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Valerian Laval HOW TO INCREASE THE VALUE-ADDED OF CONTROLLING

A GUIDE TO AN EFFICIENT AND SUSTAINABLE MANAGEMENT SUPPORT Valerian Laval How to Increase the Value-added of Controlling

Valerian Laval

How to Increase the Value-added of Controlling

A Guide to an Efficient and Sustainable Management Support



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To my beloved son Theodor.

Foreword

This book reflects almost 20 years of professional experience in the field of accounting, controlling and corporate management and aims to give new insights and guidance to practitioners and scholars on how to improve the controlling function in multinational production companies.

Writing this book and participating in conferences across all over Europe was a big wish which, finally, has come true. I thank my previous employer Dräxlmaier Group for the kind support of this project. I thank Prof. Dr. Petru Stefea, Prof. Dr. Nicolae Bibu, Prof. Dr. Liliana Donath, Prof. Dr. Ovidiu Megan, Prof. Dr. Andrei Pelin and Dr. Diana Gligor from "The West University of Timisoara", for their guidance and inspiration during the preparation of this book. I also thank Prof. Dr. Eduard Stoica, from the "University Lucian Blaga", for his hospitality during conferences and for his support in publishing several of my academic papers. My special thanks go to Jan-Norbert Schwetje, my close friend since being fellow students at the "University of Bayreuth", for his review of the manuscript and the ideas he contributed. Thank you all!!!

> Dr. Valerian Laval Düsseldorf, September 2018

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List of Abbreviations

ABAP	Advanced Business Application Programming
ASE	Academia de Studii Economice, Bucuresti (The Academy of Economic Studies, Bucharest)
BAME	Business Administration, Marketing and Economics conference
BI	Business Intelligence
BW	Business Warehouse
	Capital Expenditure
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CO	Controlling
CSR	Corporate Social Responsibility
CSV	Creating Shared Value
DWC	Deutscher Wirtschaftsclub (German business club)
EBIT	Earnings before Interest and Taxes
ERP	Enterprise Resource Planning
EUR	European currency unit
FEAA	Facultatea de Economie si Administrarea Afacerilor) (The Faculty of Economics
	and Business Administration)
FCF	Free Cash Flow
FTE	Full-Time Employee
HCL	High-Cost Location
HMS	Hybrid Management Systems
IBIMA	International Business Information Management conference
ICV	Internationaler Controller Verein (The international group of controllers)
IECS	International Economic Conference Sibiu
IGC	International Group of Controlling
IT	Information Technology
KPI	Key Performance Indicators
LCL	Low-Cost Location
М	Measure
MM	Material Management
n/a	not applicable
NWC	Met Working Capital
OPEX	Operational Expenditure
PV	Present Value
OLAP	Online Analytical Processing
P&L	Profit and Loss
PP	Production Planning
PPE	Property Plant and Equipment
PS	Project System
R&D	Research and Development
SD	Sales and Distribution
Sem	Semester
SQL	Structured Query Language
SSC	Shared Service Centre
TIMTED	Timisoara conference on "Current Economic Trends in Emerging
	and Developing Countries"

- USA United States of America
- USP Unique Selling Proposition
- UVT Universitatea de Vest din Timisoara ("The West University" of Timisoara)
- WHU Wissenschaftliche Hochschule für Unternehmensführung

1 Introduction

Very little is needed to make a happy life; it is all within yourself, in your way of thinking. Marcus Aurelius (121–180 AD)

Recent megatrends such as increasing complexity, volatility, internationalization and increased demand for transparency and compliance have changed the expectation towards the controlling function. Recent surveys have indicated that the need for a controller with a data analyst role is decreasing due to modern ERP solutions (Brands and Holtzblatt, 2015; Button 2015). Complementarily, the request towards the controlling function to provide specific decision support as a business partner of the management are increasing (Gräf 2014; Schäffer and Weber 2014a).

The idea and urgency for this topic became obvious to the author during various milestones of professional experience in multinational production companies, which have a typical number of maintained controlling specializations and a strategic orientation in the controlling function. During this professional experience, the increased expectations toward the controlling function became obvious, especially from the following perspectives:

While working in the corporate controlling department of a major steel company in Germany, the author observed that the management reporting was mainly finance driven and allowed the company no reasonable basis for an operational root cause analysis. Without knowledge about the root causes, there was no basis to set up specific countermeasures to fix the problem. So, instead of fixing the problem, the controlling department spent a lot of energy to analyse and maintain a complicated system of financial KPI including Free Cash Flow bridges between budgets and to forecast as well Economic Value-Added scenarios. It became obvious that such analysis took a lot of time to prepare and to explain to the executive board but creating no significant insight into the business. In consequence, the executive board decided to ignore the financial analysis. These observations inspired to further research on how to optimize the "value-added of management reporting" presented in chapter four.

As a general manager of automotive companies in Germany, China and Eastern Europe, the author was deeply involved in corporate planning processes and observed that those companies spent almost half a year in preparing the budget. In the first phase, the planning was prepared bottom-up in the expectation that the corporate headquarter would induce budget rounds for cost-cutting. After that, it often took half a dozen negotiation rounds and budget presentations until the final budget was approved. But, despite spending so much time and energy on the budget, it had only a little connection either with corporate strategy or with the relevant operational KPI. Furthermore, the budget was too inflexible to be changed in case a macroeconomic shock leaving the company "to be driven by sight". This observation was triggering

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the author's research to improve corporate planning and to develop a model on "operative planning by objectives", described in chapter five.

During that time the author was also involved in strategic planning processes and responsible for public relations. It thereby surprised that those two disciplines were not connected with each other. While companies see the need to include some charity in their public relation, they seldom see a way to connect their social contribution with their strategic goals. Strategic planning does consider external trends but is seldom aware of the aspect that big companies have the possibility to influence and change the society and the business environment in which they operate. During the four years of working in Eastern Europe, the author took an active role in several corporate social responsibility (CSR) initiatives. The supported initiatives included the (re)introduction of vocational education adding and modernizing bachelor and master curriculums at leading universities in Eastern Europe. Based on the experience and insights made participating in these initiatives, the author researched and connected the strategic planning and CSR aspects in a model referred later as the "value diamond of CSR" in chapter five.

Being a corporate restructuring manager in an automotive group, the author noticed that the reaction of corporates to crisis is seldom structured in a systematic way. The research on the enhancement of organization with a "portfolio-based restructuring model" proposed in chapter six is a consequence of these observations.

The publication reflects the observations of the author described above and aims at contributing new insights on how to improve the controlling function in modern multinational production companies. The following research questions will facilitate this aim:

The first research question "What does controlling involve and how can it add value to the company?" will span the field of research by clarifying what controlling means and to determine how the added value can be defined. The answer to this question will clarify a new perspective on the modern understanding of the controlling function and its development. From the results of multiple surveys that have been analysed, it becomes clear that the controlling function, in general, has been increasingly progressing, from a data preparation to a business and to a change management oriented function, highly interconnected with the management of a business organization. The answer to this first research question will be given in chapter two and three.

The second research question: "Which factors influence the set-up of the controlling function in a company and how are the expectations towards the controlling function changing over time?" will depict how the requirements towards the controlling function are changing. An analysis will present how the expectation gap can entrap the controlling function due to misalignment with the management needs. To close this gap, change models will be discussed and a new change model will be developed. The answer to the second research question will be given in chapter three.

The third research question, "How can the controlling function add value to standard reporting and budgeting activities?" will analyse and illustrate how the controlling function could increase the added-value of its standard activities such as management reporting and operative planning. The publication will outline improvements of standard management reporting activities by focusing on decision usefulness. By taking this approach, the decision-making process becomes more cost-effective. The improvements suggested are based on a survey conducted by the author across companies in 2014; the results are benchmarked with a comparable cross-European survey. A real-life implementation in a multinational production company shall validate the best practices described by using action research methods. In the content of the publication, the optimization of the standard budgeting processes will be outlined using a strategy-orientated planning model. The answer to the third research question will be given in chapter four and five.

The fourth research question "How can the controlling function add value to reorganization activities?" will focus on how to use the saved capacity by more efficient and effective standard processes for better management support. Fewer costs for standardized processes can release the capacity for management support aspect of controlling that will have a positive effect on EBIT. Emphasis is placed on research that demonstrates how to improve the alignment between the business strategy and the strategic planning process. In the case study project, the aim is to show the use of the methodology of strategic planning in managing successful CSR projects, thereby improving the financial performance of a multinational production company. The value increased of the controlling function as a provider of management support will be demonstrated by applying its methodology to business-oriented reorganization activities. Furthermore, a portfolio-based model to improve the success of restructuring initiatives will be developed. In closing, a conclusion to the research will summarize the main contributions of this publication as well as provide an outlook for further research. The answer to the fourth research question will be given in chapter six and seven.

Surveys: To back up and enrich the theoretical research and the authors' own observations during business, the author performed two surveys, one made in the year of 2014 and one made in the year of 2016. The first survey "2014 survey" was conducted during December 2014 with 20 finance experts from a global manufacturing company at its seven plants in Eastern Europe as well as in the global head-quarters. 45 % of the experts interviewed were in management level positions (see Figure 1.1).

Function

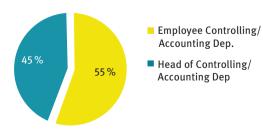


Figure 1.1: Participants by function (survey). **Source:** Author's 2014 processing/survey.

To better interpret and analyse the 2014 survey, the results were benchmarked with a reference survey ("reference") conducted by Deloitte Consulting between December 2012 and January 2013. The reference included the same set of questions which consisted out of 30 questions. The reference included 143 participants across different branches, company sizes and company types from 12 countries, with a focus on Denmark, Germany and Netherland (see Figure 1.2).

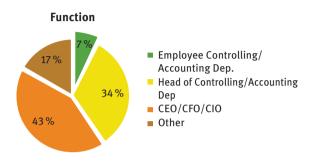


Figure 1.2: Participants by function (reference). Source: Author's processing based on Deloitte (2013).

In the author's second survey in 2016, 19 representatives from 15 multinational companies and one educational institution were interviewed, who had the authority to hire and evaluate the graduates and their skills and capabilities (see Table 1.1). Of the total of 19 representatives, ten representatives are owners or CEOs, four are department heads, one is a director and four are specialists in their companies. To reflect the perspective of the educational field, also two professors from the West University of Timisoara were interviewed (see Figure 1.3).

Company name	Interview date
Dräxlmaier	10.06.2016
PKF Econometrica SRL	10.06.2016
Corpstrat Consulting SRL	10.06.2016
West University of Timisoara	13.06.2016
Helpline Romania	14.06.2016
KPMG Timisoara	14.06.2016
DWC	14.06.2016
Netex Consulting	14.06.2016
Accenture	15.06.2016
Netex	15.06.2016
	(

Table 1.1: Overview of performed interviews.

(continued)

Table 1.1 (continued)

Company name	Interview date
Dräxlmaier	16.06.2016
West University of Timisoara	16.06.2016
WERZALIT Lemn Tech S.C.S.	20.06.2016
INTERPART PRODUCTION	20.06.2016
Linde	21.06.2016
Bosch	22.06.2016
F&F IT Services	22.06.2016
Mattig Expert Swiss Partners	23.06.2016
Continental Automotive	24.06.2016

Source: Author's 2016 processing/survey.

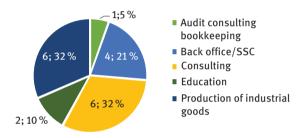


Figure 1.3: Number of participants by activity type. **Source:** Author's 2016 processing/survey.

Case studies: Beside the surveys, the author performed two major case studies and analysed them for this publication. The first case study, in 2014, was the implementation of a comprehensive process documentation and optimization of controlling processes at a multinational production company. The second case study, in 2015, was the implementation of several CSR projects in universities and professional schools.

Interventionist research: A recent review of the studies in management accounting published between 1990–2014 (Malmi 2016) outlined that the opportunities for scientists to engage in interventionist research in this field are extremely rare. This review further stated that the limited access of researchers to the executive level of multinational companies, as well as the limited motivation of such companies to support this type of research, is the main limitations of interventionist research in the field of management accounting. The author estimates that one of the most important contributions of this publication is represented by the fact that it was possible to overcome these research limitations by performing his research reflecting many years of management experience and thereby having the

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necessary insights and the necessary access to business executives and political decision-makers.

While performing the research, the author wrote ten academic papers which all have been published in double-blind reviewed academic journals. The highly practical relevance of this research, as well the inclusion of recent controlling literature, adds to the contribution of this publication.

2 Value creation in controlling – definition and terminology

The first part of this chapter, covering the theoretical framework of controlling, is based on a presentation held by the author in May 2015 on the 22nd International Economic Conference – IECS 2015 "Economic Prospects in the Context of Growing Global and Regional Interdependencies" in Sibiu, Romania, presentation that was published in "Procedia Economics and Finance" (Laval 2015a).

The second part of this chapter, covering the value-added of the controlling function, was published in the "Bulletin of Taras Shevchenko National University of Kyiv" (Laval 2017b).

2.1 Theoretical framework of controlling

According to the current understanding in the business literature and by outlining three different perspectives, the meaning of corporate controlling is perceived as being: (1) the controller's mission statement, (2) the controlling process model and (3) the role concept in controlling (see Figure 2.1).

2.1.1 The controllers' mission statement

The "Controllers' mission statement" describes the purposes and the role of the controller. The mission statement was last updated and published by the "International Group of Controlling" (IGC) as follows:

"As partners of the management, controllers make a significant contribution to the sustainable success of the organization. Controllers:

- design and accompany the management process in defining goals, planning and management control so that every decision-maker can act in accordance with agreed objectives;
- ensure the conscious preoccupation with the future and thus make it possible to take advantage of opportunities and manage risks;
- integrate an organization's goals and plans into a cohesive whole;
- develop and maintain all management control systems to ensure the quality of data and provide decision-relevant information;
- are committed to the welfare of an organization as a whole."
 Source: (IGC International Group of Controlling 2013).

