting” – an approach that will be discussed in subsection 2.5 in more detail.

2.4 BETTER BUDGETING

So far, the chapter highlighted how budgeting started, which problems it faced on the way, and how companies managed to partially address these problems. Now it will be discussed what an improved form of a traditional budget looks like and which functions it fulfills.

The most frequently recurring aspect that is mentioned when describing Better Budgeting in academic literature surprisingly is not a technical one – it is the aspect of participation (Carlson & Palaveev, 2004; CIMA / ICAEW, 2004; Cokins, 2008; Radu, 2011). The authors stress how critical it is to give employees a say in the process and the targets against which they are measured, and to assign clear responsibilities to participants of the budgeting process (Carlson & Palaveev, 2004; Cokins, 2008). Radu (2011) states that a budget must be able to “mobilize members of the organization, must be built to be exciting”. In addition, the author points out that employees perceive the budgeting process more positively when given the opportunity to participate in defining the process. In an ideal process, responsibilities of budgeting should be transferred across the organization to lower-level managers in order to increase acceptance and the quality of inputs; strategy needs to be “executed from the bottom to the top” while building in feedback loops with upper management as a control function (Cokins, 2008).

From a technical point of view, there are also many aspects that are considered crucial for Better Budgeting. First, it has to be noted that control, which has been defined as the key purpose of traditional budgeting in subsection 2.1, also plays a central role in Better Budgeting. However, authors extend the control function to include a degree of flexibility. Carlson and Palaveev (2004) state that there should be a “certain level of discretion” regarding budgetary spending but there also needs to be an upper limit in place, in order to fulfill the control function. Giannetto (2006) supports this claim and states that the budgeting process needs to be an ongoing procedure that can adjust in order to constantly focus on strategically relevant performance issues. A report from 2004 (CIMA / ICAEW, 2004)

summarizes the issue of control in budgeting as a combination of “trust, integrity and transparency”.

Still, Better Budgeting needs to do more than control expenses: it should spot inefficiencies, challenge profitability of business units, evaluate the impact of planned hires, and serve as a performance monitoring tool (Carlson & Palaveev, 2004). Other functions of Better Budgeting include the separation of incentives from budgets in order to avoid budgetary gaming, the use of explicit forecasting models in order to increase reaction speed and company flexibility, and integrated IT-systems to enhance data quality (Neely et al., 2001).

From a structural point of view, Cokins (2008) recommends separating the operational from the strategic budget (see appendix 2): The strategic budget should be project-driven and is crucial for the strategic positioning of the organization; the operational budget should be demand-driven and therefore needs to take into consideration the activities that are necessary to fulfil customer demand.

A last important remark should be taken into consideration when implementing Better Budgeting: There is no solution by the book – “companies pick and choose according to their individual circumstances” (CIMA / ICAEW, 2004).

2.5 BEYOND BUDGETING

As described in subsection 2.3, the alternative to improving traditional budgets is to abandon them altogether and go Beyond Budgeting (BB) (Hope & Fraser, 1999, 2003). The BB approach is based on the assumption that the majority of companies are still dissatisfied with their budgets, even after transitioning to Better Budgeting. The Beyond Budgeting Roundtable (BBRT) has specified a set of process and leadership principles to describe the approach (Hope & Fraser, 2003), which have been outlined in appendix 3.

Supporters of the theory claim that organizations should decentralize their decision making process and replace the evaluation through fixed performance contracts with evaluation through relative performance contracts (Hansen, Otley, & Van der Stede, Wim A., 2003). According to Hope (2003), the combination of decentralized decision making and relative performance contracts leads to increased motivation, better customer service, and higher productivity.

However, while the theoretical approach might seem promising, it has to be kept in mind that the large majority of companies still use budgets (see subsection 2.3). Therefore, it needs to be evaluated which barriers exist to implement BB. Goode and Malik (2011) raise the concern that an organization can lose its strategic focus without detailed plans and future goals that are usually derived from the budgeting process. Still, the biggest concern that authors mention is the radical cultural change that is necessary to implement BB (Banović & Slapničar, 2005; Goode & Malik, 2011). This can overwhelm employees who have spent years or even decades in a centralized decision making structure. In addition, Rickards (2006) points out that the approach is not viable for manufacturing companies as they need the budgetary planning tools in order to avoid material shortage or overstock, and Parmeter (2003) highlights that budgets are a legal requirement in some sectors and might also be required by shareholders and other investors.

To conclude, literature suggests that the approach of BB is able to provide benefits for organizations, but only for larger, non-manufacturing companies that can afford the cost of transition and have a business model that supports decentralized decision making, such as banks or organizations with largely independent group companies (Dugdale & Lyne, 2006; Rickards, 2006). The majority of companies seem to be better off with using new methods to reduce the shortcomings of the traditional budgeting process.

2.6 METHODS AND TOOLS TO IMPROVE THE TRADITIONAL BUDGETING PROCESS

This subsection will address eight methods to improve the process of traditional budgeting towards Better Budgeting. Each method will be defined, before the main benefits as well as the most significant limitations will be summarized. Where necessary, a detailed process overview of the method will be given in the appendix.

2.6.1 ACTIVITY BASED BUDGETING

Activity Based Budgeting (ABB) is an extension of Activity Based Costing (ABC). ABC aims at the determination of cost of planned activities based on their expected size and the resources they will consume; the equivalent for budgeting has been described in the Closed Loop Model (CLM), a theory on how to best apply ABB (Hansen & Torok, 2004; Sandison et al., 2003). CLM states that budgets should achieve an “operational balance first, and then a financial balance” (Sandison et al., 2003) and therefore consists of two different process parts

(see appendix 4). The budget is based on the overall company strategy, the emerging forecasted demands and the resources that are required to fulfil these demands; it is made from scratch each time the strategic focus of the company is adjusted (Cokins, 2008).

Research states that when ABB is correctly introduced into an organization, it makes the operational planning function of a budget more sophisticated (Hansen & Torok, 2004; Klammer, 1999) as revenues and costs can be allocated more effectively to actual needs and outputs instead of last year's figures (Hanninen, 2013). Other benefits of ABB include increased precision for the planning process and operational adjustments can be conducted more effectively (Hansen, 2011; Pietrzak, 2014); in addition, the efficiency of necessary activities can be improved (Coulmas & Law, 2010). Hanninen (2013) adds that ABB can reduce the bureaucracy and time that is needed to prepare budgets.

However, researchers doubt that the complexity of the process is manageable for smaller enterprises (Hanninen, 2013; Pietrzak, 2014). Even larger companies might struggle with the need for in-depth organizational knowledge regarding business processes and the linkages between activities and outputs (Cokins, 2008; Pietrzak, 2014).

2.6.2 ADVANCED BUDGETARY INCENTIVE METHODS

Advanced Budgetary Incentive Methods (ABIM) tackle the negative effects that are caused by budgetary gaming, either when setting budgets or when realizing them (Giannetto, 2006). Traditional incentive schemes are based on non-linear compensation systems (see appendix 5a) where a person is incentivized to not perform above a certain point and has no penalty for performing below a certain point (Locke & Latham, 2002). According to Collingwood (2001), this leads to gaming of the setting and realization of targets. Coulmas and Law (2010) support this claim by stating “that which gets measured is what becomes important to managers”. A more advanced incentive scheme is based on a strictly linear rewards model (see appendix 5b). This means that the compensation for a manager does not include any kind of hurdle bonus or an upper or lower bonus cap but is just a linear function of bonus and outcome. The system “rewards people for what they actually do, and not what they do relative to what they say they can do” (Jensen, 2003).

As already described in subsection 2.2.2, the cost of budgetary gaming can be significant for an organization. A linear incentive system is able to reduce these costs when correctly implemented, and organizational integrity can be restored (Jensen, 2003). Giannetto (2006)

points out that well-thought out incentive systems can motivate employees to increased performance and therefore drive value creation within the organization.

However, it should be taken into consideration that it is a highly complex endeavor to structure and implement linear incentive schemes. First, the organization needs to find the right measure of performance, as well as the intercept and slope of the bonus line. This alone takes great informational effort and has crucial effects on the overall success of the new system (Jensen, 2003). In addition, the change management process needs to address employee concerns such as cash constraints that might be endangered by a payment scheme without a lower limit, or the fact that managers might have to accept that their subordinates receive a higher bonus than they do (Jensen, 2003).

2.6.3 ADVANCED BUDGETING SOFTWARE

The topic of Advanced Budgeting Software (ABS) has been addressed by several authors (Coulmas & Law, 2010; Giannetto, 2006; Player, 2009; Reiff, 2001; Williams, 2008). However, there is no unison definition or budget software solution; instead, there is a common list of criteria what software needs to fulfill in order to truly add value to the budgeting process. The most cited criteria is that the solution cannot be Excel-based (Coulmas & Law, 2010; Giannetto, 2006; Player, 2009; Reiff, 2001; Williams, 2008), which however seems to be largely ignored by organizations as the majority of companies, and 85% of small/medium sized enterprises, still rely on Excel spreadsheets as a main budgeting tool (Centage/IOMA, 2007; Williams, 2008). Appendix 6 shows the strong correlation between company size and software used for budgeting.

The solution should use a central database which stores past and current data and enables an organization to share and update budget information on a relatively real-time basis (Giannetto, 2006). The software should allow for what-if-scenarios (Player, 2009) and for interfaces to the Enterprise Resource Planning (ERP) system and/or the general ledger (GL) application of the organization (Williams, 2008).

If an organization implements ABS that fulfills the criteria described above, several benefits can be derived: Player (2009) states that organizations that rely on spreadsheets “take 30 days longer to complete their budgets, than those who have integrated systems”. Besides this competitive advantage, integrated software allows managers to assess the actual budget situation in real-time and can therefore enable them to spot and counteract discrepancies with

shorter reaction time (Giannetto, 2006). This is supported by the possibility of generating what-if-scenarios which enable the organization to prepare for new circumstances and just run the respective “playbook” if need arises (Player, 2009; Williams, 2008).

Giannetto (2006) points out that ABS helps to get a structured budgeting process in place, which is less prone to manipulation and distortion. Other researchers (Coulmas & Law, 2010; Reiff, 2001; Williams, 2008) support this claim and add that an integrated solution also facilitates deep data analysis, the generation of meaningful reports, and faster feedback and response due to reduced cycle time. Reiff (2001) notes the effect of increased enterprise wide participation, which is supported by a study from 2004 (CIMA / ICAEW, 2004), that showed positive effects of new budgeting technologies on the reduction of isolated functional divisions and silo mentalities.

However, this last study also pointed out the negative effects of technological change in budgeting: An integrated system linked with the ERP system can lead to a higher degree of centralization and suggests development towards a vertical hierarchy structure. In addition, too rapid technological change might outrun the necessary change in the company culture and therefore alienate employees (CIMA / ICAEW, 2004). Lastly, budgeting software needs initial capital investment which might be difficult to afford for small or medium sized enterprises (Player, 2009; Williams, 2008) – a claim that is contradicted by Reiff (2001), who refers to the wide range of offers and the significant possibilities for customization in order to meet cost targets.

2.6.4 BUDGET COMMUNICATION AND TRAINING

The concept of budget communication and training (BCT) means that an organization understandably communicates the importance, purpose, and overall procedure of the budgeting process (Coulmas & Law, 2010; Orlando, 2009). It trains involved employees in how to best participate in the budgeting process (Parmeter, 2003). Training can involve a broad spectrum of activities, such as familiarity with the use of budgeting software, efficient budgeting process management, and people management skills (CIMA / ICAEW, 2004; Parmeter, 2003; Radu, 2011). However, the goal of a good communication and training scheme is to create commitment of the employees towards the process (Barnett & Atteberry, 2007). This commitment is a necessary foundation for the change process that is required for most other Better Budgeting methods. It reduces errors and misunderstandings, and therefore streamlines the overall budgeting process (Radu, 2011). Parmeter (2003) strongly

recommends in-depth workshops at the beginning of the transition to Better Budgeting in order to prepare the organization and identify possible roadblocks from the beginning.

2.6.5 BUDGETING FOR OUTCOMES / PERFORMANCE BUDGETING

Hope and Fraser (2003) point out the problem that in traditional budgeting “the internal focus to maximize volume collides with the external focus of satisfying customers’ needs”. Budgeting for Outcomes / Performance Budgeting (BFO/PB) addresses exactly this issue by stating that a budget should not only reflect the demand that is derived from company strategy, but it should specifically take into consideration the outcome that customers expect (Jordan & Hackbart, 2005). This method is mainly applied in government organizations, the R&D department of a for-profit organization, or in other departments where a fixed sum is allocated and outcomes that fit the customer best should be delivered (Jordan & Hackbart, 2005; Mokrohisky, 2014; Robinson & Brumby, 2008). The process of conducting BFO/PB can be found in appendix 7.