The mission statement, as published in 2013, reflects the increased requirements for the corporate controller function and a proactive role in assisting the management in

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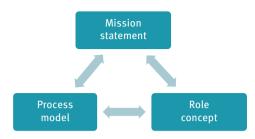


Figure 2.1: Framework of controlling. Source: Author's processing.

defining the goals, planning and deploying efficient management control (Losbichler 2013).

In the management control cycle (see Figure 2.2), planning is the process of analysis, target setting and defining the measures needed to reach the target. The execution includes the breakdown of the company's targets to the responsible managers and the formal assignment. The monitoring department controls to what extent the target is reached and determines additional measures in case this is necessary (Gladen 2014).

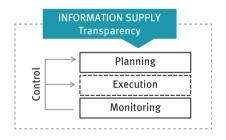


Figure 2.2: The management control cycle. Source: ICV and ICG (2013).

What needs to be mentioned here is that planning plays an important role in setting out the detailed and operative path towards the set targets, whilst the execution part of the management control cycle is not mentioned in the mission statement, since it is part of the management's attributions.

2.1.2 The controlling process-model

The "controlling process-model" (see Figure 2.3) was set up by an IGC working group and describes the processes and activities which can be executed to fulfil the purpose that is outlined in the company's mission statement (IGC 2010). The

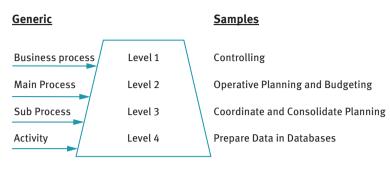


Figure 2.3: Controlling process model. Source: IGC (2010).

controlling process model is a hierarchical approach with the business process controlling as level one. The ten "main processes" are displayed as level two. The main processes are split up in sub-processes, as level three, which lead to the activities as level four.

The controlling level two processes give a good overview of the portfolio of processes, which make up the controlling function according to the process model (see Table 2.1).

As outlined in the introduction chapter, this publication will pursue the given research questions by analysing the processes highlighted in the above table using bold letters. The systematic structure of the table can also serve as a basis to set up and organize the portfolio of activities that are generated by the controlling function. Allocation of resources to the mentioned processes depends on role model present in the specific company and can change over time (Omagbon 2015). The following chapter will outline the development of the role models.

Strategic Planning chapter 5 and 6 1. 2. **Operative Planning and Budgeting** chapter 5 3. chapter 5 Forecasting 4. Cost accounting chapter 4 5. Management Reporting 6. Project- and Investment Controlling 7. **Risk Management** 8. **Function Controlling** 9. Management Support chapter 6 and 7 10. Enhancement of Organization, Processes, Instruments and Systems

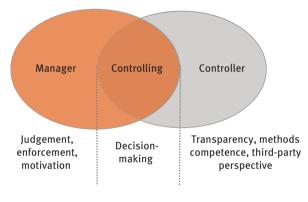
Table 2.1: Controlling main processes.

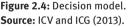
Source: International Group of Controlling (2012).

2.1.3 The role models of the controller

A role, in general, can be defined as a set of connected behaviours, rights, obligations, beliefs and norms as conceptualized by people in a social situation. It is an expected or continuously changing behaviour and may have a given individual social status or social position (Wikipedia 2017). There is a basic role metaphor that is used in literature to portray the manager as the captain of a ship (company) and the controller as the navigator. While the captain is responsible for the entire ship, the navigator suggests the right course to reach the destination. The manner in which the manager and the controller interact is crucial to the success of the company (Amann and Petzold 2014; Hubert 2015) and there must be a necessary interweaving interaction between the manager and the controller.

The decision-making process is the overlapping section between the supportive role of a controller, who is responsible for transparency, methods competence and for providing a third-party perspective on the business and the manager (see Figure 2.4). The distinguishing role aspect of the manager is to bring the judgment, enforcement and the leadership needed to implement the decision in day-to-day business.





This basic role model of the controller was further split up to cover the heterogeneous objectives and processes in the controlling function. The literature provides an extensive discussion on the role model, mainly, on how to relate the different processes to different types of role models. (Gleich and Lauber 2013) argue that there are four competence profiles or role models of controlling while (Schäffer and Weber 2014b) or (Ernst and Vater 2006) use slightly different role model types varying in concept and the number of distinguished roles. However, the meaning and underlying foundation is the same. (Gleich 2015; Gleich and Lauber, 2013) established a four role models with a an increasing implementation mandate from left to right (see Figure 2.5).



Figure 2.5: Controlling role models.

Source: Author's processing based on Gleich and Lauber (2013).

The four roles of the controller include Data Analyst, Performance Monitor, Business Partner and Change Agent and are explained as follows:

Data Analyst - Prepares and analyses the business data in a comprehensible manner for the top management. The required competencies focus on the technical and methodical aspects of controlling (Gleich and Lauber 2013). Typical activities of this role include:

- preparation of monthly and quarterly management reports;
- performance of ad-hoc analysis;
- coordination of the planning and budgeting process;
- preparation of financial reports and budgets;
- collection of operational data;
- maintenance of data systems (Schäffer and Weber 2014b).

Performance Monitor - Is the "financial conscience" of the company, who has to monitor the operational performance indicators. He has to review documents for decision making and evaluate to which extent they fit into the target system and business strategy of the company. Therefore, the role requires higher analytical competences in comparison to the analyst (Gleich and Lauber 2013). Typical activities for this role include:

- setting up of performance reports for top management;
- setting up of internal rules and procedures;
- controlling the managers' spending of resources is adequate and justifiable;
- controlling that managers respect the requirements of accounting regulations;
- evaluating that managers comply with the top management objectives (Schäffer and Weber 2014b).

Business Partner – Supports the management activities in the decision-making process, based on reliable analysis. The business partner's role requires additional business understanding. The business partner also needs good social skills, to interact with the management and team members and needs to have a solution-based approach (Eiselmayer and Kottbauer 2015; Gleich and Lauber 2013). Typical activities of this role include:

- developing plans for cost reduction and increased profit;
- analysing of product and customer profitability;

- setting up of measures to reach targets;
- appraisal of investment opportunities;
- setting up new strategies (Schäffer and Weber 2014b).

Change Agent – Can be regarded as a business partner who actively initiates change processes. The profile of this role requires an even higher understanding of the business model and organizational change management. The change agent typically works proactively and autonomously. This implies higher needs for people knowledge and cross-functional teamwork abilities. As change processes can lead to difficulties and resistance, the change agent must be able to resolve conflicts using empathy and related social skills (Edlefsen and Pedell 2015; Gleich 2012b; Gleich and Lauber 2013).

The controller's qualification requirements increase in all competence fields continuously, from the data analyst in the direction of the change agent. These qualification requirements cannot be acquired solely by seminars or other forms of the oretical education. To raise the business partners or change agents of the future at some point in time should take and manage their own business responsibility with growing responsibilities and magnitudes. The companies need to find a way to apply this insight to the "life cycle of controllers" in the succession planning of the controlling function (Gleich and Lauber 2013).

The actual setting of the role model in a company is driven mainly by the demand of the top management as an internal customer of controlling services. A survey made by Horvath (Heimel 2011a) revealed that the role model observed in various companies is diverse. The management and the self-assessment of controlling are very similar. The assessment of the management tends to be slightly more active than the self-assessment of controlling department. In general, the perceived role of controlling is usually rather active than passive (see Figure 2.6).

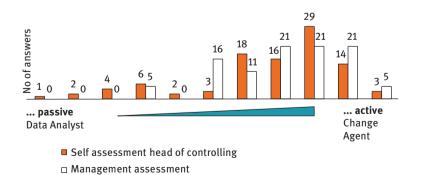
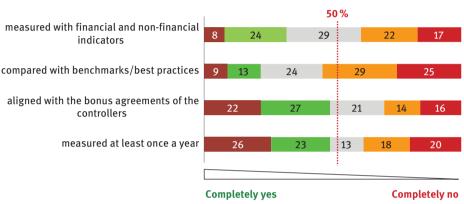


Figure 2.6: Role of the controlling in companies. Source: Author's processing modifying Heimel (2011a).

2.2 The value-added of the controlling function

For continuing improvement, the performance of the controlling should be tracked and monitored as this is the data basis needed to increase the performance of the controlling department in the future. Based on a survey from (Heimel 2011b), the performance of the controlling function is measured in only a minority of companies (see Figure 2.7).



The performance of the controlling function is

Figure 2.7: Measuring controlling performance. Source: Author's processing modifying Heimel (2011b).

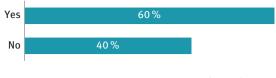
According to the survey from (Heimel 2011b) the majority of companies do the measure of the performance of the controlling function at least once a year and align it with bonus agreements. Compared with the percentage of companies who measure, the percentage of companies who have defined financial or non-financial indicators or use benchmarks is significantly lower. In other words, a significant percentage of companies without using defined financial or nonfinancial KPI.

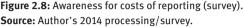
Value creation is the result of good management decisions. Controlling can support management by identifying, planning and steering decisions which contribute to the added-value of the company (Unrein 2010). The controlling function will add to the company's value if the value creation of the decision support outweighs the costs of the controlling function:

	Value creation by management support
_	Value consumption by controlling costs
=	Value added of the controlling function

In the 2014 survey and the reference, approximately 40 % of the respondents answered correspondingly that they were not aware of the true costs of the management reporting (see Figure 2.8 and Figure 2.9):







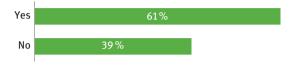
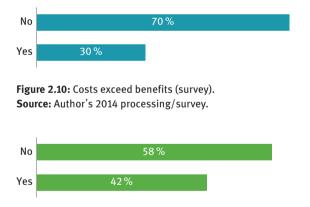
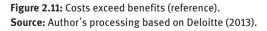


Figure 2.9: Awareness for costs of reporting (reference). Source: Author's processing based on Deloitte (2013).

The 2014 survey as well the reference also indicates that there were doubts that the cost of the management reporting exceeds the benefits of the reporting. 30 % of the participants in the author's survey 2014 (42 % in the reference survey) were of the opinion that the costs exceed the benefit of the reporting. These results indicate the need to improve the efficiency and effectiveness of the management reporting (see Figure 2.10 and Figure 2.11):





Literature has established a broad number of figures to indicate value. The purpose of these value indicators is to express complex situations in an easy figure and therefore give the management an aggregated and fast overview (Ewert and Wagenhofer 2014; Gladen 2014). EBIT and FCF belong to the most common financial performance

indicator (Barkalov 2015). Both indicators are defined by financial accounting rules (Dillerup and Stoi, 2015). In general, the closer the figures are to the published financial statements, the more transparent they appear and the easier they are to calculate and to communicate. The FCF, in particular, is seen as a very suitable indicator for decision making (Maizi 2014).

The Economic Value Added, abbreviated EVA, considers in addition to the above, the cost of capital. The EVA is also referred to as a residual profit concept since the cost of capital is deducted from the profit (Gundel 2012). In contrary to the EBIT, the calculation of the EVA is not regulated by law and the necessary adjustments are to some extent specific to each company (Velthuis 2009). Due to the costs and complexity related to implementing concepts like the EVA, this is predominantly used by larger corporations. To increase transparency, some companies replaced the EVA with the EBITaC (EBIT after Cost of Capital). The EBITaC comes along with fewer adjustments and thus it is a figure closer to the published financial data (Horster and Knauer 2012).

The above figures represent absolute value figures, which may be projected for future periods and then discounted to the present time or to the point in time when a decision will be made. The discount rate hereby anticipates the time value of money and the risk of future income in those future absolute values (Fischer and Baumgartner 2014). Apart from these absolute values, there are several relative value definitions that are widely used today, for example, return on investment or return on sales. Such relative figures support a comparability of figures between different companies or between different time periods (Ewert and Wagenhofer 2014).

The preference for the one or other value figures depends on the purpose and object of the evaluation. This purpose can be to analyse a given situation, to prepare a business decision or to motivate and control management. In general, companies combine the advantages of all mentioned value figures in their reporting system. According to the survey of (Horster and Knauer 2012), companies use, in average, four value figures as their top KPI.

The logic and methodology described in this publication to improve the value-added of the controlling function are not specific to one particular value figure. The differences in the methodology of calculation will not impact the validity of the suggestions. For the illustration of the proposed methodology in the publication, it seems to be suitable to calculate the value creation using financial projections such as EBIT or FCF as the value indicator. The projections will be discussed over a defined project lifetime to illustrate the present value of the improvement suggestions for a typical mid-sized multinational production company.

The value-added and performance of the controlling function can be measured using three kinds of indicators (see Figure 2.12). Input indicators relate to the input allocated to the controlling function such as money or headcount. Output indicators

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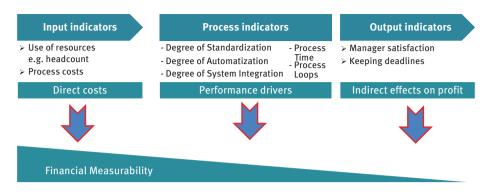


Figure 2.12: The measurability of controlling indicators. Source: Author's graph based on International Group of Controlling (2012).

relate to the quality and relevance of the output such as reports. The third category of indicators are process indicators which give an indication of the efficiency of the controlling processes (International Group of Controlling 2012):

All indicators should be measured and benchmarked to continuously improve the controlling function. However, the measurability of the effects on financial results varies (see Figure 2.13).

Input indicators such as direct costs have, obviously, a direct financial impact and can be measured easily. However, in many cases, costs should be seen as the result of actions that have taken place before. Actions to change a cost structure normally target to influence performance drivers, which then lead to cost savings.

Process indicators are indicators which can be directly influenced during an optimization project. Those indicators relate to performance drivers which have an impact on the financial performance by increasing cost efficiency and decreasing costs. Further, performance indicators relate to the output of the controlling function as discussed in the next paragraph.

Output indicators measure, in general, the satisfaction of the management with the support they get out of the controlling function. By definition, the controller is not the one responsible for executing managerial decisions. Despite that fact, the controlling function can influence the behaviour of decision-makers towards effectiveness and efficiency (Hirsch, Nitzl, and Schauß 2015) and can give support to prepare decisions and support their execution (Gleich, Horvath, and Michel, 2011). Higher decision usefulness of analysis and reports provided by controlling can contribute indirectly to the financial performance of the company. However, the connection between good or bad decision support and the companies' financial performance is very indirect (see Figure 2.13).

The contribution of supporting functions like controlling to the financial performance of a company is hardly measurable directly (Hall 2015). Satisfaction surveys with the management to identify the subjective decision usefulness of reporting is a measurable "substitute indicator" (Gladen 2014).

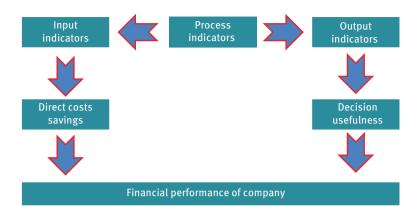


Figure 2.13: The controlling impact on financial performance. Source: Author's graph.

In general, it can be concluded that changes in input indicators represent cost changes which can be measured directly and objectively. The change of process indicators can be translated to cost savings using assumptions regarding the relation between certain process indicators and costs. These relations can be quantified by analysing past data or benchmarking. A change in output indicators has an impact on the satisfaction of management with controlling which can be measured. However, the impact of internal customer satisfaction on corporate financial results can hardly be established.

The reduction of costs for standard processes can be achieved by addressing their efficiency and effectiveness:

Increased efficiency in standard processes

- + Increased effectiveness in standard processes
- = Fewer costs for standard processes
- Positive effect on EBIT

The free capacity saved out of more efficient and effective standard processes should be used by the controlling department to improve the quality and quantity of its management support.

Fewer costs for standard processes

- More capacity for management support
- Positive effect on EBIT

Value-added is the result of good management that has taken the right decisions and performed the right initiatives. The possibilities to do so depend on the specific situation the company faces.

As soon a standard process understanding is established throughout the company, the process efficiency of the plants can be benchmarked to identify improvement areas. For the benchmarking of those activities, relevant KPI's need to be defined. Those benchmarks can relate to input KPI's such as the man-days needed to perform a certain activity or days required to complete the budget process. Also, output KPI's such as the satisfaction level of the recipient with a specific service provided. It is reasonable to start with the benchmarking of processes which are resource intense and focus the later improvement activities on processes in plants with significant performance under the benchmark.

The result of this measuring should be compared with benchmarks or best practices to estimate were the controlling function is positioned within its peer group (Küpper, Möller, and Pampel 2012). If the measuring and benchmarking systematic is established, it is recommended to ailing those systematic in the target setting the bonus regulation of the controllers.

Following the above research, it can be recommended to optimize the reporting content, to improve the efficiency of the report preparation in the given set up and, as the third step, to realize further efficiency potentials by implementing a controlling SSC.

2.3 Interim conclusion

As there are no legal requirements on how to organize controlling, the actual set up depends on the requirements of the company's management. This gives controlling the possibility to become oriented towards flexible services in order to meet the operative and strategic needs that the company faces. The content and goals of the controlling function can be specified by following the three perspectives (1) mission, (2) processes and (3) roles. For each perspective, the controlling function can be organized in the described framework.

As outlined above, the controlling function will add to the company's value if the value creation of the decision support outweighs the costs of the controlling function:

Reduction of costs for standard processes can be achieved by improving efficiency and effectiveness in those processes (Eiselmayer and Kottbauer 2015). The standardization on reporting efficiency will be described and measured based on an improvement project performed and implemented by a multinational production company. During the performed implementation, a major increase in reporting efficiency was realized by documenting clear process descriptions and by assigning process responsibilities explicit to individual persons using the above mentioned "inventory of reporting processes".

Further on, measures to increase the effectiveness of the corporate planning process are elaborated by developing concept planning by objectives. The suggested model questions several planning objectives multinational production companies focus on and suggests improvements. The EBIT effects of the measures improving efficiency and effectiveness of standard processes were calculated for a representative multinational production company.

Lifting management support requires a business related and innovative controlling understanding. In the illustrated innovative cases, the controlling function contributed to the identification, execution and monitoring of the described restructuring projects and contributed to increasing the company's financial performance. The impact on the financial performance was illustrated by financial projections based on substantial case studies. The described restructuring projects are based on real-life examples observed in multinational production companies.

3 Changing expectations in multinational production companies

This chapter is based on a presentation held by the author in June 2015, on the "International Conference Current Economic Trends in Emerging and Developing Countries" (TIMTED) in Timisoara, Romania. Following this conference, the chapter was published in the "Timisoara Journal of Economics and Business" (Laval 2015b).

3.1 Analysis of influencing factors

There are no legal requirements how to set up controlling functions in companies or what quality of results this function should deliver (Krings 2012). Because of that, the set up differs from company to company. In the following, the controlling specifics of multinational production companies will be made transparent. Such multinational production companies will be defined as large production companies with more than 20,000 employees operating and producing in multiple countries with an annual sales volume exceeding 1,000 million EUR. The actual set-up of the controlling function is influenced by several internal and external factors (see Figure 3.1).

The actual controlling organization will reflect those internal and external factors arguing that there is no ideal controlling setup which would suit all purposes. These contextual factors can change over time, e.g. a company can steadily grow in size and complexity and being or becoming a multinational production company will impose a growing pressure to adapt the controlling organization correspondingly (Küpper et al. 2012).

To illustrate this understanding, two important internal factors and their influence on the controlling function will be analysed. The first factor is the size of the company and the second factor analysed are the expectations of the management.

The size of a company influences the controlling function in many ways. The survey conducted by Schäffer and Weber (2014b) is analysed to show how the company's size influences (1) the headcount; (2) the contents and specialization fields and (3) the organization of the controlling function within it. The survey was made with a number of 378 company representatives in 2014.

The influence of the company size is a very influential factor in the controlling headcount. According to a survey made by (Schäffer and Weber 2014b) the number of controllers correlates significantly with the number of total employees (see Figure 3.2).

The numbers of controllers between 2011 and 2014 remained relatively stable with a slight increase in smaller companies and a decrease in multinational production companies with more than 10,000 employees. Dividing the number of controllers

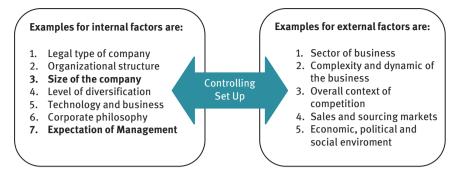


Figure 3.1: Overview of internal and external factors. Source: Author's processing based on (Küpper et al., 2012).

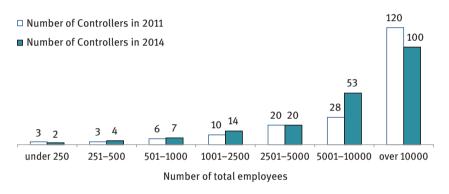
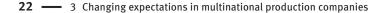


Figure 3.2: Headcount of controlling depends on company size. **Source:** Translated by the author from Schäffer and Weber (2014b).

by the number of employees clarifies that the number of controllers per employees decreases significantly in larger companies (Schäffer and Weber 2014b).

In smaller companies (up to 250 employees), 2.2 % of the employees are controllers, meaning that there is one controller per 45 employees. In multinational production companies, the percentage drops to 0.3 %, equally, one controller cares per 333 employees. The average overall ratio is one controller per approximately 120 employees (see Figure 3.3).

The decreasing percentage of controllers for the total number of employees relates to the observation that the complexity of the company's business is increasing with the company size in a sub-proportional manner. The reason for this sub-proportional increase is related to economies of scale in financial reporting and analysis; meaning that for example, a report covering double volume sales does not necessarily need double the controlling workforce to create.



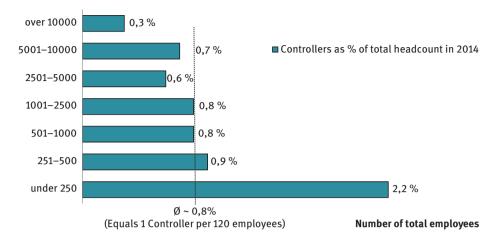


Figure 3.3: Percentage of controllers vs. company size. Source: Translated by the author from Gräf & Horváth & Partners (2014).

Company size influences also the controlling content: The controlling function of a company can maintain various controlling specializations. The number of controlling specializations differs from company to company and relates to the company's size. In bigger companies, the average number of specializations is seven, whilst in small companies, it is two and, on average, the controlling functions maintain four specializations. In other words, the bigger the company gets, the more likely it is that more controlling specializations will be in place (Schäffer and Weber 2014b).

The most prominent specializations in controlling relates to financial-, sales- and division-controlling (see Figure 3.4).

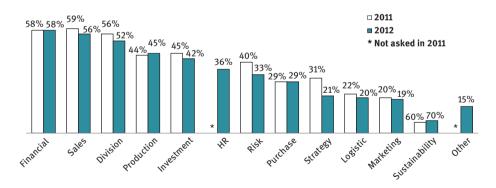


Figure 3.4: Popularity of controlling specializations. Source: Modifying Gräf & Horváth & Partners (2014).

The field of business triggers which specialization is prioritized in a specific company. It is obvious that production controlling has a high significance especially for production

companies, while risk controlling has a relatively high significance for insurance companies (Messner 2015).

Based on a survey made by Becker, Ulrich and Zimmermann (Becker, Ulrich, and Zimmermann 2012) on 45 company representatives, a correlation between the increase of company size and the increase of importance in strategic orientated tasks was clearly observed. Also, other empirical research studies (Littkemann, Reinbacher, and Baranowski 2012) showed that the majority of controllers in mid-size companies focus on operative controlling tools and that only half of the mid-size companies used strategy oriented tools.

Company size influences also the controlling organization: The head of controlling reports is in the majority of cases directly to the CFO. However, in smaller companies, the head of controlling reports to the CEO or the management board as a whole (Schäffer and Weber 2014b). The more levels there are between the head of controlling and the decision-making level of the company, the more indirect the influence of the controlling function gets (see Figure 3.5).

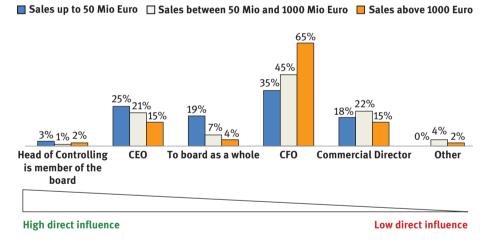


Figure 3.5: Reporting lines of the head of controlling. Source: Author's translation and modification of Gräf & Horváth & Partners (2014).

3.2 Changing expectation towards the controlling role model

Recent megatrends such as increasing complexity, volatility, internationalization and increased demand for transparency and compliance have changed the expectation towards the controlling function (Losbichler 2012; Pfläging 2015). Multiple survey indicate that the need for a controller with a data analyst role is decreasing due to modern ERP solutions such as Business Intelligence, SAP HANA or OLAP (Brands and

Holtzblatt 2015; Button 2015). Complementarily, the request towards the controlling function to provide specific decision support as business partner of the management is increasing. The chapter aims to analyse the new expectations concerning the controlling role model.

The increasing efficiency of ERP is underlined by the survey of (Schäffer and Weber 2014a) which predicts a significant boost in data availability for management without needing the controller to act as a data collector. For 2019, almost 97 % of the survey respondents expect that management can retrieve their company data by some degree of self-service (Schäffer and Weber 2014a). Fifty-three percent of the survey respondents expect even that management will have a full access to all company information with complete drill down function by the year 2019 (see Figure 3.6).

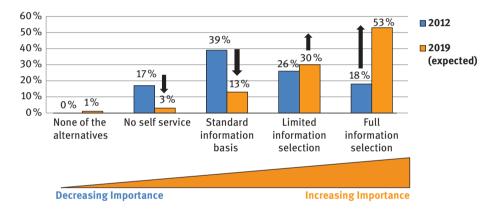


Figure 3.6: Data availability for management.

Source: Author's translation and modification of Gräf & Horváth & Partners (2014).

Due to the rising potential of ERP solutions, a shift from report extraction and publication towards report design and adaptation is expected. On the one side, the manual preparation of reports by the controlling department will lose demand (Matyac, Mishler, and Monterio 2015). On the other side, controllers have to adopt the reporting functionalities to cover the changing information needs and to ensure that the reports keep their relevance (Günther 2012).

In the controlling literature and surveys from the last years, a clear trend towards an increasing importance of the business partner and change agent role has been noted, while the relative importance of the other roles is decreasing. In this chapter, a variety of illustrative surveys are referred and analysed. The research studies between 2006 and 2014 were selected as long-time research in order to analyse the change in the understanding of the controlling role models in the last decade (see Table 3.1).

No.	Year	Author
1	2006	Ernst et al. (2006)
2	2012	Schäffer and Weber (2012)
3	2012	Pótsch (2012)
4	2013	Gräf et al. (2013)
5	2014	Schäffer and Weber (2014a)

Table 3.1 : Development of research studies.

Source: Author's table.

(1) The first survey referred to in this chapter was made by Ernst et al. (2006). He examined which of the roles would describe the role of controlling at the German company "Deutsche Post World Net". The survey indicated that the need for profiles such as "number cruncher", "administrator" and "policeman" were expected to decrease significantly in the future while profiles such as "business partner", "challenger" and "internal consultant" are expected to gain importance. This development was expected by the controllers as well as by the internal customers of the controlling service in similar proportion (see Figure 3.7).

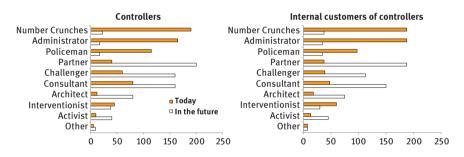


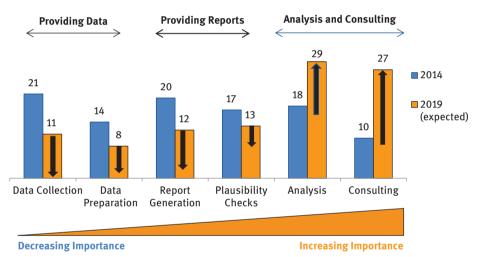
Figure 3.7: Controlling roles at Deutsche Post World Net. Source: Translated by the author from Ernst et al. (2006).