The biggest advantage of this method is that it shifts the focus from an internal view to a more customer-oriented perspective, where the level of accountability is increased as results can be linked to budgets (Jordan & Hackbart, 2005). It also encourages ways to use a limited budget in order to achieve the best possible outcome (Mokrohisky, 2014). Since the approach works without a base budget (e.g. the budget from last year), existing programs and new ideas compete on the same level (Barnett & Atteberry, 2007). It has been found that BFO/PB also increases cross departmental cooperation as employees strive to find new, more cost efficient ways to accomplish their goals (Sterck & Scheers, 2006).

However, as already mentioned in the first paragraph, this method is only suited for few types of firms and departments. It is made for allocating a fixed input to activities in order to achieve a flexible output, or number of outputs – such as an R&D department with its R&D budget in a for-profit organization or a state service department with allocated tax money in a governmental organization (Robinson & Brumby, 2008), which clearly limits the applicability of the method. Also, it assumes that the organization has a well-maintained and comprehensive database regarding operational, financial, and performance data to generate the necessary transparency for implementing BFO/PB (Barnett & Atteberry, 2007).

2.6.6 BALANCED SCORECARD

The Balanced Scorecard (BSC) was developed in 1992 as a coherent set of financial and non-financial performance measures (Kaplan & Norton, 1992). Over time, it has evolved into a strategic management system (Kaplan & Norton, 1996) and finally into a tool meant for communicating, managing and controlling strategy (Kaplan & Norton, 2000). Use of the BSC stresses measuring the strategic performance of organizations in four perspectives: financial, internal business processes, customer satisfaction, and learning and growth (see appendices 8a and 8b). Organizational measures in each of these areas are calculated to determine if the organization is progressing toward its strategic objectives (Snapka & Copikova, 2011).

There is a long list of benefits that research associates with the implementation of the BSC: It improves management effectiveness as it facilitates communicating and implementing strategy; employees also have a clearer picture what the strategic goals of the organization are and how each business unit can support the strategy by fulfilling their main target measures (Hoque & James, 2000). This claim is supported by Juhmani (2007), who sees the main benefit of the BSC in the provision of “a comprehensive framework to translate the company’s strategic objectives into a coherent set of performance measures”. Further studies found that implementing the BSC led to operational improvement (Mcadam & Walker, 2003; Phillips, 2007), and that it helped organizations to find opportunities to reduce costs (Anand, Sahay, & Saha, 2005).

Another positive point is remarked by Cokins (2008), who refers to improved organizational behavior; he states that employees become more involved as the BSC “directly connects the executive team's strategy to individuals, regardless of the departmental or matrix-management arrangements”. This claim is supported by (Mcadam & Walker, 2003), who see “encouraged improvement at all levels”.

Still, the developers of the BSC always stated that implementing the BSC is a “complicated endeavor” for an organization (Kaplan & Norton, 1996, 2000). They classify “process difficulties”, which refer to the problems of implementing the BSC into organizational processes, and “project difficulties”, which address issues that are related to generating an initial BSC for an organization.

The most common process difficulties include poor vertical communication and therefore lack of organizational support and understanding (Beer & Eisenstat, 2004), lack of

management level support, especially during the implementation process (Hrebiniak & Joyce, 2006), and lack of ability to translate the strategy into organizational processes (Assiri, Zairi, & Eid, 2006).

There are fewer project than process difficulties, but they can have a more severe impact on the overall success of the BSC: Kocakülâh and Austill (2007) see a significant problem in the timely collection of data, while other researchers remark problems in the basic setup of the BSC, i.e. how to choose the right indicators and what the correct cause-and-effect relationship is between the chosen indicators (Assiri et al., 2006; Kaufmann & Becker, 2006; Malina & Selto, 2001).

2.6.7 EXTERNAL BENCHMARKING

External benchmarking (EB) is the formal and structured performance management process that assists organizations in identifying processes which lead to best practice identification and implementation within the organization to achieve strategic goals and objectives (Hacker & Kleiner, 2000; Meade, 1994). When an organization uses EB for budgeting performance, budget goals are not set based on last year's numbers with a forecast-influenced adjustment, but are set depending on these benchmarks (Hope & Fraser, 2003). They are ideally derived from the peer group of an organization, so other organizations within an industry that have similar characteristics, such as size or product portfolio, which increases the benchmark quality and relevance compared to general industry benchmarks (Parmeter, 2003). The practice of best-in-class benchmarking goes even further and searches for new approaches outside the industry in which the organization operates – it looks for identifying the criteria that “separate the top performers in any discipline or industry from the rest” (Hope & Fraser, 2003).

Elmuti and Kathawala (1997) identify three main benefits from the successful implementation of EB: It can increase productivity and individual design, as companies can find process improvements when looking outside their own organizational barriers; it can create strategic advantages if it helps to leapfrog competition in certain areas; and it can spark growth as new fields of business or other opportunities can be identified. All three benefits are based on effective company learning that is sparked through external input (Soni & Kodali, 2010). Other benefits that can be found in benchmarking research are the generation of a “binding commitment to continuous improvement and monitoring” (Mohamed, 2013), the identification of trade-offs when implementing new strategies and methods (Brown,

Traupman, Broadwell, & Patterson, 2002), and the constant updating of existing internal best practices (McGaughey, Puleo, & Casey, 2005).

However, there are also some limitations to EB: A lack of clarity how benchmarking data has been derived can cause severe resistance from employees who feel that they are benchmarked against the wrong numbers (Elmuti & Kathawala, 1997). When adapting best practices from other firms, cultural issues need to be taken into consideration; Awasthi, Chow, and Wu (2001) state that US firms failed to implement Japanese management practices because of cultural differences. Lastly, Mohamed (2013) suggests that larger firms are more likely to adopt EB as they can spare more resources for experiments and innovation compared to smaller firms, which highlights the cost-intensity of the benchmarking process and the resulting initiatives.

2.6.8 ROLLING FORECAST

Standard forecasts are used to inform decision makers and to reduce the reaction time of an organization to changing events. The problem with forecasting as used in traditional budgeting is that it focuses on achieving the pre-defined annual targets, even if their underlying assumptions are incorrect (Player, 2009). In comparison, a Rolling Forecast (RF) is defined as a forecast that uses a consistent period, for example five financial quarters Q1-Q5 as a forecasting horizon. As the financial year proceeds, the forecasting horizon does not get shorter, but is rather shifted into the future and stays constant, with the actual financial quarter always being set as Q1 (see appendix 9).

There is no unison opinion about how many quarters a RF should cover. The number ranges from four to six in most cases (Golyagina & Valuckas, 2012; Lorain, 2010; Zeller & Metzger, 2013), with five quarters being the most common (Player, 2009). However, Player (2009) finds that “leading organizations match their forecast with their ability to see”, which suggests that each organization needs to decide individually which forecasting horizon to use, depending on available information, market fluctuation, seasonality and so on. Some researchers also define RF as short-term budgets for a medium-term horizon which helps an organization to focus on the future (Golyagina & Valuckas, 2012; Sivabalan, 2011), or as financial estimates of likely future outcomes based on current assumptions (Zeller & Metzger, 2013).

There are many advantages linked to the implementation of RF: The constant time horizon allows forecasts to be used as a tool to discuss future risks and opportunities instead of a performance evaluation tool that ends with the financial year and is then reset (Hansen, 2011; Player, 2009). It also speeds up the process of decision making and therefore strengthens value added activities (Lorain, 2010). By anticipating different scenarios for status-quo trends through the use of improved forecasting quality, a company can specify necessary corrective measures in advance (Miller, Michael, Schnittger, & Hackman, 2013). By using these scenarios, the company can then identify and execute measures that correct the status-quo trend towards the targets that have been set (Player, 2009). RF enables an organization to “drive continuous improvement [...] to ensure that the organization's financial trajectory aligns with long-term goals” (Miller et al., 2013).

Another important benefit of RF is cross-departmental cooperation in the implementation of the process, which decreases inter-organizational barriers. This is caused by the fact that RF is ideally done on a higher level than budgeting – instead of itemizing individual departments or units, it groups together functional departments that define a service (Miller et al., 2013), and only focuses on key income and balance sheet items (Golyagina & Valuckas, 2012).

The biggest weakness of an RF is that its benefit significantly depends on the quality of information that is used to create the forecast; the lion share of usefulness still depends on knowledge, information gathering, and analysis (Player, 2009). Cokins (2008) even states that “only computer automation [...] allows an organization to produce valid, derived rolling financial forecasts”. Other researchers remark that the process might become so complex that accountants and specialists would need to be trained in order to acquire the necessary skills and understanding for the organizational environment (Lorain, 2010; Sivabalan, 2011). Therefore, the prerequisite any organization needs to fulfill before successfully implementing RF is to have a working, high-quality knowledge and information system in place, which can require significant expenditures.

3 METHODOLOGY AND DATA COLLECTION

This chapter will describe the methodological approaches that were used to generate the literature review and the survey, as well as the limitations of this thesis due to the chosen methodology. The aim is to create transparency about how this thesis was set up and should therefore enable fellow researchers to validate the results of this thesis by following the same methodological approaches and processes.

3.1 LITERATURE RESEARCH METHODOLOGY

The purpose of the literature research was to gather a comprehensive understanding about the past and recent development of the budgeting process, its shortcomings, and methods of Better Budgeting.

For selecting the methodology of the literature review chapter, a series of methods for qualitative research design were evaluated. The methods “critical analysis”, “generalization of other authors’ views, opinions and conclusions”, and “conclusion formulation” were selected to generate a thorough theoretical foundation for setting up a survey and interpreting the results in later steps (Flick, Kardorff, & Steinke, 2007; Sarafino, 2005). A deductive approach was used to translate the literature research into a results matrix.

Special focus should be put on the methodology of subsection 2.2, where the comprehensive publication of Neely et al. (2001) was used as a main reference for identifying the 12 main budgeting problems; then, each of the identified problems was cross-examined with findings from more current research. No research pre-dating the study from Neely et al. was used in order to validate the current relevance of each problem.

3.2 SURVEY METHODOLOGY

The purpose of gathering practical data in addition to the literature research was to compare current company budgeting problems and Better Budgeting practices to the results that were obtained during the theoretical research.

A survey methodology that uses an online questionnaire which was sent out by email was chosen to gather practical input for the thesis. The tool “Limesurvey” was used for setting up the online questionnaire¹. According to Leary (1995), there are distinct advantages in using a

¹ The survey can be accessed via: <http://huzsurvey.limequery.com/index.php/496335/lang-en>

questionnaire vs. an interview methodology: questionnaires are less expensive and easier to administer than personal interviews; they lend themselves to group administration; and, they allow confidentiality to be assured.

3.2.1 SURVEY STRUCTURE

The survey consisted of a welcome and completion screen, and four content parts (see appendix 10): It started with a list of the in subsection 2.2 identified problems of traditional budgeting. The survey participants were asked to rate the presence of these problems in their organization one by one on a semantic differential scale with polar adjectives from (1) = “Not at all” to (5) = “Very strong”. This kind of scale is used to measure the meaning of things and concepts on a connotative level (Sarafino, 2005). In addition, the participant could select “Unable to rate” which increased the overall quality of the results as fix replies were avoided. This was a closed-ended part of the questionnaire.

The closed-ended part two of the survey consisted of a list of the in subsection 2.6 identified methods to reduce or eliminate problems in traditional budgeting. The survey participant were asked to answer the dichotomous question about the usage of each method in the organization with “Yes”, “No” or “Not familiar with the method”. In order to guarantee a common understanding for the listed theories, a brief definition was given for each theory.

In the closed-ended part three, participants were asked to select which problems were reduced by implementing the methods that have been answered with “Yes” in part two. The answers were given on a semantic differential scale with polar adjectives from (1) = “Caused the problem” to (5) = “Solved the problem” which accounted for the possibility that the implementation of a method actually might worsen an existing problem or cause a new one, as was suggested in the literature review.

The last part of the survey was open-ended and gave participants the chance for comments with regards to other budgeting problems they encountered, what their biggest problem with traditional budgeting was, and which methods they implemented that were not covered in the survey. Through this, additional information was gathered which might prove helpful for further research.

Screenshots of the web-based survey are presented in appendices 11a – 11f.

3.2.2 SURVEY SAMPLE

This research is based on cross-sectional purposive sampling technique instead of probability sampling due to limited time and resources; the method is also justified by the fact that it stays robust even when tested against random probability sampling (Tongco, 2007). The researcher made contact with potential respondents through use of e-mail. The sent email contained a description of the research objective and the link to the online survey. Participants were selected from personal connections of the researcher and his advisors, on the basis of their knowledge and connection to the area of budgeting and controlling. The study was conducted in the time horizon from the 10th to the 26th of August 2015 and a sample size of n=10 was retrieved during this period.

3.2.3 SURVEY RESULTS' ANALYSIS

The results of the survey were analyzed with basic statistic approaches such as absolute distribution and result correlation. A deductive approach was used to draw theoretical conclusions from this data and link it to the results derived from the literature research. The analysis of the survey data was mainly processed using Microsoft Excel and partially with the statistical software “analycess”. The statistical analysis focused on absolute distribution, value correlation, and linear regression, as the sample was considered too small for advanced descriptive statistics (Beaujean, 2014; Delucchi, 2004). In addition, all set hypotheses could be validated or disproved with the method. For some analyses, scores were assigned to responses in order to generate comprehensive sample scores to validate or disprove hypotheses.

3.3 LIMITATIONS

Limitations of this research paper are twofold: They affect both, the qualitative/literature research and the quantitative/survey research:

The literature research was mainly limited by the complexity and heterogeneity of budgeting theory; this paper does not claim to deliver detailed information about each topic it covers, but to give a comprehensive overview about budgeting development, problems, and solutions. Focused, in depth research can be found for each individual topic; the respective publications can be looked up in the reference list.

In terms of quantitative research, time and resources limit the researcher's ability to generate a statistically significant sample and to draw conclusions for specific company sizes or industries. The survey focuses on generating a data set that enables a first conclusion to which degree new budgeting methods are being used within organizations and to test for the general soundness of the developed theoretical results.

4 RESULTS ANALYSIS

This chapter will be divided into four parts: First, the theoretical results will be analyzed in order to develop a framework which problems can be solved by which Better Budgeting methods; second, the theoretical findings will be summarized and four hypotheses will be derived from these findings; third, the practical results from the survey will be analyzed and the findings will be discussed; and fourth, it will be checked if the practical results match with the framework derived from the theoretical results by testing each hypothesis.

4.1 ANALYSIS OF THEORETICAL RESULTS

In the following, each of the eight Better Budgeting methods presented in subsection 2.6 will be put into context with the 12 main problems of traditional budgeting discussed in subsection 2.2, and a framework will be created to graphically show the matching between budgeting solutions and problems. The problems are listed once more with a numbering for orientation purposes and are only referred to by their numbering for the rest of the chapter:

Number	Problem
P1	Budgets constrain responsiveness and flexibility and are often a barrier to change.
P2	Budgets are rarely strategically focused and are often contradictory.
P3	Budgets add little value, especially given the time required to prepare them.
P4	Budgets concentrate on cost reduction and not on value creation.
P5	Budgets are time-consuming and costly to put together.
P6	Budgets encourage ‘gaming’ and dysfunctional behaviors.
P7	Budgets are developed and updated too infrequently, usually annually.
P8	Budgets are based on unsupported assumptions and guesswork.
P9	Budgets strengthen vertical command and control.
P10	Budgets do not reflect the emerging network structures that organizations are adopting.
P11	Budgets reinforce departmental barriers rather than encourage knowledge sharing.
P12	Budgets make people feel undervalued.

TABLE 1 – TRADITIONAL BUDGETING PROBLEMS (NEELY ET AL., 2001)

The literature analysis showed that ABB clearly increases the strategic focus of the budgeting process as it links the overall strategy and the resulting expected demands to operational budgets. This allows organizations to respond faster to market changes and reduces the

guesswork that is involved in setting budgets. However, the method requires both financial and time investment:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
ABB												

TABLE 2 – EFFECTS OF ABB ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

ABIM are clearly able to reduce gaming and dysfunctional behavior, if implemented correctly. A well working incentive system also helps to show people monetary appreciation for their work:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
ABIM												

TABLE 3 – EFFECTS OF ABIM ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

The implementation of ABS significantly reduces the time to prepare budgets, increases flexibility of the organization as data mining and scenario planning is facilitated, and decreases departmental barriers. The only negative aspect is its tendency to strengthen vertical command and control:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
ABS												

TABLE 4 – EFFECT OF ABS ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

The BSC has the clear focus of linking budgets and strategy in order to create value. It can reduce gaming behavior and make the employee feel more valued through enhanced performance monitoring. It also reduces departmental barriers and encourages cross-company communication. However, the process is time-consuming and binds organizational resources:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
BSC												

TABLE 5 – EFFECT OF BSC ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

BFO/PB encourages flexibility and change by motivating employees to find ways to achieve the best results possible with a limited input which increases value generation. It also reduces departmental barriers and encourages knowledge sharing. A negative aspect of the method is the need for information that might make the process complex and time consuming:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
BFO/PB												

TABLE 6 – EFFECT OF BFO/PB ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

Budget communication and training (BCT) has positive effects on the value creation of budgets as employees are more aware of the right processes and how to prepare high quality budgets. This reduces the guesswork in setting budgets and the feeling of being an important part of the process makes employees feel more valued:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
BCT												

TABLE 7 – EFFECT OF BCT ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

EB, especially best-in-class benchmarking, strongly encourages a culture of change by forcing the company to look for new solutions outside their comfort zone. This can help an organization to make more qualified assumptions in their budgeting process:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
EB												

TABLE 8 – EFFECT OF EB ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

Lastly, a RF clearly makes an organization more responsive to changing conditions and significantly increases flexibility. It helps the company to match the budget with actual strategic requirements and encourage frequent budget updates when necessary:

Strongly Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Positive Effect												
Negative Effect												
RF												

TABLE 9 – EFFECTS OF RF ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

4.2 SUMMARY OF THEORETICAL RESULTS

When assigning values to each type of effect, with “strongly positive” being +2, “positive” being + 1, and “negative” being -1, the following scoreboard can be derived:

Strongly Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Positive Effect												
Negative Effect												
ABB												
ABIM												
ABS												
BCT												
BFO/PB												
BSC												
EB												
RF												
Total	+4	+3	+3	+2	-1	+3	+1	+3	-1	+1	+3	+3

TABLE 10 – EFFECT SUMMARY OF BETTER BUDGETING TOOLS ON TRADITIONAL BUDGETING PROBLEMS (BASED ON LITERATURE REVIEW)

The scoreboard shows that seven of the traditional budgeting problems can be tackled by three or more Better Budgeting methods, while another three problems can be reduced by at least one method. On average, each single budgeting method positively addresses 3.25 problems.

The issue of strong vertical command and control (P9) is not specifically addressed by any Better Budgeting method, which might point out that there is either a methodological gap or the problem is not as important to organizations; the score for the problem of time and cost in putting budgets together (P5) shows the negative trade-off when implementing too many

methods. However, it should be noted that ABS has the potential to significantly mediate this effect.

The following hypotheses can be derived from the theoretical result analysis:

Hypothesis 1: The implementation of Better Budgeting methods overall reduces traditional budgeting problems in organizations.

Hypothesis 2: There is a strong correlation between the implementation of certain Better Budgeting methods and the reduction of certain traditional budgeting problems.

Hypothesis 3: The more methods are implemented, the timelier and/or cost-intensive (P5) the process becomes; this effect is weakened if ABS are in place.

Hypothesis 4: There is no need for Better Budgeting methods that address vertical command and control (P9).

4.3 ANALYSIS OF PRACTICAL RESULTS

This part will present the practical results that have been extracted from the n=10 completed surveys. The structure will be the same as in the survey: First, the results about traditional budgeting problems, second the findings about the use of Better Budgeting methods, and third the effect of implemented Better Budgeting methods on traditional budgeting problems.

4.3.1 RESULTS REGARDING TRADITIONAL BUDGETING PROBLEMS

Figure 1 highlights that all 12 problems occur at least weakly in the majority of participating organizations, which shows that the problems identified by Neely et al. (2001) are still in place.

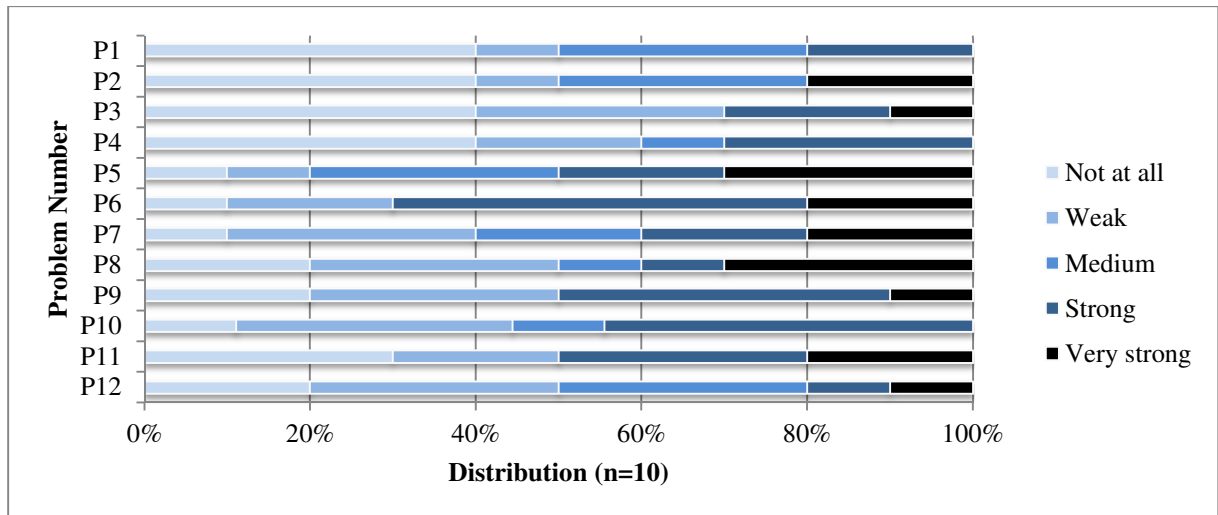


FIGURE 1 – SURVEY RESULTS: OVERVIEW OF TRADITIONAL BUDGETING PROBLEM OCCURENCE

The ranking of problems by severity score (obtained by assigning a score from 1 = “Not at all” to 5 = “Very Strong” for each problem) shows that P5 and P6 are the most severe, while P1, P3, and P4 are ranked as less severe (see figure 2). This highlights that companies struggle most with the cost- and time-intensity of budgeting, as well as with budgetary gaming.

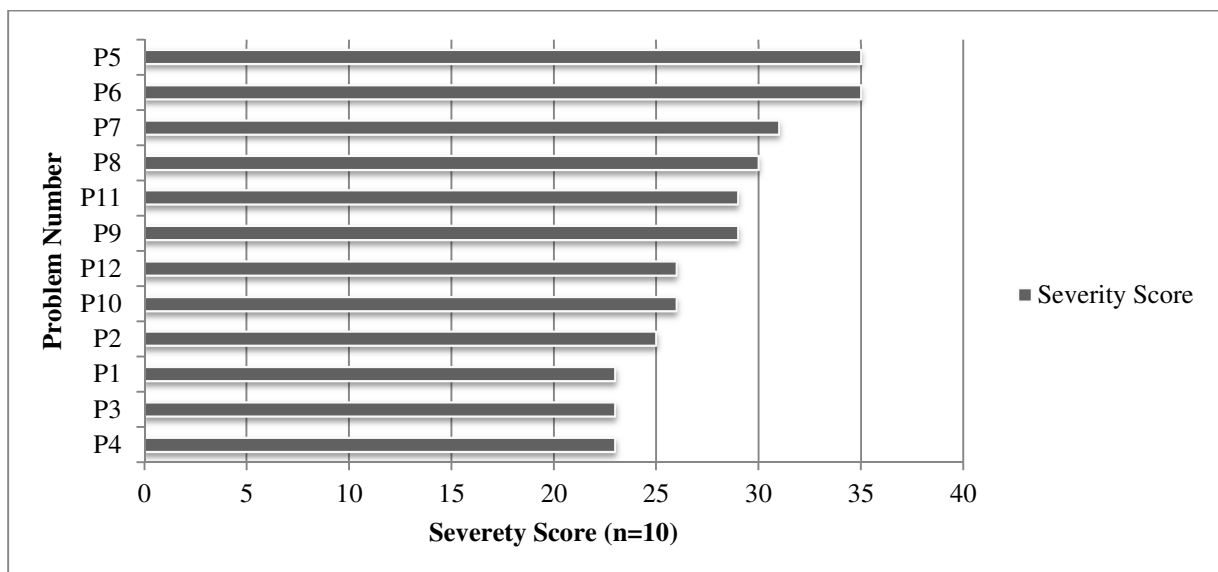


FIGURE 2 – SURVEY RESULTS: SEVERETY SCORE OF TRADITIONAL BUDGETING PROBLEMS

On average, participating companies had 4.6 strong or very strong problems with traditional budgeting; however, the standard deviation of 3.8 clearly indicates that companies have either very few or very many budgeting problems. Closer analysis showed that the sample can be divided in two groups: Three companies had nine or more strong/very strong problems (group

1), while six companies had four or fewer strong/very strong problems (group 2). Only one company was in the middle third with six strong/very strong problems.