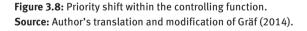
This early survey of 2006 used a comparable differentiated ten-role model that can be understood as a predecessor of the modern four-role model. Nevertheless, the naming of roles (Ernst et al. 2006) already documented an activity level segmentation and indicated a trend towards active roles such as partner, challenger or consultant.

(2) The future role of the controller was also analysed in a survey conducted by (Schäffer and Weber 2012). For this survey, the feedback of 448 controllers and board members in the year 2011 have been collected and analysed. Based on this survey, the following three roles and fields of controlling will gain importance for the future: first, the role of reporting on the efficiency of the company, second, the role of organizing the strategic planning and third, the role of the controller as a business partner. Those roles and fields of controlling were addressed by controllers and board members commonly.

(3) At Volkswagen AG a corresponding three-step development process of the controlling function was observed by Pótsch (2012): in the first phase, the controlling function mainly fulfilled the function of calculating the cost; in the second phase, controlling was involved in management decision processes by coordinating corporate planning and control systems and as of today, the controllers work as an active consultant to the board of management.

(4) A survey of Horváth in 2013 analysed the current and expected importance of selected activities in controlling (Gräf, 2014). Following the survey, the activities "data collection", "data preparation" "report generation" "plausibility checks" are decreasing in importance while "analysis" and "consulting" are expected to gain importance (see Figure 3.8).





(5) The results from the Horváth survey in 2013 were confirmed by another survey conducted by (Utz Schäffer and Weber 2014a) with 472 survey respondents. The focus of this survey was to identify the hierarchy level in controlling that provides a business partner role at the moment and which hierarchy level is expected to provide this role in five years. As a result, a significant shift in the hierarchy level of the controllers providing the role of a business partner from 2014 until 2019 can be expected. In 2014, this role was mainly reserved for the "management level" and "selected experts", each representing 37 % of answers. Until 2019, 46 % of respondents expect that the business partner role will be provided by "all controllers" (see Figure 3.9):

This significant shift towards the lower levels of the controlling hierarchy implies a higher number of controllers working as business partners. This observation is

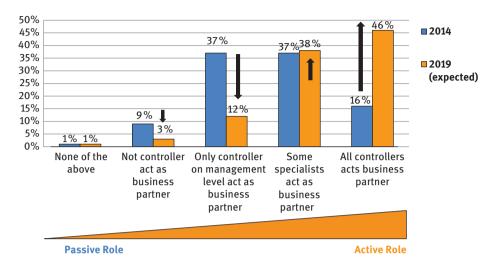


Figure 3.9: Significance of the business partner role increases. Source: Author's translation and modification of Gräf & Horváth & Partners (2014).

especially valid for the German-speaking European controlling literature, while in the Anglo-American or French literature the data analyst role of the controller still prevails (Möller 2015; Paul and Traber 2015; Shields 2015). However, also in the Anglo-American literature, the trend to a more active, change-oriented management accountants is seen as a new trend (Cokins 2014).

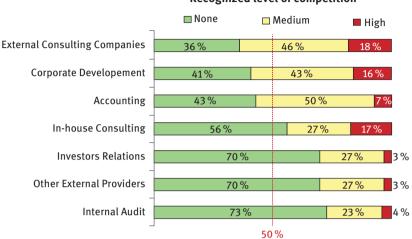
3.3 Implication of the changed expectations for the individual company

As analysed above, the expectation concerning the controlling function is changing. If the controlling function does not adapt, the controlling function might not deliver the support requested by the top management needed to make their decisions.

Unless controlling provides a clear basis for the decision-making process of the top management, top managers make their decision not based on controlling analysis but on intuition or, alternatively, rely on the analysis of other functions such as production or business development functions.

The major test and turning point for the future importance of controlling will be conducted by companies in financial distress in particular: either controlling fulfils the ever-growing demands and is able to gain more and more importance or it fails and gets replaced by other functions (Goeldel 2010).

There are several internal and external competitors to the controlling function. Following a recent survey by (Utz Schäffer and Weber 2014b), the two main competitors of the controlling function are the external consultants and corporate development followed by the accounting function (see Figure 3.10).



Recognized level of competition

Figure 3.10: Competitors of the controlling function. **Source:** Author's processing modifying Schäffer and Weber (2014b).

The majority of respondents assigned a high or medium level of competition to the top three competitors. Analysing the implication of the main competitors for the controlling function shows that the controlling function tends to be squeezed from two sides (see Figure 3.11).

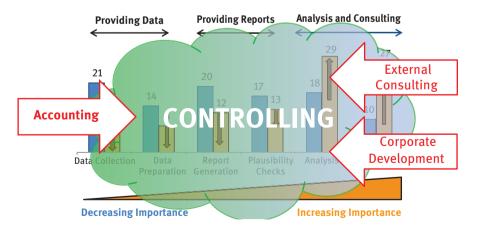


Figure 3.11: "Competitive challenge of controlling". Source: Author's processing based on Gräf (2014).

All reviewed surveys indicated that the importance of active activities, such as analysing and consulting are increasing. Those activities are the main competence of the controlling function but also strong competencies from external consulting and corporate development. This inherent competitive position makes it difficult for the controlling function to cover these fields despite the increasing importance. On the other side, we see that the amount of data provided by the accounting function is increasing, further propelled by increased external reporting requirements (Wagenhofer 2015). Both trends can lead to the situation in which the controlling function is stuck in the middle (see Figure 3.11).

The importance and influence of the controlling within a company depends on the individual controller and the role model and processes he provides. If the controller limits himself to the budget process and commenting P&L positions, the importance is decreasing. Complementarily, the importance of other functions is increasing.

For example, the importance of the finance/accounting functions increases if they take responsibility for cash management and liquidity projections. Another complimentary example is the area of corporate development which can build out its stakes in scenario planning and restructuring, if controlling has no sufficient capabilities in those areas (Goeldel 2010).

Although controlling has the tools to offer valuable input to the management, it strongly depends on the head of controlling; how he/she can play his/her cards to the top management to maintain the influence of the controlling function. When the strategic aspect of the controlling function is challenged by alternative strategic functions, the controlling function can be reduced to operative reporting topics (Krystek 2012).

The more the controlling function gets excluded in the strategy process, the more its capability to contribute to the strategy process as a consequence is eroded (Ernst et al. 2006). The process of slowly substituting the controlling function with so-called "shadow controllers" can be illustrated (see Figure 3.12).

Building up shadow controllers might be better than having no fact and figures at all. The solution proposed in this publication, however, is to adapt the controlling function to better provide the support the business requires. The importance of the controlling position in the company can gain momentum if the controller also focuses on the market and business performance aspects and therefore, they get involved in the decision-making process (Goeldel 2010).

A complex optimization project can bring formalities and complex project structures, which might not be possible to realize, in a change hostile environment. Without setting up a formal optimization project, it has to be noticed that there are "self-improvement mechanisms" which can be used consciously (see Figure 3.13). This informal implementation approach uses the reverse effect of the cycle with the shadow controller introduced by Ernst et al. (2006):

The process is an iterative one that can be described as iteration between the supplied and the demanded controlling products. In literature such iterative approaches are also referred to as "lean change management" (Scheller 2015). The better the

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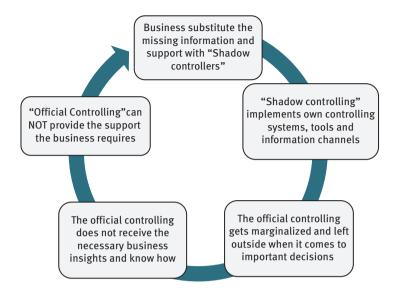


Figure 3.12: Shadow controlling.

Source: Translated by the author from Ernst et al. (2006).

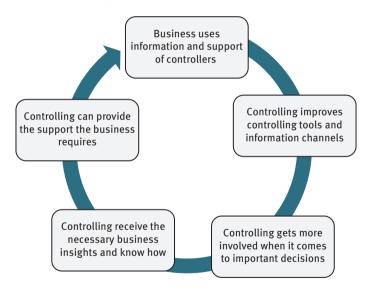


Figure 3.13: Iterative improvement concept. Source: Author's processing reversing Ernst et al.

supply of controlling services, the more they will be demanded and vice versa. With this iterative approach, the effectiveness of controlling can be improved and therefore, the relevance and inclusion of the controlling function in the *decision-making* process can be increased.

Despite the expectation of a more consulting-oriented business partner role, a survey made by (Weißenberger, Wolf, Neumann-Giesen, and Elbers, 2012) revealed that the controller normally does not take the position of the business partner role by intrinsic motivation but if the management requests this role from him. This means that the management should clearly address the changed expectation towards the controller and support a structured change process model.

3.4 Development of a structured change model

The controller cannot fulfil his tasks successfully without providing services that are personalized to the individual requirements of the company's management (Losbichler 2013). As literature suggests, unless this adjustment takes place, controlling tends to an over-engineering of its financial tools and reports (Jürgen Weber, 2004). Under everyday circumstances, the management is unable to understand or follow all these sophisticated tools and the controller risks to spend considerable time adjusting the entire set of tools to meet the needs of the decision-makers. Consequently, the controllers have fewer resources to support management performance by providing timely, qualitative information.

If controlling wants to maintain an influential function in the company, it needs to adapt to the changed expectations of the management. The necessary actions for this process happen often naturally, in time, by "trial and error". It is most likely and possible that the actual set up of a controlling function in a given company to have been built without applying a structured and reflective approach (Küpper et al. 2012). However, we can make the assumption that the success rates of a structured approach are higher than the ones of a "trial and error" approach. The building process should be structured to reach optimized results.

In order to achieve these desired results, the author has developed a conscious optimization project for the controlling function. In literature, some structured adjustment approaches for the controlling function were proposed. The approaches vary in the titles and number of process steps. Heimel et al. (2009) and Küpper et al. (2012) suggest comparable structured improvement programs for the controlling function. The main difference between those two approaches is that Heimel et al. (2009) split up the implementation phase of the approach in three sub-steps. The fundamental approach described by Krings (2012) is, in comparison, less detailed.

Subsequently, in this paper, a new optimization project plan will be outlined and later discussed. The goal of this approach is to score some quick wins easily and early, in order to move towards achieving the objectives by building on the success of the first phases. The optimization project was designed by the author to gain acceptance and without the need to "sell a big project" at the beginning. Hereby, the resistance of the people affected by this project is minimized.

For a structured project, it is helpful to understand in which aspects and dimensions such optimization might take place. When reviewing the performance of a controlling organization, there are two questions in focus: 1. whether controlling produces "reports" that have a significant impact on the decision making process and 2. whether the production of those reports is as efficiently organized as possible (Heimel, Meier, and Schmidt 2009).

The effectiveness should, in other words, be optimized BEFORE addressing the efficiency. Optimizing processes within controlling can only increase the efficiency of the controlling work. The progress in IT capabilities can lead to an increased efficiency in generating various kinds of reports and numbers and leading to an "ocean of data and options" (Quattrone 2016). By creating all those reports without customer or strategy orientation, the effectiveness of the reports can vanish. This phenomenon is also referred to as "effectiveness trap" (Bernauer 2008).

Krings (2012) outlined correspondingly that, for the optimization of the controlling, first, the roles and expectations have to be clarified for acceptance, second, the products of the controlling function can be reviewed for effectiveness and, as last step, the processes shall be reviewed to "produce" the effective products as efficient as possible.

All the considerations mentioned above were integrated in the outlined optimization project. The first project steps will involve only a limited amount of resources. Only the later project phases need increasing involvement and effort of the organization to reach the optimization goals. According to the specific situation in which a company finds itself, a decision can be made regarding the group of people that will know the entire project plan from the beginning and if the communication should follow a step by step approach.

To perform a customer satisfaction survey, the first step is to clarify the actual and potential customers of controlling services in a company. This might not be clear from the beginning because the customer orientation of a controlling function is seldom so low that controlling has not yet clearly defined their customers.

The satisfaction with the controlling function can measured following the "WHU-Controller Index" systematic (see Figure 3.14). This index used in surveys of the "WHU Controller panel" and consists out of 9 questions (Schäffer and Weber 2014b):

The scale for responses was from one as minimum up to five as the maximum, with an average response value of 3,8. The results were made transparent, namely that the influence of controlling on management decisions was rated relatively weak. This might be the reason why also the general reputation and the career options were rated lower than the other fields questioned.

This scheme and the results of Schäffer and Weber (2014b) can be used as benchmark to better evaluate the satisfaction with the controlling function in a given company. When performing the survey, the answers should be separated for the top management as customer and the controllers as suppliers. This helps to identify the differences between the self-perception of the controllers and the perception of

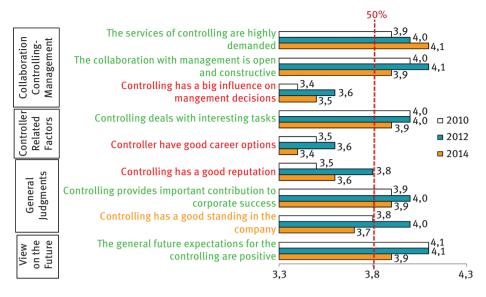


Figure 3.14: WHU controller index 2014. Source: Translated by author from Gräf & Horváth & Partners (2014).

the customers of the controlling services. The satisfaction survey can be done in a compact format with a web-based tool. The purpose of the survey is not to identify all weak points in detail but to answer the following two questions before the optimization project is continued:

- Is there a true need to continue with the project?
- Is there sufficient management support for this project?

If the survey indicates a satisfaction level under the predetermined expectation level, this would affirm the need for an optimization project.

3.4.1 Increasing effectiveness

If the satisfaction level retrieved from the web-based survey showed improvement needs, the top management and the controlling executives should be prepared and motivated for the next step which is a one-day workshop to specify change areas. The goal of the workshop is to align and synchronize the controlling activities with the management approach and expectations (Heimel et al. 2009).

In order for this to be achieved, the "products" of controlling and the underlying controlling processes should be evaluated by the customers, to what extent they match their requirements and if they are in line with the strategic challenges and questions of the company (Bernauer 2008; Langer and Munhoz 2005). Increasing the customer orientation approach and satisfaction will increase the extent to which controlling products are considered in the decision process of the management (Schäffer, Weber, and Strauß 2012).

As discussed above, the role of controller can include various degrees of managerial activities. In the first part of the meeting, the management should therefore discuss about the different services of the controlling function and which importance they assign to them. The controlling role models can be a basis to elaborate what kind of controller role the management is willing to appreciate and accept. The general trend is a decreasing importance of data and report providing and an increasing importance of analysis and consulting (Gräf 2014).

For the workshop, it is recommended that controlling provide the current allocation of their time on the activities, so that the survey of (Gräf 2014) can be used as benchmark. The above survey illustrates the expected increasing importance of controlling activities related to analysis and consulting. Controlling will not spend the majority of time on data and report generation, but use their energy for value-adding activities. The degree in the individual situation will depend on the abilities of the controller as supplier and the demand of the top management as client. Supportive for the acceptance of the controller as consultant are social skills like empathy and the ability to communicate with colleagues and management (Krings 2012).

A supplementary, more detailed approach, is to split up the current and target activities of controlling following the process model of IGC (2010) and to discuss the current and target focus on the level of the ten mentioned controlling processes (see Table 3.2). The mentioned numbers are illustrative in nature and consider the generally observed priority shift in management reporting towards active roles.

Main Process	Current*	Target*	Delta*
Strategic Planning	5	10	5
Operativ planning and budgeting	30	10	-20
Forecast	5	10	5
Cost accounting	5	5	0
Management reporting	20	10	-10
Project- and investment controlling	5	10	5
Risk management	2	5	3
Functional controlling	20	10	-10
Internal consulting	3	25	22
Improvement of processes, tools, and systems	5	5	0
	100	100	0

Table 3.2: Process table based on IGC process model.

* Illustrative figures.

Source: Author's own illustration based on IGC (2010).

The current time allocation should be provided by controlling. To ensure the customer focus in the optimization project, the target numbers should be the result of an agreement with the customers on each process. Here, the accuracy is not so important; the goal of this exercise is more the delta proportion that indicates the need for adaptation in this area.

The advantage in using such a process model is that it can be drilled down easily from the process level down to activity levels that will support more structured adaption phases later on. The disadvantage is that a too detailed technical controlling discussion in the workshop could overstrain top management. Therefore, it may be more recommended to follow up with such details on a second meeting or to elaborate such details not with top management but with middle management representatives.

As result of the workshop, it became transparent on what activities the controlling should put less emphasis and on which it should place more. The portfolio of unneeded/unappreciated activities can be reviewed. Most likely, those can be found in the processes with indication that they should lose importance. Based on an inventory of products it should be checked if there is an easy way to omit unneeded activities without negatively affecting appreciated products. The time gained by this shortening of unneeded activities can be used to increase the energy on desired activities. In this phase, the project team will not spend time to optimize the efficiency of activities because this is reserved to a later phase.

3.4.2 Increasing efficiency and its organizational impact

The efficiency of the reporting process can be increased in many ways, with different level of organizational change effort. Horvath (2012) introduced three key measures to increase efficiency in the controlling field, this measures he refers to as the "industrialization in controlling": (1) standardization and simplification of processes for forecast, planning and reporting; (2) improving efficiency by using shared service solutions with two subcategories "centre of scale" and "centre of excellence"; (3) improving IT infrastructure. This approach was followed by Schäffer et al. (2012) who added (4) simplifying and shortening the reporting material (see Figure 3.15). It is thus illustrating how such optimization measures affect the organizational set up.

To avoid resistance in organizations towards the adaptation, the outlined optimization project addresses the measures one by one, starting with the measure which requires the smallest organizational changes. Systematically, the optimization process can be extended to measures which involve more organizational changes.

For the local optimization, an inventory of controlling processes should be set up as described in chapter four of this publication. The inventory should follow the structure of a process model such as the model of IGC (2010) and should include all processes performed, when they are performed, by whom and how much time is needed. Based on the overview, local process descriptions can be set up. The local process descriptions should be discussed within the controlling team to identify inefficiencies

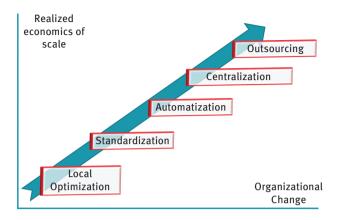


Figure 3.15: Organizational impact of efficiency measures. Source: Translated by author from Goltz and Temmel (2014).

and weaknesses. In addition, the data suppliers of the processes should be integrated in this discussion to optimize data interfaces.

Based on local optimization, these optimized processes can be rolled out to other plants or functional areas of the company and hereby standardized. During the roll out, the comparable processes of the different plans will be compared with each other, which will challenge the initial standard setting as it will bring new ideas and viewpoints to the existing process documentation.

The methodology to optimize the efficiency in management reporting and planning will be illustrated in the next chapter based on a case study.

Besides reviewing the existing reports for their effectiveness, controlling should identify measures to improve the value they add by providing internal consulting services. Selected business partnering projects can address consulting needs, as far this is not sufficiently covered. The necessary resources can be gained by shifting the resources from the unneeded tasks to the uncovered needs. To get the support for this business partnering role of controlling, some sample projects should be agreed upon with the top management. Those projects can be first set up on the central level as pilot projects which can be later rolled out through the organization. The required learning and training activities should be provided closely to the projects instead of focusing on formal trainings. Sample projects with focus on restructuring initiatives will be discussed in the last two chapters.

3.5 Interim conclusion

The controlling function of the company is influenced by various internal and external factors. It was outlined how especially the size of the company influences headcount,

specializations and organization of the controlling function. Large companies have a larger controlling team in absolute figures, but the relative number of controllers in relation to the total headcount decreases. The company size correlates with the number of maintained specializations and the strategic orientation of the controlling function.

Multinational production companies were defined as large production companies with more than 20,000 employees operating and producing in multiple countries with an annual sales volume exceeding 1,000 million EUR. Based on the surveys analysed, the controlling function in such companies employs, in average, more than 60 controllers or 0.3 % of the total headcount. The number of maintained controlling specializations is seven, with an overweight on production controlling. In comparison with smaller companies, multinational production companies regularly apply strategy oriented planning and controlling tools. In most multinational production companies the head of controlling reports to the CFO (65 % of the companies).

The controlling function in a company can take a more passive or a more active role. According to recent surveys, the majority of controlling functions tend to take a rather active role. The activities and services performed by the controlling function are influenced by this role setting and vice versa.

Recent megatrends such as increasing complexity, volatility, internationalization and increased demand for transparency and compliance have changed the expectation towards the controlling function. Following all outlined surveys, the focus of the activities within the controlling function is expected to further shift from passive roles such as data preparation to more active roles, such as advising management and initiating change processes. For this, the controlling should further streamline its standard reporting activities to the specific company situation on the one side and increase its consulting support to prepare business decisions on the other side. Multinational production companies are exposed to the enumerated megatrends at a comparable early stage. Therfore, the changed expectations towards the controlling function in such multinational production companies are higher than in smaller companies operating only in regional markets.

To increase its added value, the controlling function needs to improve its support in the decision-making process of the management. However, these activities are not exclusively the field of activity of the controlling function but are also provided by competitive functions. The "competitive challenge of controlling" was summarized in a new model. Following this model, the controlling function can be easily squeezed between the accounting function on the one side and corporate development and external consultants on the other side.

Therefore, the accounting function would be the one providing the basic data needed for management to make an informed decision. The decision-making process, however, cannot be efficient with only basic data that management may not understand or may not fully comprehend. This role of controlling is taken by external consulting or by the corporate development offering the function of analysis and consulting. This would provide actual information for management to base their decision upon. Having this competitive challenge, the controlling function must show that they can offer the same or even better information than the external consultants, even when they are in-house working, inside the company.

The adaptation of the controlling function towards the changed expectations can lead to a complex project with growing change resistance. A "synopsis of structured change models" representing the current state of affairs was set up by the author. Based on this synopsis, as well as the author's experience as controlling manager, a new adoption model was introduced. The model was designed to be especially successful in change-resistant environments in which a successful optimization project needs to be able to realize quick gains "under the radar" with low involvement from the organization. The study focused on the works of Heimel, Krings, Kupper and Laval. Heimel sustained his change model by having a stable target position and get to it with a clear, structured action plan and continuous improvement.

Krings is the adept of acceptance and creating change through improved effectiveness and efficiency. Kupper has a similar view to Heimel's opinion, defining the target position as a mission statement, analysing the current situation and developing a plan to reach a higher level controlling function. The author proposed a workshop around a satisfaction survey and thinking about how the organization should look like in the future. Having this goal in mind it would be much easier to manage the change process. This new model will be tested and validated in the case study described in chapter four.

4 Management reporting – contents and processes

This chapter is based on the presentation of the author in November 2015 at the 26th "International Business Information Management Conference" (IBIMA) in Madrid, Spain, which was published in the "Proceedings of the 26th International Business Information Management Association Conference" and later, in the "Journal of Financial Studies & Research" (Laval 2015c, 2016c).

This chapter will illustrate how the quality and value-contribution of management reporting activities at a global manufacturing company can be analysed, benchmarked and improved. Based on the illustrated benchmarking process the process efficiency, the reporting relevance, reporting volume and the cost/benefit ratio are identified as weak areas with major improvement potential. For these weak areas, improvement recommendations are illustrated and outlined. The proposed improvement process is based on the author's 2014 survey and compared with the reference survey of Deloitte.

A selection of the original questions/answers in the 2014 survey as well the reference which indicated the highest improvement potential for the management reporting is presented below. The improvement area of process efficiency will be outlined based on an implemented case study. The other improvement areas will be further outlined conceptually.

4.1 Classification and goals of management reporting

The management reporting is one of the ten controlling main processes as defined by the International Group of Controllers in the controlling process model (see Table 4.1).

According to the controlling process model, "the aim of management reporting is to produce and deliver information relevant for decision-making in the sense of relation to objective/degree of goal attainment, in a recipient-oriented and timely manner for the control of the company. With the information and documentation task, reporting is to ensure company-wide transparency" (Bloomfield 2015; International Group of Controlling 2012).

4.2 Contents of management reporting

4.2.1 Analysing the survey on reporting contents

Most of the 2014 survey participants saw a high or very high impact of the top management reporting on the company success. Only a minority of 8–10 % saw a low impact.

Table 4.1: Controlling main processes.

1.	Strategic Planning
2.	Operative Planning and Budgeting
3.	Forecasting
4.	Cost accounting
5.	Management Reporting
6.	Project- and Investment Controlling
7.	Risk Management
8.	Function Controlling
9.	Management Support
10.	Enhancement of Organization, Processes, Instruments and Systems

Source: International Group of Controlling (2012).

The result of the survey is almost identical with the result of the reference survey confirming that management reporting has a significant impact on company success (see Figure 4.1 and Figure 4.2):

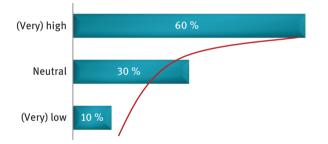


Figure 4.1: Impact of top management reporting on company success (survey). Source: Author's 2014 processing/survey.

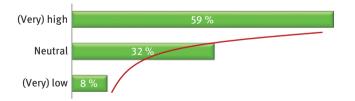


Figure 4.2: Impact of top management reporting on company success (reference). **Source:** Author's processing based on Deloitte (2013).

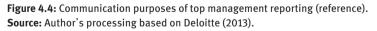
The management reporting fulfils important communication purposes within the companies. The results of the 2014 survey and the reference are comparable in the order of the purposes indicating the transparency and early warning signals are the top communication purpose of management reporting Figure 4.3 and Figure 4.4):



Figure 4.3: Communication purposes of top management reporting (survey). **Source:** Author's 2014 processing/survey.

Interpreting and comparing the results of the 2014 survey with the reference, the author's 2014 survey tends to indicate a clearer ranking of the answer options. This tendency to prioritize answers for a clearer result is due to a recommendation to avoid selecting too many results. The answers of the reference survey are in comparison often closer to each other.





The survey and the reference both confirmed that the focus on key measures and the reliability of the information are the top two reporting requirement. The focus on key measures is of high importance for the budgeting and budget control process because this is where controlling can add valuable feedback to what range the management is on track to reach the agreed performance targets Figure 4.5 and Figure 4.6).

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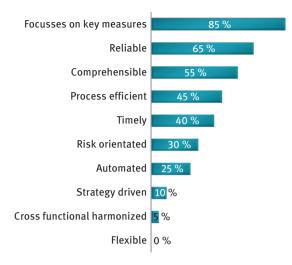


Figure 4.5: Major requirements regarding characteristics of top management reporting (survey). **Source:** Author's 2014 processing/survey.

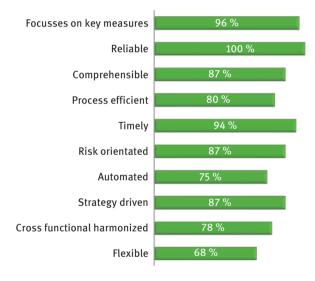


Figure 4.6: Major requirements regarding characteristics of top management reporting (reference). **Source:** Author's processing based on Deloitte (2013).

Asking about the current qualities of the management reporting fulfils the communication purposes the 2014 survey and the reference see room for improvement. The main areas for improvement according the survey are in the area of internal benchmarking and a clearer connection with the corporate strategy (see Figure 4.7). Also the reference survey indicated that 75 % of the participants evaluated that not all communication purposes were fully covered (see Figure 4.8).