4.3.2 RESULTS REGARDING THE USE OF BETTER BUDGETING METHODS

Figure 3 shows that not all Better Budgeting tools are used equally. While ABB, BCT, and RF are used in at least 60% of surveyed organizations, BFO/PB is only used in 20% and ABIM in none of the surveyed organizations. The participating companies used on average 3.6 different Better Budgeting methods; the standard deviation of 1.74 shows a certain fluctuation in the sample. The minimum number of implemented methods is one (RF), while three organizations reach the maximum number of six implemented methods.

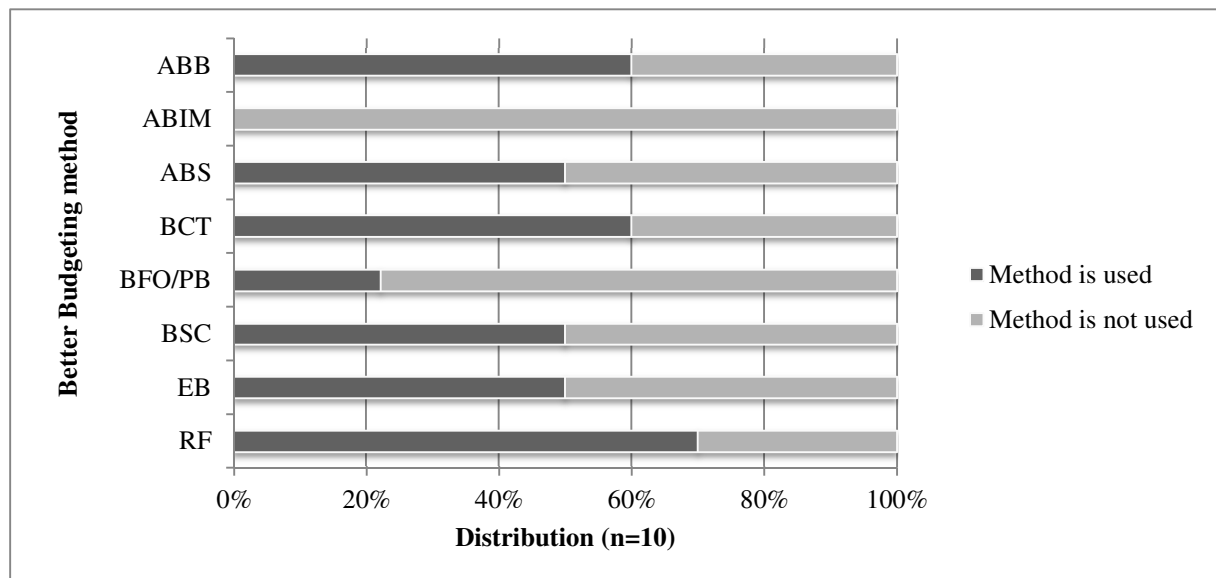


FIGURE 3 – SURVEY RESULTS: USE OF BETTER BUDGETING METHODS

A comparison between group one (three companies with significant amount of severe problems) and group 2 (six companies with fewer severe problems) showed a discrepancy in the number of Better Budgeting methods used. While the first group used on average 2.3 Better Budgeting methods, the second group used 4.1 different methods for Better Budgeting. This leaves two possible conclusions: Either the number of budgeting problems is reduced by an increased number of Better Budgeting methods, or there is some other connecting factor between fewer budgeting problems and a greater number of tools, such as company size or industry.

4.3.3 RESULTS REGARDING THE EFFECT OF BETTER BUDGETING METHODS

Figures 4 to 10 highlight the perceived effects that the implementation of a Better Budgeting method has on traditional budgeting problems in the surveyed organizations. The option of “Caused the problem” is not displayed as this option was never chosen in the survey. In addition, ABIM is not displayed as it was not applied by any company in the survey.

Figure 4 highlights that ABB addresses a great number of problems at once; it has significant effects on reducing P1, P2, P3, P4 and P8. However, it is also shown that P5 is increased by ABB in 50% of the six organizations that implemented it. It could be classified as an allround- improvement tool, which however can make the budgeting process more costly and time-intense.

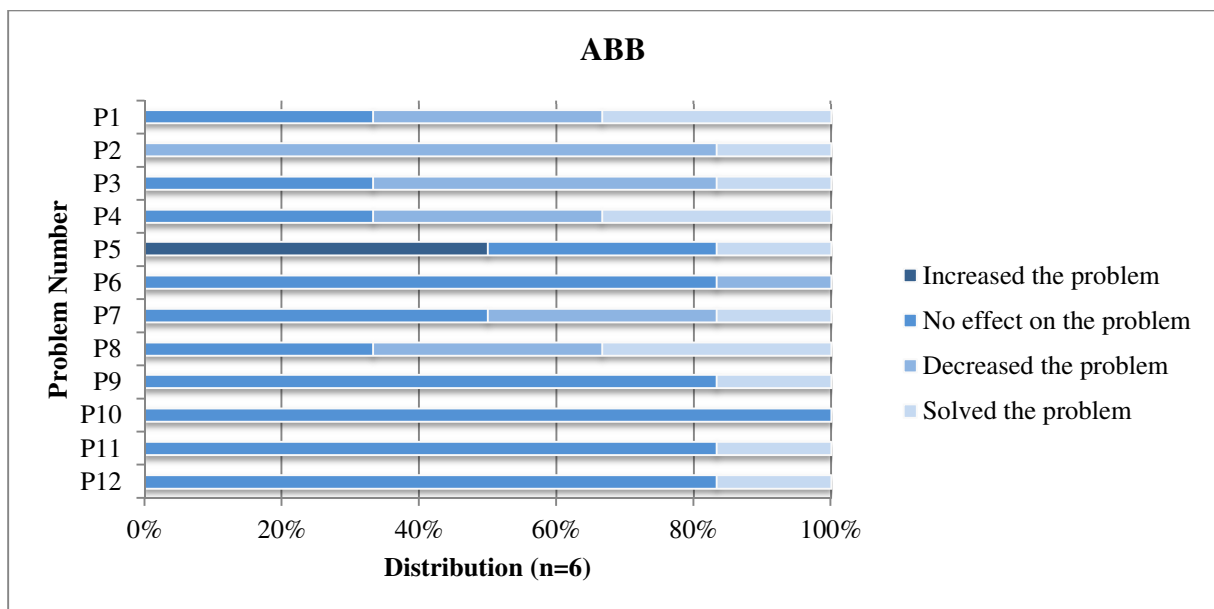


FIGURE 4 – SURVEY RESULTS: EFFECT OF ABB ON TRADITIONAL BUDGETING PROBLEMS

Of the six surveyed organizations that implemented ABS, all experienced a reduction in P5. Further significant problem reductions can be observed in P1 and P3, while P6 experienced slightly negative effects (see figure 5). The method clearly facilitates the overall budgeting process and therefore saves time and money, while making the budget more flexible and value-adding to the organization.

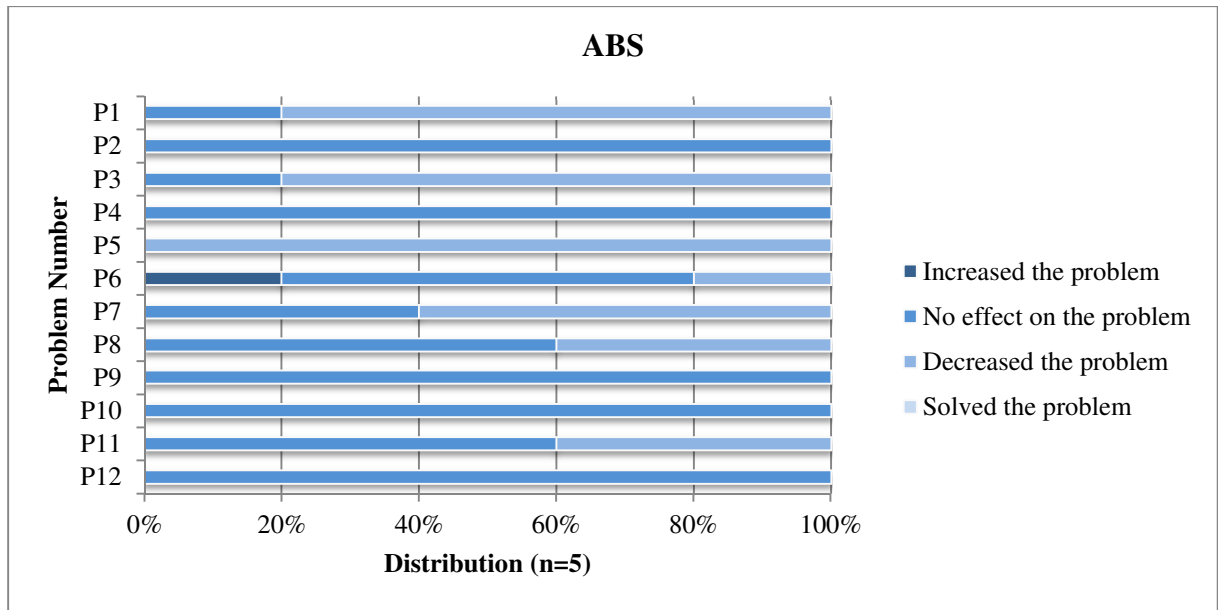


FIGURE 5 – SURVEY RESULTS: EFFECT OF ABS ON TRADITIONAL BUDGETING PROBLEMS

Figure 6 shows that BCT was implemented in six surveyed organizations; the most significant reduction can be observed for P12. Other problems are only slightly influenced. Apparently, training employees in the budgeting process and communicating its targets clearly increases the feeling of being appreciated as an employee.

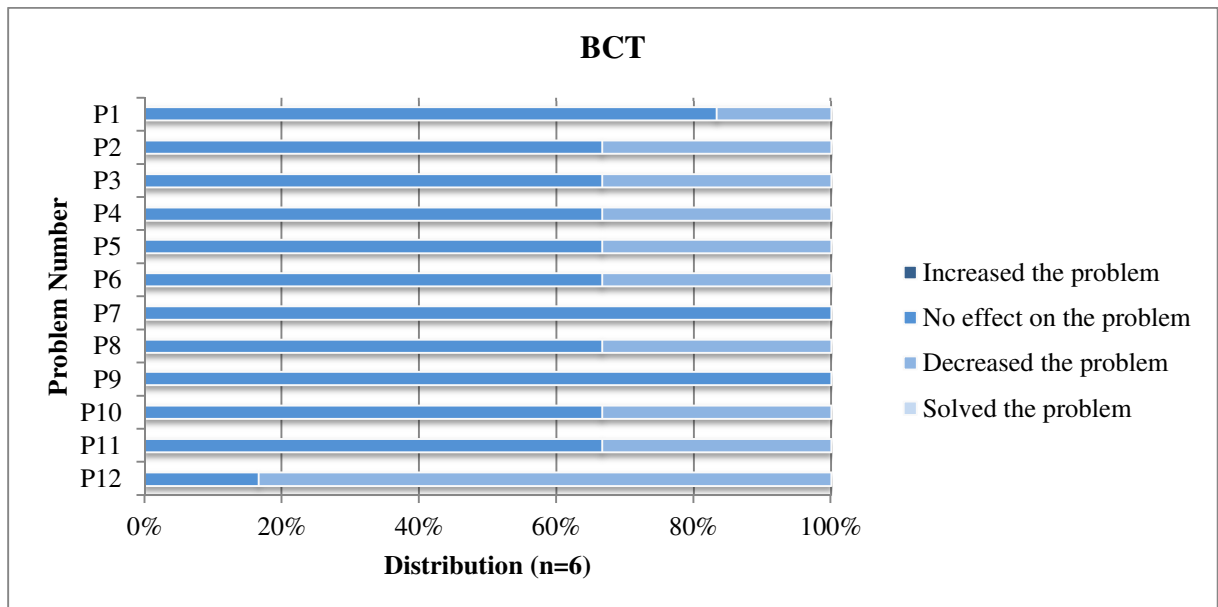


FIGURE 6 – SURVEY RESULTS: EFFECT OF BCT ON TRADITIONAL BUDGETING PROBLEMS

BFO/PB was only used in two surveyed organizations, which helped both organizations to decrease P1. However, other effects on P2, P4, P7, and P8 were only experienced by one organization; one organization also experienced an increase in P5 (see figure 7). The low

number of organizations that use this tool can be explained by the fact that no governmental organizations - where BFO/PB is more suited – were part of the survey.