Figure 4.7: Communication purposes already covered in the current management reporting (survey). **Source:** Author's 2014 processing/survey.

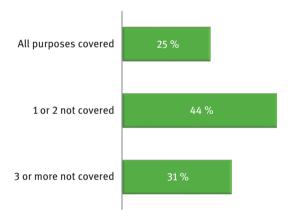


Figure 4.8: Communication purposes already covered in the current management reporting (reference).

Source: Author's processing based on Deloitte (2013).

Despite the high impact of the management reporting, the participants of the 2014 survey and the reference saw huge improvement potentials in many areas of the management reporting. Almost all respondents highlighted more than one improvement area. Improvements in the reporting processes were ranked second in the author's survey and even by most participants of the reference survey (see Figure 4.9 and Figure 4.10).

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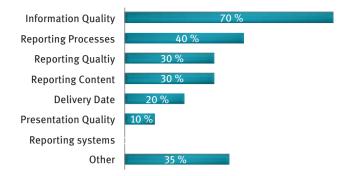


Figure 4.9: Most frequently seen improvement areas (survey). **Source:** Author's 2014 processing/survey.

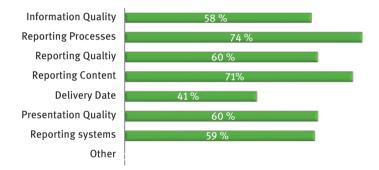


Figure 4.10: Most frequently seen improvement areas (reference). Source: Author's processing based on Deloitte (2013).

The value of the reports depends on the right level of detail as well as the relevancy of the information to the audience. The reverence survey is closer to the interpretation that the most important aspect is the decision relevance and that too many details could distract top management easily (see Figure 4.11 and Figure 4.12).

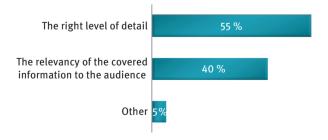


Figure 4.11: The value of top management reports depends on ... (survey). Source: Author's 2014 processing/survey.

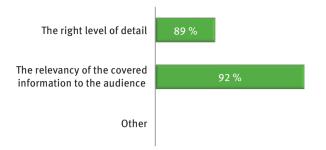
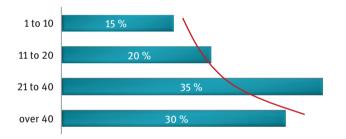
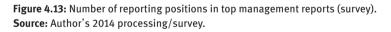


Figure 4.12: The value of top management reports depends on ... (reference). **Source:** Author's processing based on Deloitte (2013).

The number of reporting positions in the author's 2014 survey was significantly higher than in the reference survey (see Figure 4.13). The 2014 survey and the reference present interesting inverse results. Only a marginal indicator in the author's 2014 survey presented short reports with 20 or less reporting positions, while in the reference a majority had short reports (see Figure 4.14). In the author's 2014 survey, 65 % (36 % in the reference survey) of the reports had more than 21 reporting positions:









This indicates that the management reporting in the companies of the author's 2014 survey could be streamlined to transport fewer but more significant information. A high number of existing positions and a high intensity of analysing financial KPI can lead to an increased workload and stress level within the controlling, but this will not necessarily lead to an increased impact of the controlling (Goeldel 2010). The number

of reporting positions was therefore identified as a significant improvement area. The inventory of reporting positions should be regularly reviewed for decision usefulness.

The vast majority of management reports include comments. The survey shows a balance between aggregated level and line item based commenting (see Figure 4.15) while the reference survey indicates that the majority of comments are done on an aggregated level (see Figure 4.16). In general, comments should only be used to point

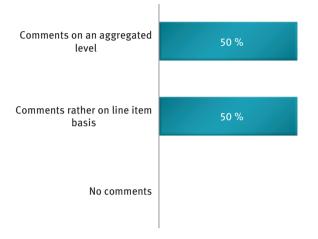
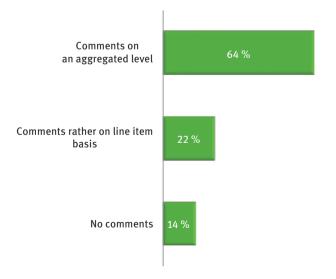
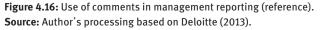


Figure 4.15: Use of comments in management reporting (survey). **Source:** Author's 2014 processing/survey.





out significant actual/plan deviations. The quality of comments for sure is far more important than their quantity. Quality comments include a description of the business origin of a significant deviation as well as a description of suggested countermeasures: In the 2014 survey and the reference, around 85 % of the respondents are convinced that strategic initiatives should be included in the management reporting (see Figure 4.17 and Figure 4.18). However, in the reference survey almost 50 % of the management reports are not used to drive strategy execution:

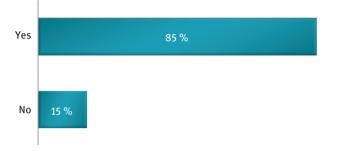
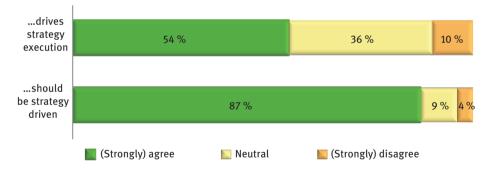
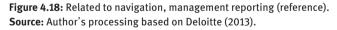


Figure 4.17: Should strategic initiatives be included in the management reporting? (survey). **Source:** Author's 2014 processing/survey.





The management reporting should be adapted to changing and volatile business environment. As many as 85 % of the survey respondents confirmed this understanding (see Figure 4.19) while in the reference survey 50 % had this opinion (see Figure 4.20). The higher values indicate the willingness as well as the need to adapt the reporting to changed reporting requirements:

The reporting should be reviewed regularly if it is in line with the key drivers of the business and if the reporting addresses the right content to the right people, meaning decision-relevant information to those who are in the position to make this decision.

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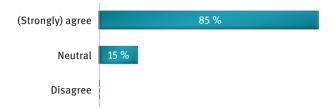


Figure 4.19: Adaptability of reporting (survey). **Source:** Author's 2014 processing/survey.



Figure 4.20: Adaptability of reporting (reference). Source: Author's processing based on Deloitte (2013).

Around 90 % of the companies maintain a monthly reporting cycle. In addition, many companies follow a quarterly and yearly reporting cycle (see Figure 4.21 and Figure 4.22). The result of the survey indicates that reports are normally not performed in cycles shorter than the month and the monthly reporting is in quality and volume almost if not completely identical with the reports done at the end of the quarter/the year:

Almost all companies do ad-hoc reports in addition to the standard management reporting. The number of ad-hoc reports in the 2014 survey and the reference in the clear majority is between 1 and 20 reports per month (see Figure 4.23 and Figure 4.24).

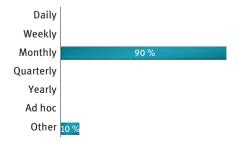


Figure 4.21: What reporting cycles exist in your top management reports (survey). **Source:** Author's 2014 processing/survey.

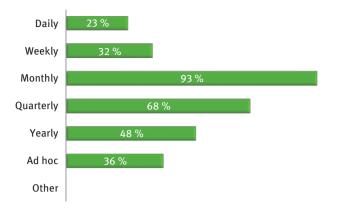
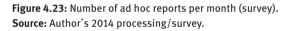


Figure 4.22: What reporting cycles exist in your top management reports (reference). **Source:** Author's processing based on Deloitte (2013).





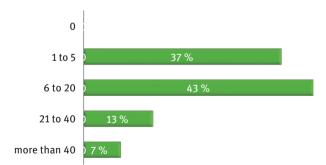


Figure 4.24: Number of ad hoc reports per month (reference). Source: Author's processing based on Deloitte (2013).

The delivery of the reports is done in the majority of cases within 10 workdays after the month's end closing (see Figure 4.25 and Figure 4.26). A timely reporting correlates positively with the decision usefulness of the management reporting.



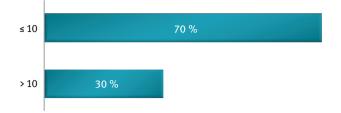
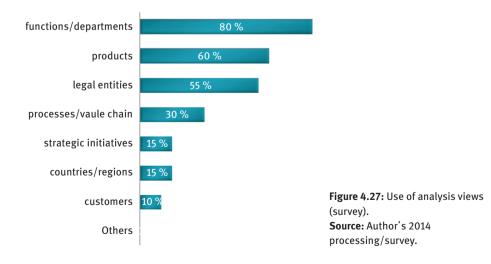


Figure 4.25: Workdays until reports are distributed (survey). Source: Author's 2014 processing/survey

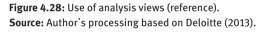


Figure 4.26: Workdays until reports are distributed (reference). **Source:** Author's processing based on Deloitte (2013).

The 2014 survey and the reference indicate the availability of different analysis views. The top three are identical between the two surveys confirming the importance of functions/departments, products and legal entities as common analysis views used in the business (see Figure 4.27 and Figure 4.28).







Standardization of abbreviations and names is seen as a weak point in the standardization efforts of management reporting in the 2014 survey and the reference. While the standardization of visual elements was seen as a weak point in the survey, it was better evaluated in the reference survey (see Figure 4.29 and Figure 4.30).



Figure 4.29: Managament reporting in cockpit – storyline,layout & standardization (survey). **Source:** Author's 2014 processing/survey.

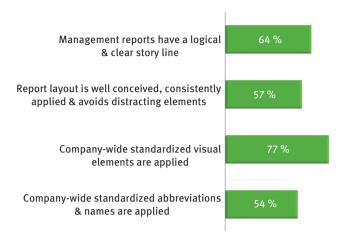


Figure 4.30: Managament reporting in cockpit – storyline, layout & standardization (reference). **Source:** Author's processing based on Deloitte (2013).

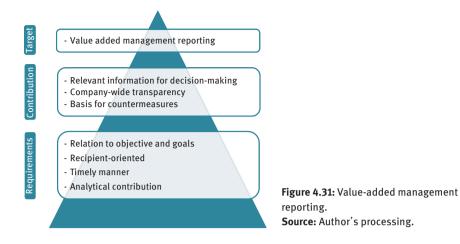
4.2.2 Value-added reporting content

Value-added management reporting must provide the decision-makers with the relevant information for decision making ensure companywide transparency and establish a clear basis for countermeasures. The management reporting can provide such contribution only if certain requirements are taken into consideration. The requirements for the added value management reporting are the relevance of information consistent with the company specific objectives and goals, being recipient-oriented to be understandable by the decision maker, to be provided in a timely manner and contain an analytical contribution. All reports should be designed in such a way to support the decision makers to take efficient actions.

In the field of management reporting the interdependency between requirements, contributions and value-added reporting can be illustrated in the model of "value-added management reporting" (see Figure 4.31).

To reach the target of value-added management reporting, the management reporting must provide the decision maker with relevant information in relation to the goals he pursues. Management reporting can only provide this contribution as far as the outlined requirements are respected. To better demonstrate this concept, the requirements for value-added management reporting shall be illustrated.

Relation to objective and goals: The reporting content needs to be related to the way the company is steered. The objectives and goal settings of the strategic planning have to be aligned with the operative management reporting and the management reporting itself has to be aligned with the way the operative units are steered.



Recipient oriented: The reports need be designed to support the decision maker and not to please the financial organization. An over-engineering of the management reporting and thereby a loss of relevance for the decision maker should be avoided.

Analytical contribution: To be a basis for countermeasures, the cause and effect relationships of the reported data need to be separated and made transparent. The causes for an unfavourable development need to be clarified in the report as a basis to identify and manage countermeasures.

To increase the value-added does not mean to increase the number of reports and figures reported, but to increase the decision usefulness of the data provided to the decision makers of the company (Bernauer 2008). The survey of Gräf, Isensee, Kirchmann, and Leyk (2013) reveals that especially financial KPI's are expected to lose their dominance in the decision making process while the non-financial and external information is gaining importance. The effectiveness of reports can, therefore, be increased by aligning them with the KPI's required by management for the decision-making process (see Figure 4.32).

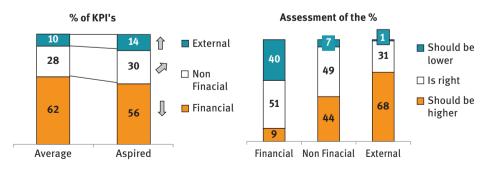
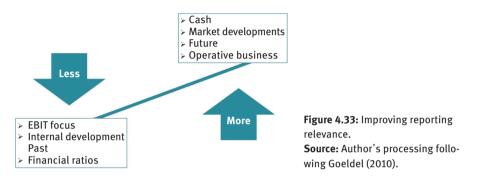


Figure 4.32: Development of KPI's used for decision making. Source: Gräf & Horváth & Partners (2014).

To be effective, the reporting contents need to follow the business requirements. Important is to focus the reporting on key performance indicators related to the business strategy (Baumgärtner 2014). The decision usefulness of selected key performance indicators will depend on the company business model and on the current situation of the company (Rachfall and Rachfall 2013). To improve the reporting relevance, the management reporting should concentrate on a few decision relevant KPI (Goeldel 2010) which relate to cash and market aspects and focus more on the operative business (see Figure 4.33).



4.3 Processes of management reporting

4.3.1 Analysing the survey on reporting processes

Process efficiency can be obtained by a standardization and simplification of processes (Edlefsen and Pedell 2015). The documentation of controlling and accounting guidelines, as well as indicators, are satisfactory in the 2014 survey and the reference. In the 2014 survey and the reference, the ownership of the indicators and governance procedures for maintaining the indicators is less sufficient defined and is a weak point in the existing documentation work.

In the author's 2014 survey, as well as in the reference survey, the level of detail of the reporting process documentation was considered comparable low when it comes to training purposes of new employees (see Figure 4.34 and Figure 4.35).

85 % of the participants in the author's 2014 survey (see Figure 4.36) and 46 % in the reference survey (see Figure 4.37) answered, that the reporting process was not documented in the necessary detail e.g. for training purposes.