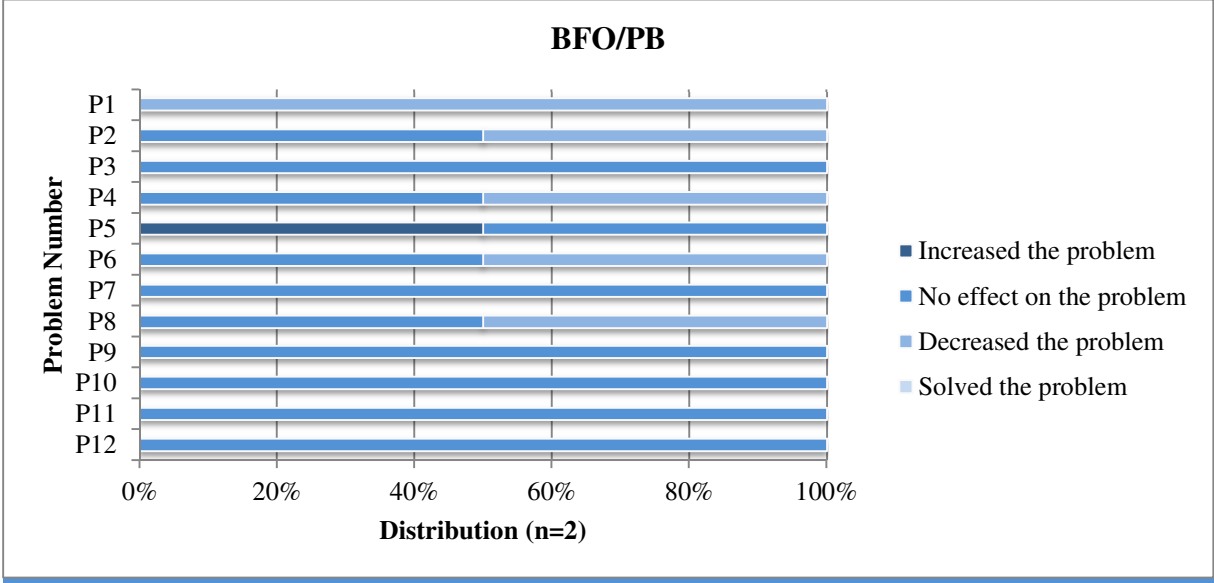


FIGURE 7 – SURVEY RESULTS: EFFECT OF BFO/PB ON TRADITIONAL BUDGETING PROBLEMS

Figure 8 highlights that implementation of the BSC helped five of the surveyed organizations to significantly reduce P2, followed by P1 and P4. However, it also shows an overall worsening of P5 and P9 when averaging the sample. The method helps organizations to adjust their strategic focus, increase flexibility and create value but it comes at the cost of significant implementation and monitoring effort, and increases vertical command and control.

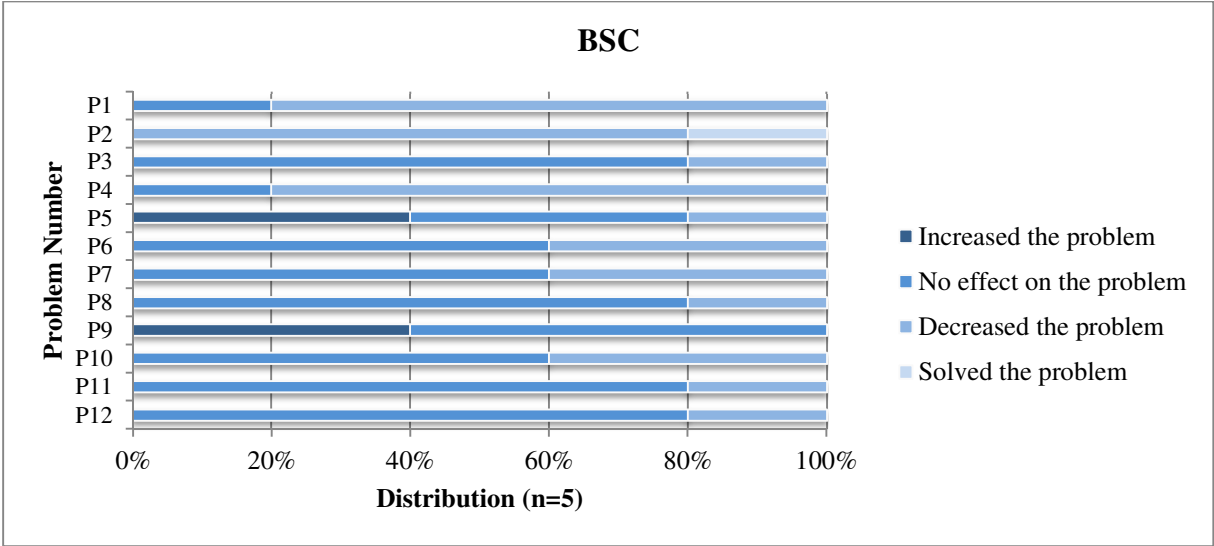


FIGURE 8 – SURVEY RESULTS: EFFECT OF BSC ON TRADITIONAL BUDGETING PROBLEMS

Figure 9 shows that of the five companies which implemented EB, 80% experienced an increase in P5, while smaller negative influences were noted on P2, P3, P4, P6, and P8.

However, at least 20% of survey participants also noted a problem decrease in 11 of 12 problems. Similar to ABB, EB can be classified as an all-round tool – but with less significant positive and more significant negative impact.

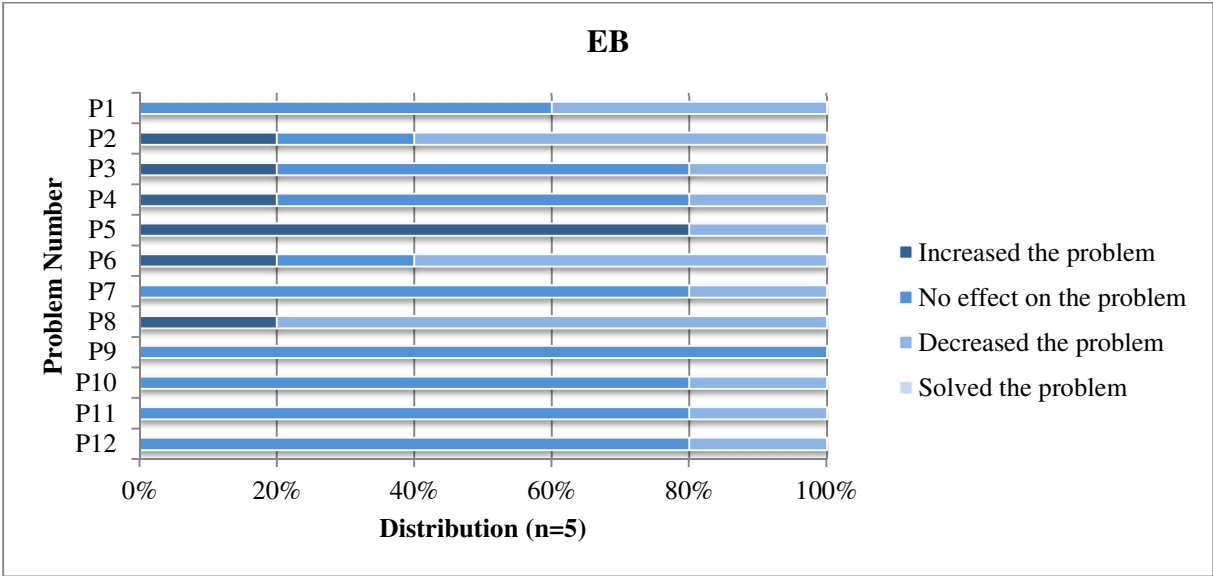


FIGURE 9 – SURVEY RESULTS: EFFECT OF EB ON TRADITIONAL BUDGETING PROBLEMS

The biggest sample was obtained for RF (see figure 10): Seven organization implemented the method and the majority managed to decrease or even solve P7. There were also some positive effects on P1, while the problems P3, P5, and P6 were increased in some of the surveyed organizations. The tool is able to motivate companies to update their budgets more frequently and therefore makes it more flexible and adjustable. However, this improvement comes at the cost of greater time-effort.

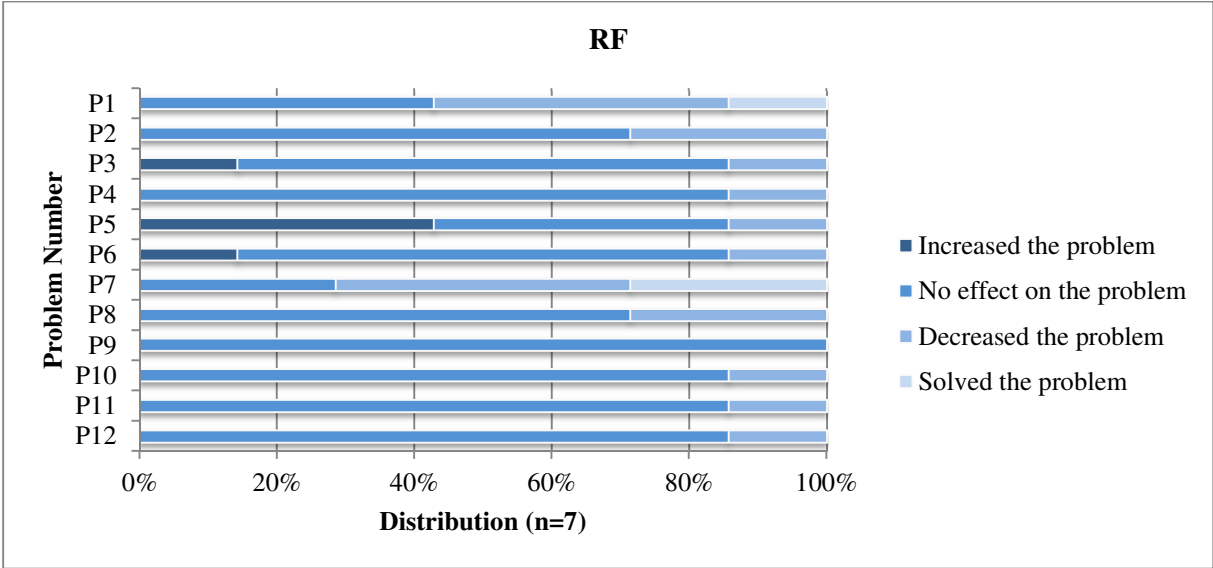


FIGURE 10 – SURVEY RESULTS: EFFECT OF RF ON TRADITIONAL BUDGETING PROBLEMS

To summarize the overall positive or negative effect of Better Budgeting tools for each of the sampled organizations, a score was assigned to the ratings: “Increased the problem” = -1, “No effect on the problem” = 0, “Decreased the problem” = +1, and “Solved the problem” = +2. Figure 11 points out that surveyed organizations 2, 5, 6, and 8 experienced only a small or even no measurable overall effect. However, these organizations were also the ones with the fewest implemented Better Budgeting method, which suggests that there is a causal nexus between number of methods and overall impact. Still, organization 1 achieved the by far highest score with only four measures, while company 9 achieved one of the lowest scores with six implemented measures. It can therefore be concluded that there is a relationship between number of implemented Better Budgeting methods and overall positive impact, but that other factors, for example the quality of implementation, seem to play an important role as well.

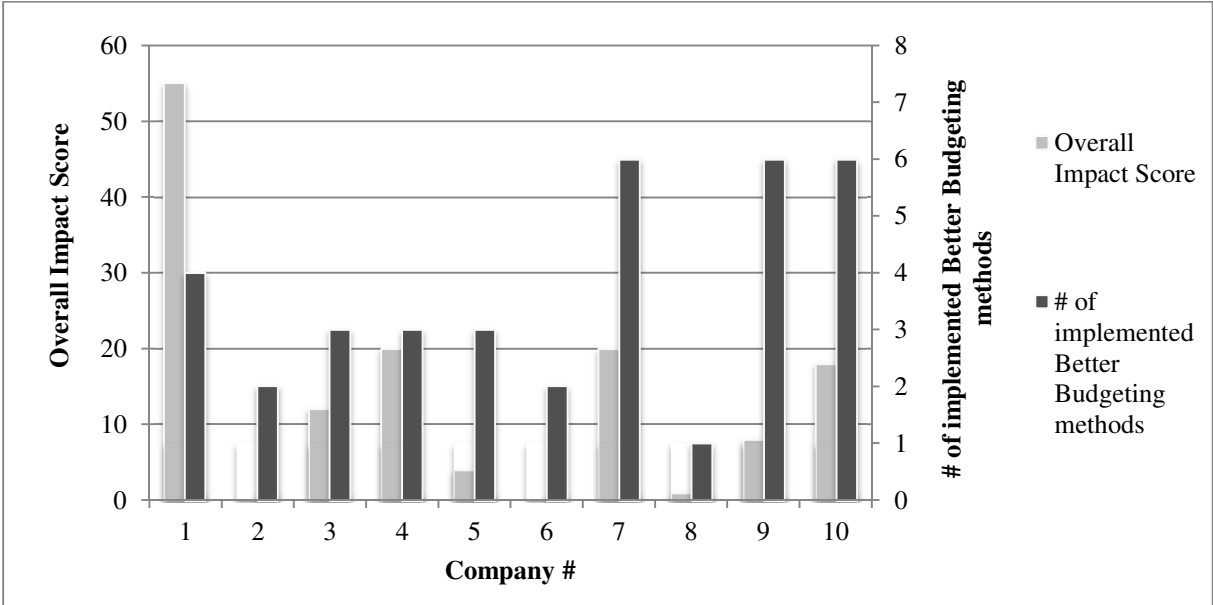


FIGURE 11 – SURVEY RESULTS: CAUSAL NEXUS BETWEEN OVERALL IMPACT AND NUMBER OF IMPLEMENTED BETTER BUDGETING METHODS

4.4 SUMMARY OF PRACTICAL RESULTS

When consolidating the results from subsection 4.3 with regards to the absolute effects of a measure on a problem, and adding a scale by type of effect, with “Strongly Positive Effect” being +2, “Positive Effect” being +1, and “Negative Effect” being -1, the following scoreboard can be derived:

Strongly Positive Effect												
Positive Effect	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
Negative Effect												
ABB												
ABIM²	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
ABS												
BCT												
BFO/PB												
BSC												
EB												
RF												
Total	+9	+8	+6	+7	-2	+5	+7	+8	0	+4	+6	+6

TABLE 11 – SURVEY RESULTS: EFFECT SUMMARY OF BETTER BUDGETING TOOLS ON TRADITIONAL BUDGETING PROBLEMS

Table 11 shows that companies perceive Better Budgeting methods as a strong support in reducing 10 out of 12 problems of traditional budgeting. No absolute effect could be measured on P9, while a negative effect for P5 was observed. It can therefore be concluded that there are several tools to address the majority of traditional budgeting problems; however, the study also indicates that implementing too many measures will lead to a more time- and cost-intense budgeting process. This effect can be mediated by implementing ABS and BCT. The problem of vertical command and control is only addressed by ABB, and therefore has the fewest alternatives for improvement.

When comparing these practical findings to the theoretical findings from subsection 4.3 it can be said that the results are coherent in most areas. However, it has to be pointed out that organizations rate the overall effect strength and width of Better Budgeting methods much higher than budgeting literature suggests, with positive scores of up to +9, compared to a maximum of +4 from the literature research; the average number of addressed problems per method lies at 7.13, which is more than twice as high as the result of 3.25 from the theoretical research. Another difference is the perceived positive effect of ABB on vertical command and control in the practical findings, compared to no effect in the theoretical research.

The discussed practical findings will now be used to validate or disprove the hypotheses developed in subsection 4.2:

² No results could be obtained as no company in sample used ABIM

Hypothesis 1: The implementation of Better Budgeting methods overall reduces traditional budgeting problems in organizations.

As outlined in subsection 4.3.3 and figure 11, the majority of companies had an overall positive impact from implementing Better Budgeting methods; a strong causal nexus between number of implemented methods and overall impact was found. Still, not all organizations were able to benefit from implementing these methods, as other factors, seem to play an important role as well. Hypothesis 1 is therefore disproved.

Hypothesis 2: There is a strong correlation between the implementation of certain Better Budgeting methods and the reduction of certain traditional budgeting problems.

Table 11 summarizes the finding that each Better Budgeting method is able to reduce certain problems. Even though ABB, BCT, and the BSC have a wide range of effect, it can still be said that methods are not interchangeable and that each method has a certain range of problems where it is more suited than others. Hypothesis 2 is therefore validated.

Hypothesis 3: The more methods are implemented, the timelier and/or cost-intensive (P5) the process becomes; this effect is weakened if ABS are in place.

Table 11 shows exactly this effect. While five Better Budgeting methods make the process timelier and/or cost intense, ABS is able to mediate this effect. Hypothesis 3 is therefore validated.

Hypothesis 4: There is no need for Better Budgeting methods that address vertical command and control (P9).

Figure 2 puts P9 at the median in terms of severity score. The problem is therefore still present in organizations and, more importantly, there is only one method (ABB) that partially reduces the problem. Hypothesis 4 is therefore disproved.

5 CONCLUSIONS AND FUTURE RESEARCH

The last chapter will summarize the main conclusions from this research; in addition, it will give an outlook on future research possibilities based on the limitations and results of this thesis in order to address challenges that will arise in the future.

5.1 CONCLUSIONS

The aim of this thesis was to develop a framework that helps organizations to identify their traditional budgeting problems and address them more efficiently with fitting Better Budgeting methods. Through the literature review, a comprehensive list of budgeting problems has been developed and explained, which provides a checklist for companies to evaluate which problems they are facing. In addition, a theoretical framework has been developed that matches Better Budgeting methods and the problems they are able to solve/decrease. The practical test of this framework against survey responses for companies by using four hypotheses showed that more practical input and additional theoretical research is needed to shape the framework: Two hypotheses were validated, two were disproved.

It has been validated that there is a strong correlation between the implementation of certain Better Budgeting methods and the reduction of certain traditional budgeting problems, which shows the great value of a comprehensive framework to assist organizations in choosing the correct Better Budgeting methods for their problems. However, the disproving of the hypothesis that the implementation of Better Budgeting methods overall reduces traditional budgeting problems in organizations highlighted that other factors, such as implementation quality, company size, or industry, need to be evaluated in order to increase the success rate of choosing the correct Better Budgeting methods.

By validating the hypothesis that the more methods are implemented, the timelier and/or cost-intense the process becomes, it has also been highlighted that more is not always better, that companies should choose their Better Budgeting methods with care, and that they should always keep an eye on not overwhelming the organization with too much change at once. It has also been proven that Advanced Budgeting Software and budget communication and training are essential prerequisites if an organization wants to implement Better Budgeting.

Lastly, the disproving of the hypothesis “There is no need for Better Budgeting methods which address vertical command and control” points at research gaps that still exist in the

complex area of budgeting theory. These areas of future research will be addressed in the following subsection.

5.2 FUTURE RESEARCH

Areas of future research can be deduced twofold from this thesis:

First, future research could address the limitations of this thesis. Great value could be obtained by researching if the analyzed tools and methods are more suited for certain industries and/or company sizes. This would add additional layers to the framework on how to resolve budgeting problems and help companies to choose the methods that are best suited for their company type and industry. Also, the conducted study could be repeated in the same way with a bigger sample in order to re-evaluate which traditional budgeting problems still persist in 2015, and if there has been a positive development since the study from Neely et al. in 2001.

Second, future research could focus on the results obtained in this thesis and build contingency research from there on. It could for example be examined why some Better Budgeting methods are implemented more frequently than others and what role the effort and cost of implementation of each method play. Another possible research area is the problem of vertical command and control, which has not been addressed in any current research but still plays a role in organizations, with limited solutions being at hand. It could also be evaluated why no organization in the sample used Advanced Budgetary Incentive Methods, and how the methods could be improved to increase application. Lastly, the ultimate research goal would be to define a set of best possible combinations of Better Budgeting methods to completely resolve traditional budgeting problems and to achieve true Better Budgeting.

IV) APPENDIX

Appendix 1 – Company Revenue and Budget Preparation Time (CENTAGE/IOMA, 2007)

Appendix 2 – Separation of Operational and Strategic Budget (Cokins, 2008)

Appendix 3 – BB Process and Leadership Principles (Hope & Fraser, 2003)

Appendix 4 – The Closed Loop Model of ABB (Hansen & Torok, 2004)

Appendix 5a – Non-linear Pay for Performance Scheme (Jensen, 2003)

Appendix 5b – Linear Pay for Performance Scheme (Jensen, 2003)

Appendix 6 – Company Revenue and Used Budgeting Software (CENTAGE/IOMA, 2007)

Appendix 7 – BFO/PB Process Description (Barnett & Atteberry, 2007)

Appendix 8 – RF Process Description (Player, 2009)

Appendix 9a – BSC Areas (Pardal, 2014)

Appendix 9b – BSC Structure (Pardal, 2014)

Appendix 10 – Survey Structure

Appendix 11a – Survey Welcome Screen

Appendix 11b – Survey Part 1 – Budgeting Problems

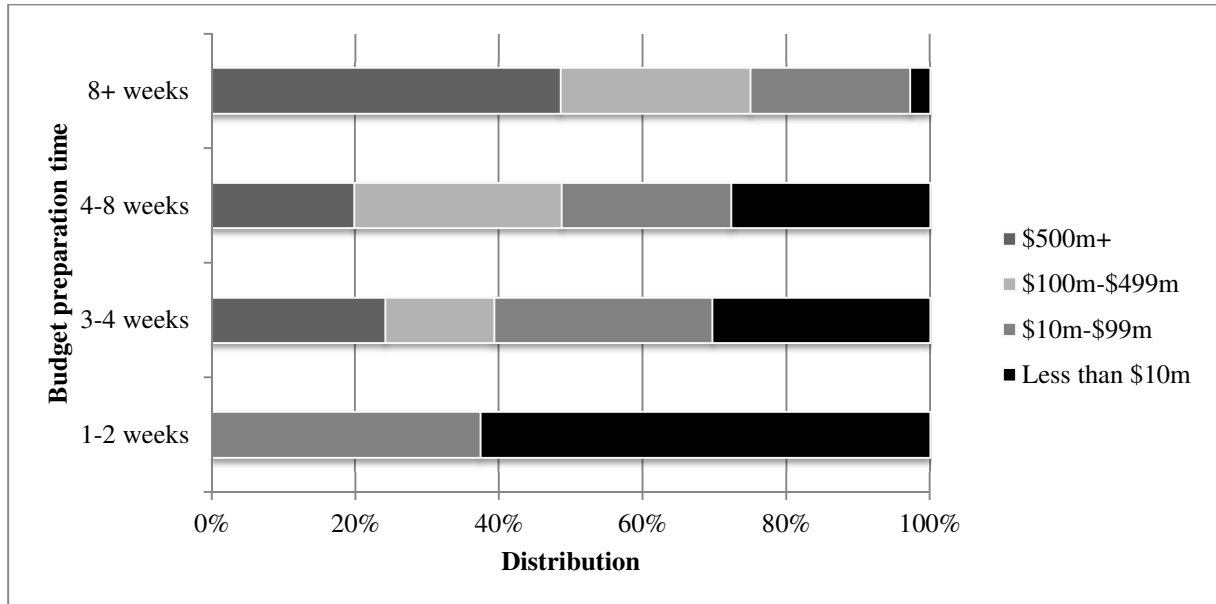
Appendix 11c – Survey Part 2 – Better Budgeting Methods (exemplary)

Appendix 11d – Survey Part 3 – Effects of Method Implementation on Problems

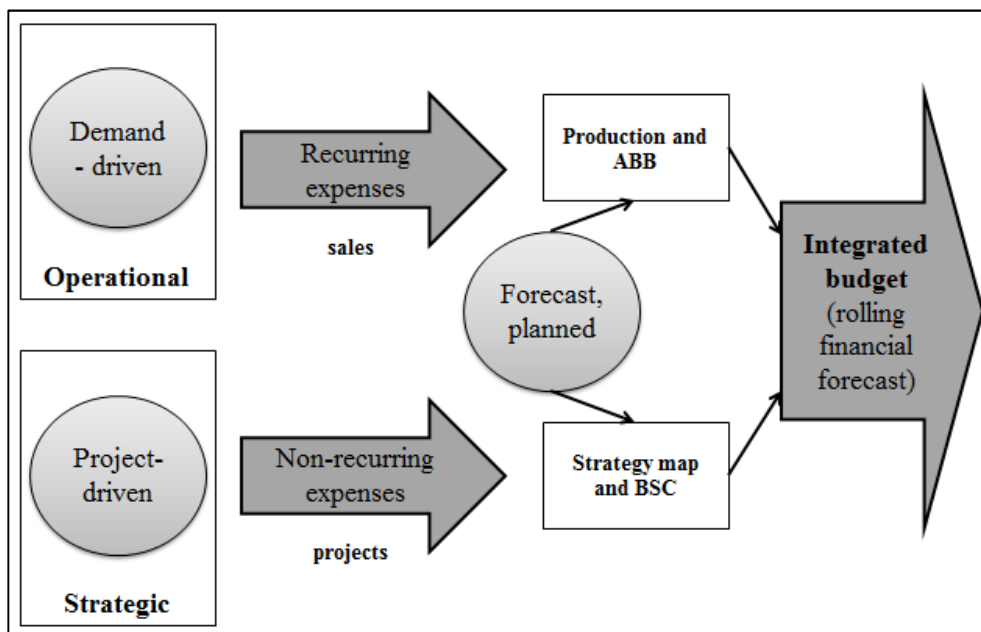
Appendix 11e – Survey Part 4 – Comments

Appendix 11f – Survey Completion Screen

APPENDIX 1 - COMPANY REVENUE AND BUDGET PREPARATION TIME (CENTAGE/IOMA, 2007):