4.3.2 Improving reporting processes

As the satisfaction with the process documentation in the author's 2014 survey was significantly below the benchmark, the process documentation was chosen as first

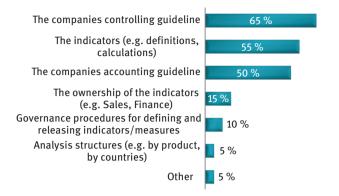
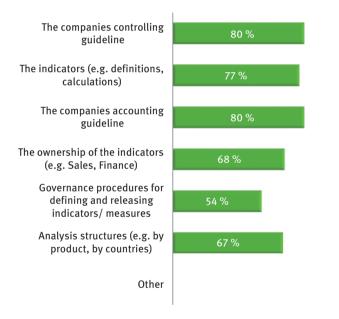
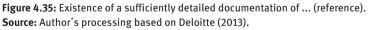


Figure 4.34: Existence of a sufficiently detailed documentation of ... (survey). **Source:** Author's 2014 processing/survey.





optimization object. The project performed on a group of five plants simultaneously will be illustrated as a case study. Starting points for the improvement process were the time lost during the on boarding of new employees and the lack of clear back up responsibilities (see Figure 4.38):

These identified improvement needs lead to a project in order to set up a controlling manual containing work instructions which can be used in the training of the new employees and interns. The project was structured in three working packages: **56** — 4 Management reporting – contents and processes

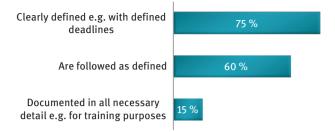


Figure 4.36: Our reporting process steps are ... (survey). **Source:** Author's 2014 processing/survey.

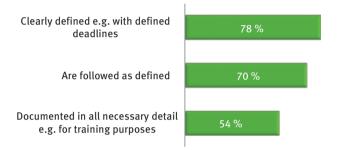


Figure 4.37: Our reporting process steps are ... (reference). **Source:** Author's processing based on Deloitte (2013).



Figure 4.38: Starting points of the case study. Source: Author's graph.

(1) to inventory all relevant processes (2) to describe the processes and (3) to assign responsibilities including back up (see Figure 4.39).

The result of the work was a controlling manual which consists out of an inventory of all relevant controlling processes at the five plants. For this, all controlling processes were inventoried while periodicity and the due date were documented (see Table 4.2). The due date here was set as a specific working day of the month. The respective process

	۶	Periodicity WD	QN	Brief description of processes	Plant A	Plant B	Plant C	Plant D	Plant E
		Monthly	m	Statistical key figures manually upload personal and QM Involved in processing the monthly personnel controlling	9C	NF; AW	AW; NF	BC; SC	SC; BC
	2	Monthly	7	BAB_download and preparation of the PIV's for cost center groups	GC	NF; AW	AW; NF	BC; SC	SC; BC
	ŝ	Monthly	00	Support and inform CC responsible about the invest list, the evolution of the investments	EB; GC	NF; AW	AW; NF	BC; SC	SC; BC
	4	Monthly	10	Monthly report for income as preparation for management report	n/a	n/a	n/a	BC; SC	SC; BC
	ŝ	Monthly	10	Tracking profitability by product category	n/a	n/a	n/a	BC; SC	n/a
	9	Monthly	10	Telephone conference with corporate headquarter analyzing the cost factor and deviation to budget	EB	NF; AW	AW; NF	n/a	n/a
квотия	~	Monthly	10	Monthly report for income /costs upload and check figures Hyperion	EB; GC	n/a	n/a	n/a	VIB
ΛNI	8	Monthly	11	P & L account – analysis, short explanations.	n/a	n/a	n/a	BC; SC	SC; BC
	6	Monthly	11	Record investments for each cost centers: proposals, monthly monitoring of evolution, within budget / request add / financial reallocation	EB; GC	NF; AW	AW; NF	BC; SC	SC; BC
	10	10 Monthly	11	Invest budget comments and analyze the open orders	EB; GC	NF; AW	NF	BC; SC	SC; BC
	11	11 Monthly	11	Control the budget for each cost center group, the report planned / performed, analysis of deviations, and proposing corrective measures involved (PiV)	EB; GC	NF; AW	AW; NF	BC; SC	SC; BC
	12	12 Monthly	11	Cost factors calculation for the plant activities	n/a	NF; AW	n/a	n/a	n/a
	13	13 Monthly	12	Preparing the meeting and the presentation file for the monthly budget meeting	EB; GC	NF; AW	AW; NF	BC; SC	SC; BC
						ASSIGN TH	ASSIGN THE RESPONSABILITIES	ABILITIES	

Table 4.2: Inventory of reporting processes.

Source: Author's graph.

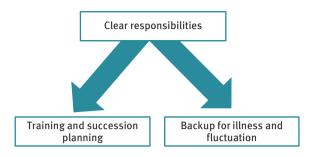


Figure 4.39: Project steps. Source: Author's graph.

names can be found in the next column. As the illustrated company structure consists out of five plants, it was important to clarify which processes are relevant for each specific plant. If a process was not applicable for a plant, this was clarified with "n/a".

The responsible person for each process was assigned as well as a backup person was defined. The clear definition of responsible persons and backup persons (see Figure 4.40) had certain advantages:

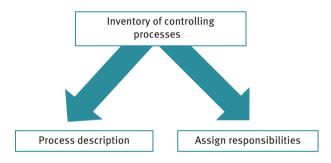


Figure 4.40: Assign responsibilities. Source: Author's processing.

Based on the process inventory a detailed process description was set up for each process (see Figure 4.41). By doing this, a common process of understanding between the five plants could be established and the processes between the plants were harmonized following best practices. Other goals achieved were to document the process ensuring high process quality in the execution and to establish training material for the on-boarding of new colleagues and as a reference for the backup person. To reach these goals, the process goals were clarified and the process execution was documented with screenshots and, if applicable, with SAP transaction codes. Special topics or potential conflicts were documented in a special field:

The improvement project was concluded and 84 relevant controlling processes were identified, documented and the responsibilities including back up responsibilities were clarified.

Process Number	1	Prepared by	EB
Process Short Name	Key Figures	Date	08.04.2015
C		Pogularity	monthly
Company name Time needed in min	All Plants 30 min	Regularity	,
	30 mm	Due on working day	y 3ra
Process Long Name	Manually upload pers	sonal and QM as statistical key fig	ures
Purpose of Process			
line statistical key fig	gures are needed to rui	n the allocation cycle for the cost o	centers
<u>الــــــــــــــــــــــــــــــــــــ</u>			
Information needed	and source		
HR report personalad	ctiv.xls		
Square meters file ba	ased on layout and upo	dated in case of changes together	with cost center
responsible			
Description			
There are several wa	y to book the statistica	al key figures:	
1. fill in the mandato	ry fields in the transac	tion KD31N an after that you just s	ave
2. use a document be	ooked in a previous mo	onth and make the necessary char	iges
Care sight and as			
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		u don't need to make any booking	,
will be taken the last	booked figures this ru	ıle in not applicable from one year	to other
	0	for a cost center you have to make	a booking with
0(zero) otherwise the	e previously booked va	lue with be used in allocations	
Screenshots and tra	nsaction codes used		
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Figure 4.41: Detailed process description. **Source:** Author's graph.

4.4 Improving efficiency by IT and shared service solutions

Most respondents in the survey 2014 and the reference agreed that the system supports the commenting process. The number of respondents who indicated even a strong system supported in the survey 2014 was 30 % (see Figure 4.42). In the reference survey a strong system support was indicated by 44 % of the respondents (see Figure 4.43).

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Figure 4.42: System supported commenting process (survey). Source: Author's 2014 processing/survey.

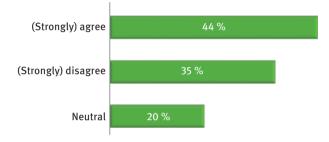


Figure 4.43: System supported commenting process (reference). **Source:** Author's processing based on Deloitte (2013).

Most time is used to create reports and for quality assurance. Only about a third of the time is used for analysing the figures and acting (see Figure 4.44 and Figure 4.45). Due to the rising potential of ERP solutions the percentage of time used for report creation and quality assurance is expected to decrease significantly in the future.

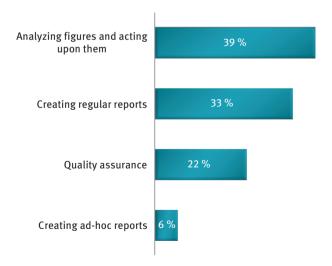
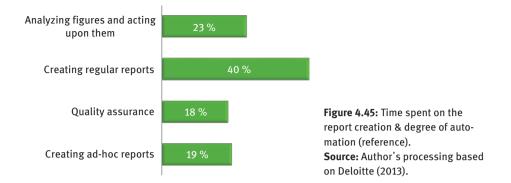


Figure 4.44: Time spent on the report creation & degree of automation (survey). Source: Author's 2014 processing/survey.



Manually created spreadsheets are still the most used reporting format. But there is a clear trend that the significance of analysis based on OLAP ("online analytical processing" or "data warehouse") and online dash boards will gain importance in the future (see Figure 4.46 and Figure 4.47).

Most respondents confirm that the availability of management reports on mobile devices would be beneficial. However, it is only a minority of companies who have implemented the usage of mobile devices for management reporting at this point in time (see Figure 4.48 and Figure 4.49).

The overall trend revealed in the survey indicates that the influence of IT support is assumed to increase significantly soon with positive impacts on the efficiency of data and report generation.

The measures discussed above can be implemented on a standalone basis by local optimization, meaning without considering a big organizational change. As introduced in a prior chapter beyond this local optimization, a new level for the optimization of reporting processes can be reached by pooling repetitive and standard controlling activities in controlling shared service centres, abbreviated "SSC" (Lechky and Wiesehahn, 2016; Unrein, 2010). Based on a survey made by Weber and Gschmack (2012), the usage of SSC has a correlation with company size and function analysed. The bigger the company, the more companies use SSC. The following percentage numbers relate to big companies over 1 bn. EUR sales: accounting 53 %, taxes 42 %, treasury 41 %, cost accounting 25 % and controlling 18 % (see Figure 4.50).

Regarding the location of the SSC, the mentioned study reveals that 56 % of the SSC were in the country of the corporate centre (in this case, Germany) and only 9 % were located outside the European Union. Triggering aspects for the location of the SSC were the availability of qualified people and the respective salary costs. It helps if the region has already a track record in hosting shared service centre as this increases the likelihood to be able to hire the needed personnel (Steuer and Westeppe 2015). According to the survey, the physical distance to the corporate centre had a lower influence on the decision for location (Weber and Gschmack 2012).

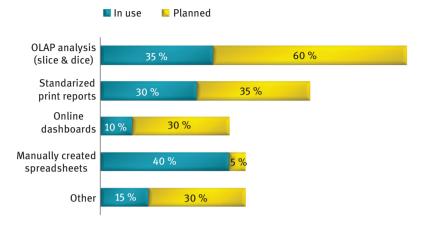


Figure 4.46: Use of following kinds of reporting formats (survey). **Source:** Author's 2014 processing/survey.

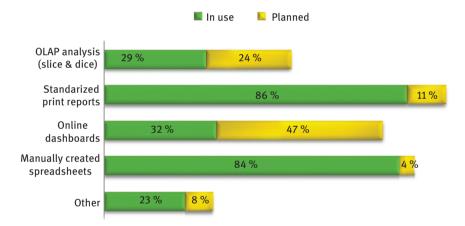


Figure 4.47: Use of following kinds of reporting formats (reference). **Source:** Author's processing based on Deloitte (2013).

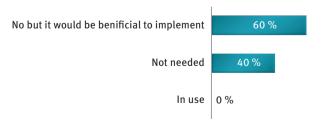


Figure 4.48: Top Management Reports can be viewed on... mobile devices (survey). Source: Author's 2014 processing/survey.

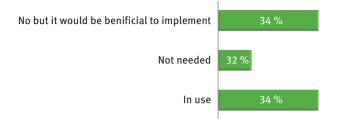


Figure 4.49: Top Management Reports can be viewed on... mobile devices (reference). **Source:** Author's processing based on Deloitte (2013).

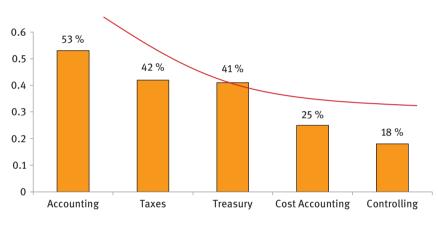


Figure 4.50: Popularity of shared service centres. Source: Author's processing based on Weber and Gschmack (2012).

The observed popularity of controlling SSC was with 18 % significantly lower than with other finance functions. Arguments for the lower popularity of controlling SSC was that controlling activities were considered to be comparable less standardized in comparison with other financial functions such as the legal requirements driven accounting function (Unrein 2010). Also, the controlling data were seen as more sensitive and confidential than accounting data because of their business and future orientation (Schäffer et al. 2012). These restrictions can be overcome by setting up a "reporting factory". The reporting factory should clearly separate the following controlling activities: (1) data creation, (2) reporting and (3) analysis and consulting (Kirchberg and Palenta 2012).

A similar approach was suggested by Goltz and Temmel (2014) who suggested a shared service centre reporting which centralized data preparation on a corporate level while data generation and analysis commenting should remain on operative levels (see Figure 4.51). Especially the centralization using controlling shared service centres was so far only seldom applied, as the controlling apparently

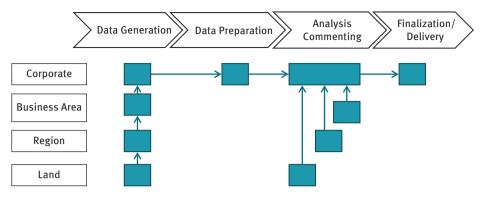


Figure 4.51: Shared-service centre reporting. Source: Translation of author from Goltz and Temmel (2014).

requires relatively close business knowledge and includes confidential information (Goltz and Temmel 2014). However only pooling the data preparation activities in shared service centre organization can be a smart move which also supports the standardization of reporting within a company. The analysis part of the reporting should remain close to the business where the business understanding is available to provide valuable analysis and commenting (Steuer and Westeppe 2015).