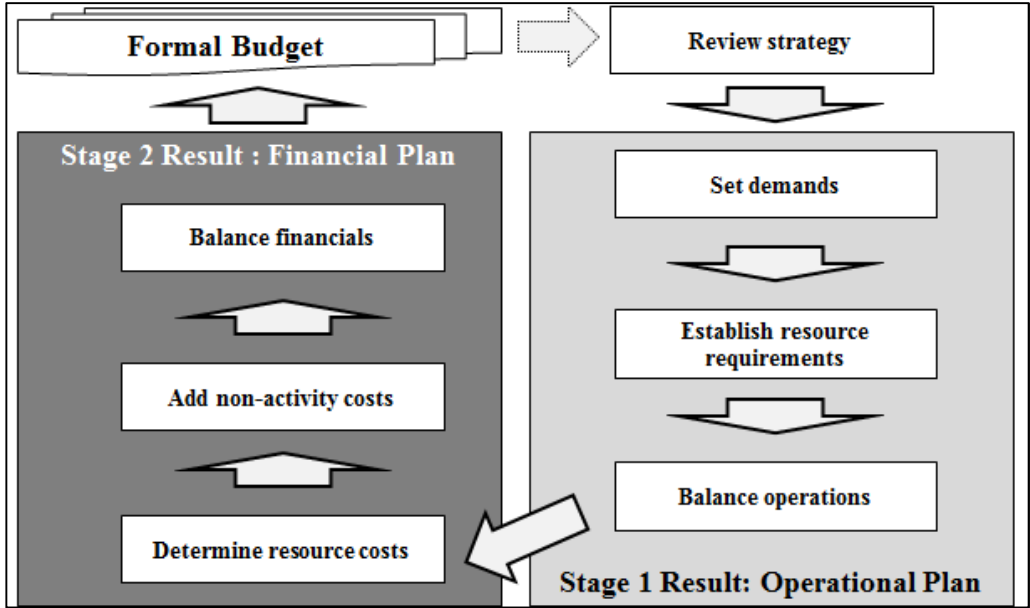
APPENDIX 2 – SEPARATION OF OPERATIONAL AND STRATEGIC BUDGET (COKINS, 2008):



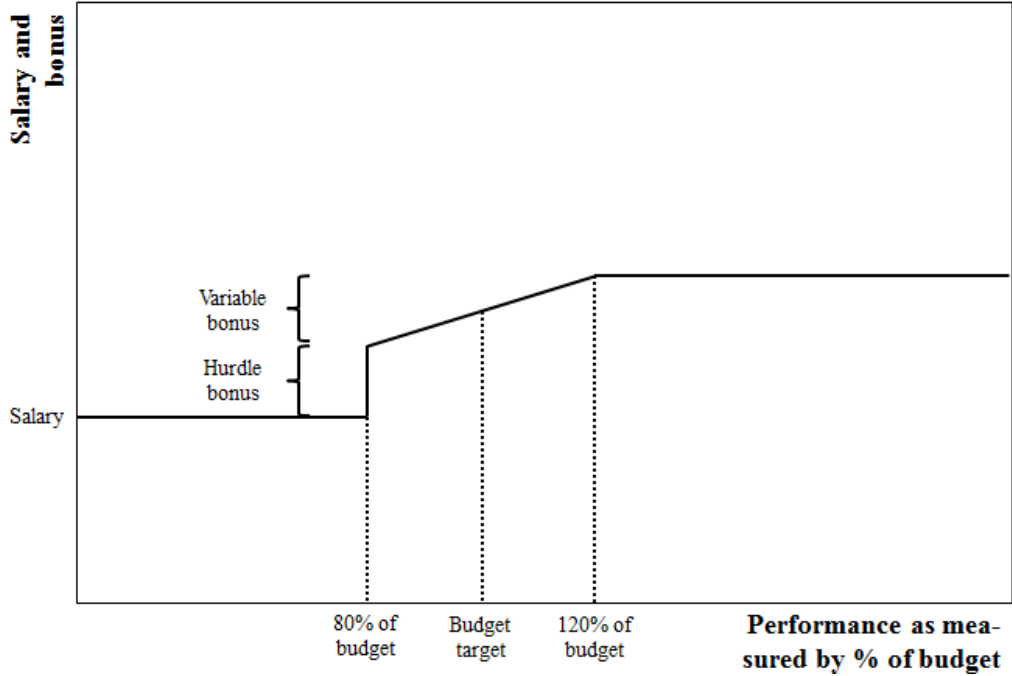
APPENDIX 3 – B PROCESS AND LEADERSHIP PRINCIPLES (HOPE & FRASER, 2003)

Process Principles	Leadership Principals
<ul style="list-style-type: none"> •Set aspirational goals aimed at continuous improvement, not fixed annual targets. •Reward shared success based on relative performance, not on meeting fixed annual targets. •Make planning a continuous and inclusive process, not an annual event. •Base controls on relative key performance indicators (KPIs) and performance trends, not variances against a plan. •Make resources available as needed, not through annual budget allocations. •Co-ordinate cross-company interactions dynamically, not through annual planning cycles. 	<ul style="list-style-type: none"> •Focus everyone on improving customer outcomes, not on meeting internal targets. •Create a network of teams accountable for results, not centralised hierarchies. •Champion success as winning in the marketplace, not on meeting internal targets. •Give teams the freedom and capability to act, don't merely require adherence to plan. •Base governance on clear values and boundaries, not detailed rules and budgets. •Promote open and shared information, don't restrict it to those who 'need to know'.

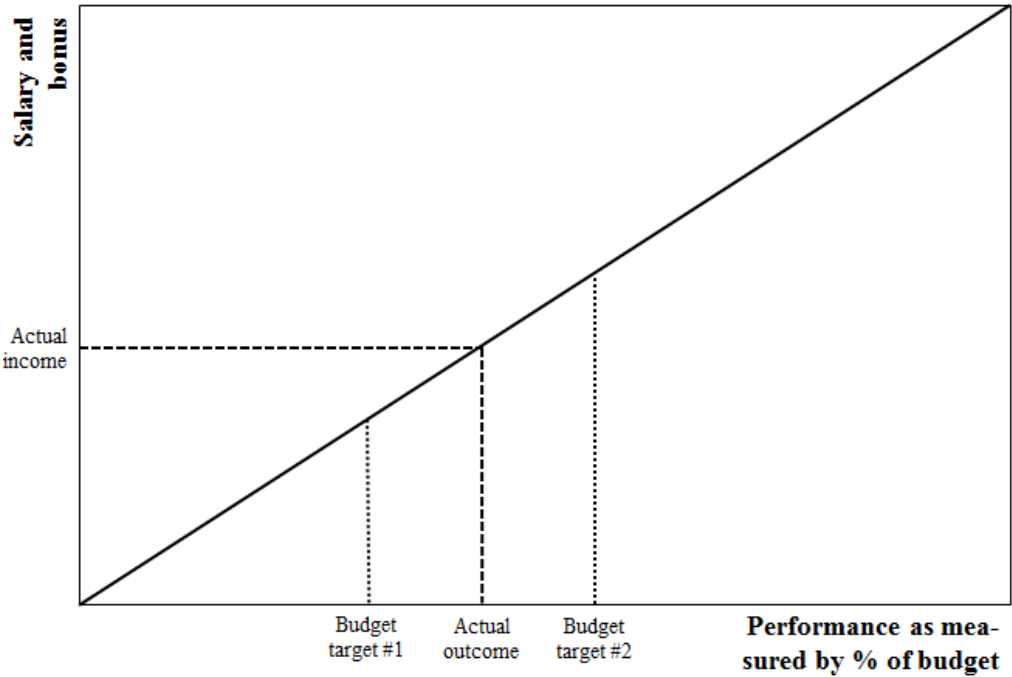
APPENDIX 4 – THE CLOSED LOOP MODEL OF ABB (HANSEN & TOROK, 2004):



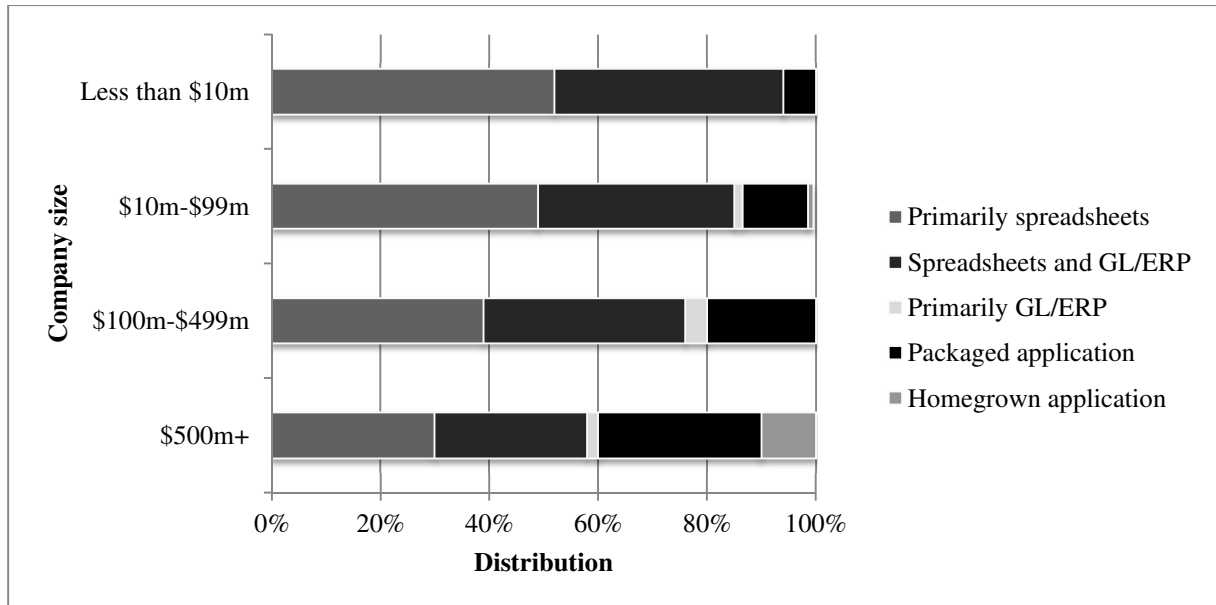
APPENDIX 5A – NON-LINER PAY FOR PERFORMANCE SCHEME (JENSEN, 2003):



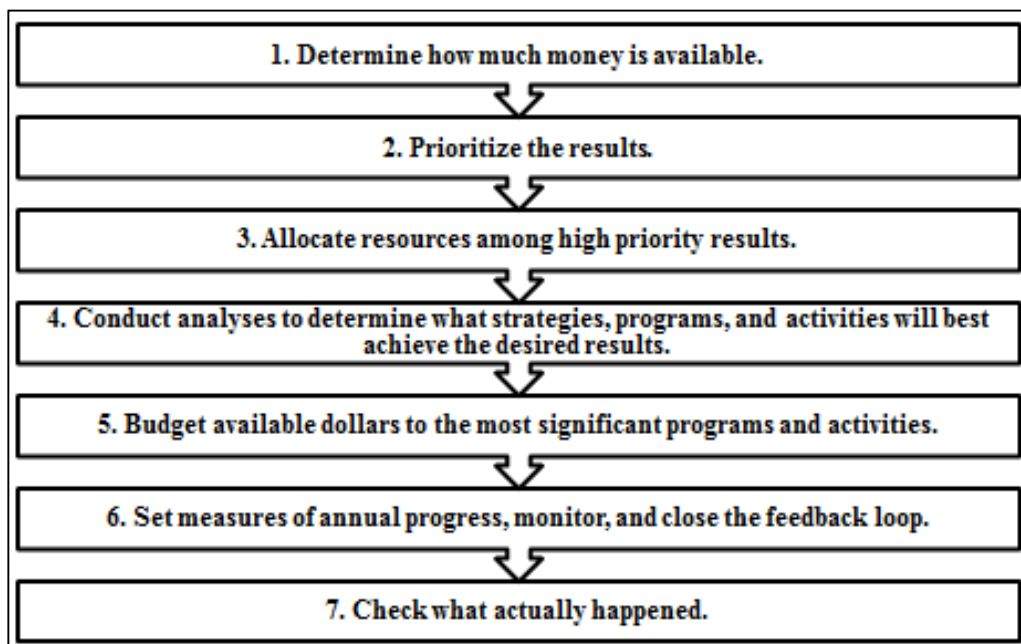
APPENDIX 5B – LINEAR PAY FOR PERFORMANCE SCHEME (JENSEN, 2003):



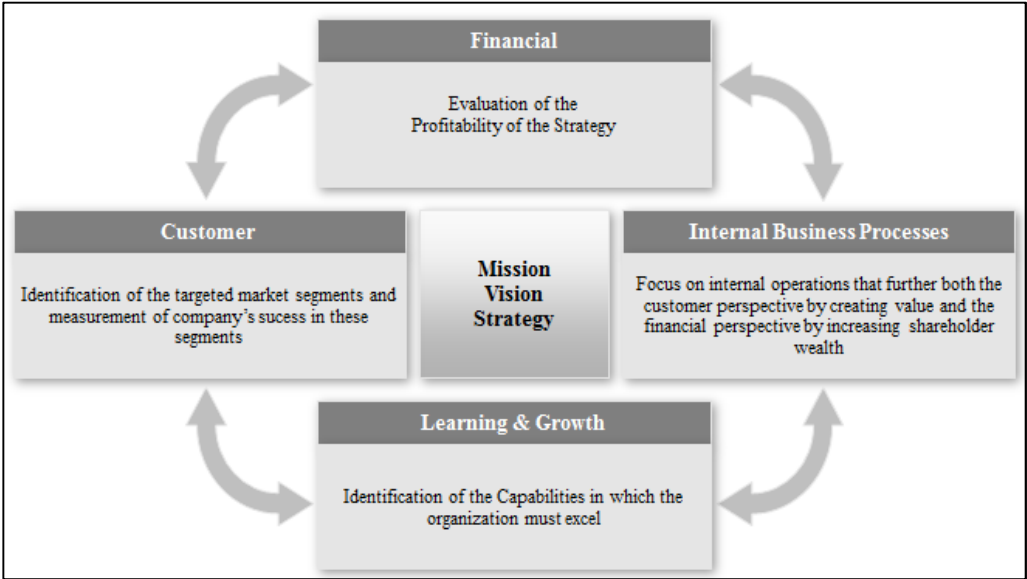
APPENDIX 6 - COMPANY REVENUE AND USED BUDGETING SOFTWARE (CENTAGE/IOMA, 2007):



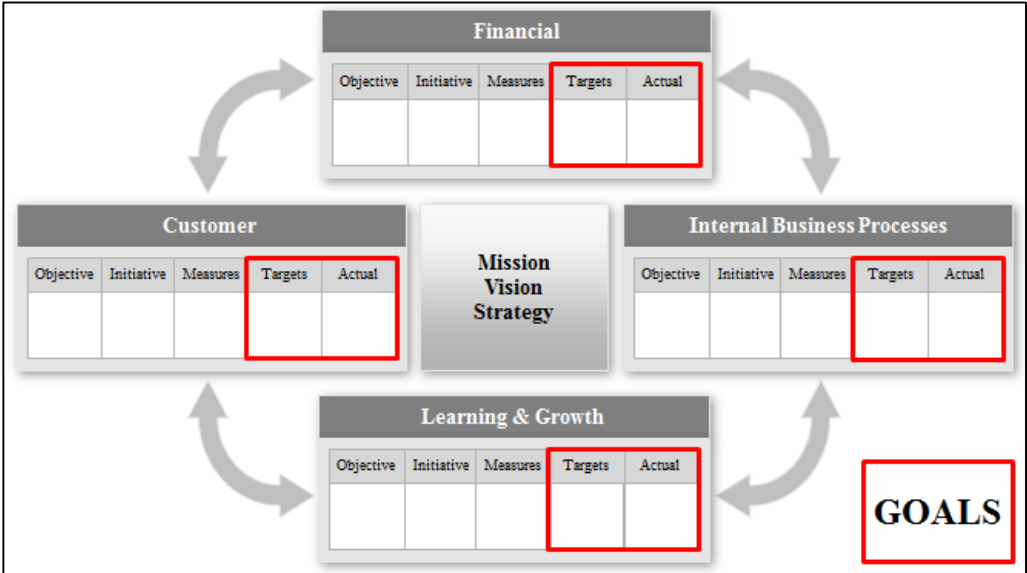
APPENDIX 7 – BFO/PB PROCESS DESCRIPTION (BARNETT & ATTEBERRY, 2007):



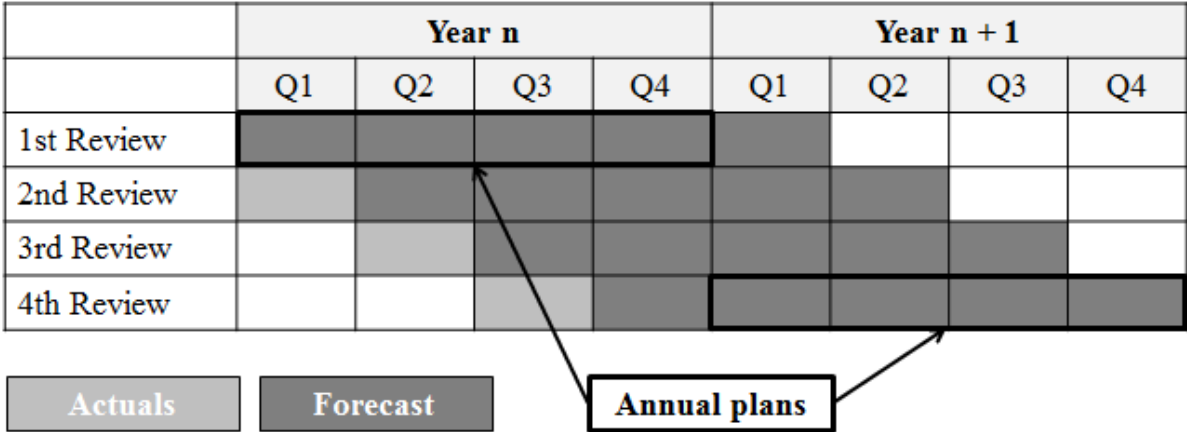
APPENDIX 8A – BSC AREAS (PARDAL, 2014):



APPENDIX 8B – BSC STRUCTURE (PARDAL, 2014):



APPENDIX 9 – RF PROCESS DESCRIPTION (PLAYER, 2009):



APPENDIX 10 – SURVEY STRUCTURE:

<p>Welcome Screen Welcome message , survey purpose, survey structure, privacy statement</p>
<p>Part 1: Budgeting Problems <i>Questions:</i> 12 – one for each problem <i>Answers:</i> Semantic differential scale with polar adjectives (1-5); Degree of problem presence</p>
<p>Part 2: Better Budgeting Methods <i>Questions:</i> 8 – one for each method <i>Answers:</i> Dichotomous (“Yes”;”No”) and “Not familiar with the method”</p>
<p>Part 3: Effects of Method Implementation on Problems <i>Questions:</i> Dependent on Part 2 – one for each method answered with „Yes“ in Part 2 <i>Answers:</i> Semantic differential scale with polar adjectives (1-5); Degree of method effect</p>
<p>Part 4: Comments <i>Questions:</i> 4 - other problems, biggest problem, other methods, open comment <i>Answers:</i> Open</p>
<p>Completion Screen Thank you message</p>

APPENDIX 11A – SURVEY WELCOME SCREEN:

h&z Beratung mit
Hirn, Herz und Hand

Better Budgeting - The tools companies use to reduce the flaws of the traditional budgeting process

Welcome to the "Better Budgeting" survey.

This survey is part of a paper regarding the possibilities of improving traditional budgeting and how these possibilities of improvement are currently used within organizations.

The survey will take approximately 10-20 minutes and is divided into three parts: First, you will be asked to identify common budgeting problems that are present in your organization; second, you will be asked to identify methods/tools for budgeting improvement that are used in your organization; third, you will be asked to rate the effects of the methods/tools identified in part two on the problems described in part one. Lastly, you have the chance to leave comments and additional remarks.

Your participation is greatly appreciated.

A note on privacy
This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will only be updated to indicate that you have (or haven't) completed this survey. There is no way of matching identification tokens with survey responses in this survey.

Load unfinished survey Next ▶

APPENDIX 11B – SURVEY PART 1 – BUDGETING PROBLEMS:

h&z Beratung mit
Hirn, Herz und Hand

Better Budgeting - The tools companies use to reduce the flaws of the traditional budgeting process

0% 100%

In the first part of the survey, we would like to ask you about the 12 most common problems in Budgeting.
We would like to know which problems of the traditional budgeting process you experience in your organization and, in your opinion, to what degree they appear.

* Please indicate to what degree do you experience the following problems of the traditional budgeting process in your organization?

	Not at all	Weak	Medium	Strong	Very strong	Unable to rate
Budgets are time-consuming and costly to put together	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets constrain responsiveness and flexibility and are often a barrier to change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets are rarely strategically focused and are often contradictory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets add little value, especially given the time required to prepare them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets concentrate on cost reduction and not on value creation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets strengthen vertical command and control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets do not reflect the emerging network structures that organizations are adopting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets encourage 'gaming' and dysfunctional behaviors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets are developed and updated too infrequently, usually annually	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Budgets are based on unsupported assumptions and guesswork	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets reinforce departmental barriers rather than encourage knowledge sharing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets make people feel undervalued	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Resume later ◀ Previous Next ▶

APPENDIX 11C – SURVEY PART 2 – BETTER BUDGETING METHODS (EXEMPLARY):

h&z Beratung mit Hirn, Herz und Hand

Better Budgeting - The tools companies use to reduce the flaws of the traditional budgeting process

0% 100%

In the second part of the survey, we would like to know which Better Budgeting methods and tools to improve the traditional budgeting process are used in your organization.

Method 1: Activity Based Budgeting

To your best knowledge, is this method used in your organization?

Choose one of the following answers

Yes
 No
 Not familiar with the tool/method

Please enter your comment here:

? Activity Based Budgeting (ABB) is an extension of Activity Based Costing (ABC). It requires the determination of cost of planned activities based on their expected size and the resources they will consume. ABB focuses on creating budgets based on activities rather than units.

APPENDIX 11D – SURVEY PART 3 – EFFECTS OF METHOD IMPLEMENTATION ON PROBLEMS:

h&z Beratung mit Hirn, Herz und Hand

Better Budgeting - The tools companies use to reduce the flaws of the traditional budgeting process

0% 100%

In the third part of the survey, we would like to know which effect Better Budgeting methods/tools that are used in your organization have on the problems of traditional budgeting in part one of the survey.

Please indicate on which problem(s) **Advanced Budgeting Software** has/had an impact on, and if the impact was positive (it solved/decreased the problem) or negative (it caused/increased the problem); otherwise, please select "No effect on the problem".

	Caused the problem	Increased the problem	No effect on the problem	Decreased the problem	Solved the problem
Budgets are time-consuming and costly to put together	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets constrain responsiveness and flexibility and are often a barrier to change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets are rarely strategically focused and are often contradictory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets add little value, especially given the time required to prepare them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets concentrate on cost reduction and not on value creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets strengthen vertical command and control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets do not reflect the emerging network structures that organizations are adopting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets encourage 'gaming' and dysfunctional behaviors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets are developed and updated too infrequently, usually annually	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets are based on unsupported assumptions and guesswork	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets reinforce departmental barriers rather than encourage knowledge sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Budgets make people feel undervalued	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

? Advanced Budgeting Software is the technological evolution from using Excel Spreadsheets to generate budgets. Instead, dedicated software is used that utilizes one central database; it stores past and current data and enables an organization to share and update budget information in a relatively real-time basis. The software should also allow for what-if-scenarios and interfaces to the ERP system and/or general ledger application of the organization.

APPENDIX 11E – SURVEY PART 4 – COMMENTS:

h&z Beratung mit
Hirn, Herz und Hand

Better Budgeting - The tools companies use to reduce the flaws of the traditional budgeting process

0% 100%

Lastly, we want to ask you about any additional budgeting issues you face in your organization or methods/tools you use to improve the traditional budgeting process that have not been covered in this survey. Also, we want to give you the chance to leave general comments about this survey.

Which problems with the traditional budgeting process - that were not covered in this survey - do you experience in your organization?

What is your biggest issue with the budgeting process in your organization?

Which methods/tools to improve traditional budgeting - that were not covered in this survey - does your organization use?

Do you have any further comments regarding this survey?

APPENDIX 11F – SURVEY COMPLETION SCREEN:

Thank you for your participation!

[Print your answers.](#)

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