Further topics seem suitable for SSC are big data analysis, functional controlling and standard cost accounting tasks (Steuer and Westeppe 2015).

To implement a shared-service concept for financial support functions, three different timelines of process standardization can be distinguished (Fritze 2015; Weber and Gschmack 2012):

(1) Change-Lift-Drop (= standardization before moving),

(2) Lift-Change-Drop (= standardization with moving) and

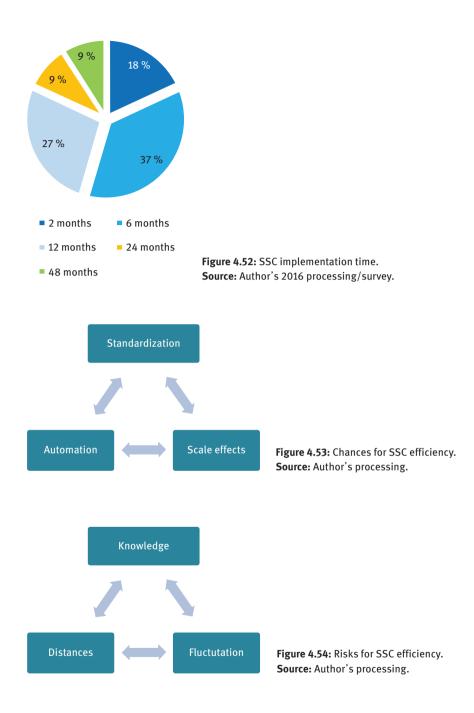
(3) Lift-Drop-Change (= standardization after moving).

According to a survey made by the author in 2016, "survey 2016", shared-services usually take 6 months to reach the cost advantage but the time duration depends on level of the cost in the country. In high-cost countries, however, it might it take up to three years to reach the cost advantage (see Figure 4.52).

The efficiency of the finance functions can be increased by bundling capacity in one SSC and in regional hubs (see Figure 4.53). The main chances to increase the efficiency in SSC is based on the standardization of processes (Becker, Ulrich, and Eggeling 2013; Pérez 2009), on automation and on scale effects (Oldiges and Schikor 2013).

In addition to the described efficiency gains, a further cost reduction can be realized by offshoring to low-cost locations (Suska, Zitzen, and Enders 2011).

Beside the benefits, three risks on efficiency by offshoring need to be considered (see Figure 4.54). The first risk is seen in the insufficient knowledge of employees



in SSC of end to end process, the second risk is due to the distance between the SSC and the operative entity which can reduce the business thinking in the SSC (Kolburg 2013) and the third risk is the high fluctuation of employees in SSC (Alebrand 2013).

As indicated, to obtain the potential benefits of reporting SSC is not easy and without risk. However, if the companies assign the appropriate activities to the SSC and the use a reasonable implementation strategy, a cost reduction by offshoring between 25–50 % of the original cost base seems to be realizable (Suska et al. 2011).

4.5 Financial statements projection

The financial statement outcome of efficient process documentation in operative controlling shall be illustrated in a business case simulation. The business case simulation will be based on the observation of the author as general manager of multinational companies as well as the 2016 survey performed in June 2016 with 16 multinational companies in the west area of Romania (Laval 2016a).

In the business case, qualitative benefits will not be considered in financial projection but will be discussed separately. The projection time is set to be 10 years, positive effects after this projection are not considered in the scenario. The PV will be calculated using an interest rate of six percent.

4.5.1 Business case assumptions

The business case simulation will be based on a set of assumptions which will be discussed upfront. The assumptions can be distinguished in general assumptions and efficiency assumptions (see Table 4.3).

Table 4.3: Busine	ss case assumptions.
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General assumptions
Number of plants
Controller per plant
Plant controllers
Average salary for controller
Salary increase
Fluctuation rate
Efficiency assumptions
General efficiency gain for on boarded FTE
Financial gain due to higher efficiency
Time-saving during onboarding in months
Financial gain due to faster onboarding

Source: Author's processing.

The number of plants/controller per plant: The business case simulation shall illustrate the financial benefits for a multinational production company implementing the suggestions in order to increase efficiency within the controlling function made in this chapter. As typical leverage for the harmonization and standardization, a multinational production company with 20 operational plants primarily in low-cost countries is used for the calculation. This number of 20 plants represents an average mid-sized multinational production group in which the author worked. Each production company is assumed to have three plant controllers. The number of three plant controllers reflects the observation of the author in his last two locations in West Romania (see Table 4.4 and 4.5).

Year	Start	Leaves	Hires	End	Turnover rate
2010	2	0	0	2	0 %
2011	2	0	0	2	0 %
2012	2	0	0	2	0 %
2013	2	0	0 2		0 %
2014	2	2	1	1	100 %
2015	1	1	3	3	100 %
2016	3	0	0	3	0 %
			Average T	urnover:	33 %

Table 4.4: Observed controller fluctuation Plant A.

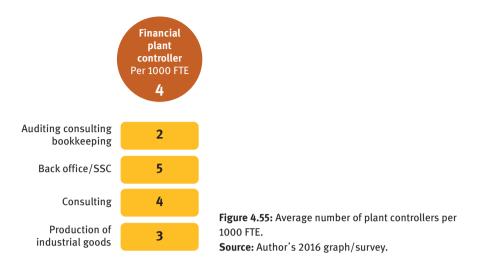
Source: Author's observation.

Year	Start	Leaves	Hires	End	Turnover rate
2010	2	0	0	2	0 %
2011	2	0	0	2	0 %
2012	2	0	0	2	0 %
2013	2	0	0	2	0 %
2014	2	1	1	2	50 %
2015	2	1	2	3	50 %
2016	3	0	0	3	0 %
			Average -	Furnover:	17 %

Table 4.5: Observed controller fluctuation Plant B.

Source: Author's observation.

The number of plant controllers was confirmed by the author's 2016 survey which was described with three plant controllers for typical production plants of multinational production companies (see Figure 4.55).



In consequence, the number of plants was set at 20 and the controller per plant set at three, for the purpose of the business simulation.

The average salary for controllers: The topics covered in documentation cover standard reporting processes which typically fill out a majority of time in the operative plants and are predominantly performed by fresh controllers. The average monthly salary of newly graduated controlling specialist is 412 EUR and tends to increase 10.2 % per year. Production of industrial goods companies offers 466 EUR which is the highest amount but has the lowest increase rate, 5.0 %, among other companies. Audit consulting bookkeeping company offers 342 EUR which is the lowest amount; however, annual increase is 8.3 %. Consulting companies offer 390 EUR per month but offer highest annual salary increase is 12.4 % (see Figure 4.56).

To be noted that the starting salary, as well as the salary increase of fresh controllers, differ from one industry to another. The start salary in multinational production companies was in average slightly higher than in other industries. In contrary the



Figure 4.56: Average monthly net salary for fresh controllers. Source: Author's 2016 processing/survey.

expected salary increase in consulting outperformed the expectable increase in the other industries. Taking all industries into consideration, the average salary increase of fresh graduates was 10.2 %:

20.8 %	Social insurance
5.2 %	Health insurance
0.5 %	Unemployment insurance
0.15 %	Insurance for work accidents and occupational diseases
0.25 %	Guarantee fund for salary payment
0.5 %	Unemployment insurance
27.4 %	Social contribution at the cost of employer

Table 4.6: Social contribution at the cost in Romania.

Source: Author's processing based on Chirigiu (2016).

The monthly salary costs at the level of the employer can be calculated considering a social contribution of 27,4 % (see Table 4.6). To be noted that those costs exclude the costs for office expenses, administration overhead and voluntary social contributions. To calculate the financial impact for a multinational production company, the average net salary for fresh controllers at such companies - according to the survey 466 EUR net per month - was applied to calculate the average monthly gross salary expenses of 689 EUR (see Table 4.7).

Table 4.7: Average monthly gross salary expenses.

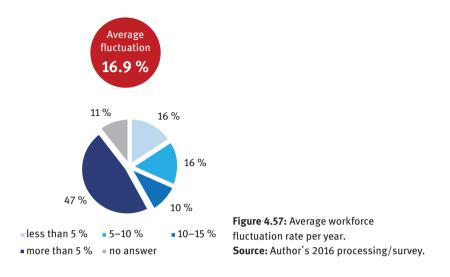
466 EUR	Average net salary according survey16
541 EUR	Gross salary at 16 % flat tax in Romania
148 EUR	Social insurance contribution at the cost of employer
689 EUR	Gross salary expenses of employer

Source: Author's 2016 processing/survey.

Undergoing the business simulation, the average salary expenses for fresh controllers at the P&L were set at 700 EUR per month, equalling 8,400 EUR per year. The yearly salary increase was set at 5 % per annum.

The fluctuation rate: The author's 2016 survey indicates that the fluctuation percentage reaches high levels in the case of most of the interviewed companies. According to the survey, 47 % of the company representatives observed a fluctuation above 15 % per annum. The average fluctuation percentage observed per year was 16.9 % (see Figure 4.57).

The author's 2016 survey further indicates, that the average fluctuation differs significantly between the industry sectors. In the field of auditing consulting bookkeeping



the fluctuation was 20.0 %, in the field of back office/SSC 23.1 % and at consulting companies the fluctuation rate was 21.0 %. Production industrial goods companies had with 10.8 % fluctuation rate lowest workforce fluctuation rates (see Figure 4.58).

The author's observation of fluctuation at multinational production plants was between 17 % and 33 % (see Table 4.4. and 4.5). For the business simulation, the average fluctuation rate was set at 17 % per annum.

General efficiency gain for on boarded FTE: Harmonized and optimized process definitions can increase the efficiency of the controlling department. The optimization can ensure that the processes are performed in the most efficient way. The harmonization enables the implementation of stable and efficient backup responsibilities also between different plants or business units. According to the author's 2016 survey, the majority of the participants stated that the potential increase out of harmonized and optimized process definitions to be between 20–40 % with an average assumed the increase of 41.6 % (see Figure 4.59).



Figure 4.58: Average workforce fluctuation rate by industry.

Source: Author's 2016 processing/survey.

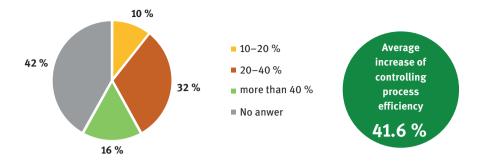


Figure 4.59: Average efficiency increase in controlling process. Source: Author's 2016 processing/survey.

This reflects a very optimistic expectation, which might be influenced by the participants of the survey working in SSC environments. In such environments, harmonized and optimized process definitions are seen as a basic need for operation. In the operative plant controlling the workload is, however, less repetitive, so a lower efficiency should be assumed. For the business simulation, an average efficiency increase of 10 % shall be assumed, which is on the lower end of the survey results.

Time-saving during onboarding in months: The current level of competence from fresh controllers in the western part of Romania is quite low. According to the author's 2016 survey, controlling competence is on average only 26 % from the needed 100 % competence to perform the job independently and in a consistent quality (see Figure 4.60).

The reason for this exceptional low competence in between fresh controllers is in the fact, that the teaching content appears to be, in some parts, outdated and the teaching approach does not train independent problem-solving techniques. Based on this poor competence level it is quite obvious, that training on the job requires a big amount of time and money to be invested by the multinational companies. The time needed for fresh graduates to reach the full productivity required in controlling depends heavily on the assigned tasks. Easy tasks in controlling can be assigned to fresh controllers after 6 months, to be able to perform the jobs independently and with no full supervision. To fully fill out the job description of a junior controller, however, the training period it is expected to be beyond 12 months.

The quality of training documentation varies among the companies (see Figure 4.61). The quality tends to be higher at companies who experience a high number of fluctuations and hereby face a higher and repetitive onboarding need:

Approximately 47 % of the companies think that their onboarding training is well documented, 26 % – fair, and 16 % – poorly documented which is due to company size and training type. For example, for small-sized companies the onboarding process is not standardized and individual onboarding is usually arranged.

The harmonized process description can play a central role to ease the onboarding of new controllers. The training of complex processes is simplified



Figure 4.60: Current competence level of fresh graduates (percentage). **Source:** Author's 2016 processing/survey.

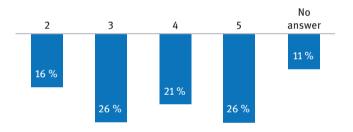


Figure 4.61: Quality of training documentation (1-very poor, 5-very well). **Source:** Author's 2016 processing/survey.

as the new controller have an overview about the process in its entirety already prior to the training and have the required documents at hand after the training later for review and to reproduce the process on their own. The training for fresh controllers, in the majority of cases, is provided internally in the company with own training material. The harmonized and optimized processes definitions can document and explain easy and repetitive tasks in controlling and hereby can speed up the way of fresh controllers, to perform the easy tasks in controlling. For the business simulation, an average reduction of onboarding time from six months to four months will be assumed. The efficiency gains by implementing optimized and documented processes can be calculated in a business case (see Table 4.8 and 4.9).

gains.
efficiency
Projected
Table 4.8:

General assumptions	Unit	2016	2017	2018	2019	2020
Number of plants	plants	20	20	20	20	20
Controller per plant	FTE	m	m	£	m	ę
Plant controllers	FTE	60	60	60	60	60
Average salary for controller	EUR	8,400	8,820	9,261	9,724	10,210
Salary increase	%	5 %	5 %	5 %	5 %	5 %
Total salary	EUR	504,000	529,200	555,660	583,443	612,615
Fluctuation rate	%	17%	17 %	17 %	17 %	17 %
Onboarding to compensate fluctuation	FTE	10	10	10	10	10
Efficiency assumptions	Unit	2016	2017	2018	2019	2020
General efficiency gain for on boarded FTE	%	10 %	10 %	10 %	10 %	10 %
Financial gain due to higher efficiency	EUR	41,832	43,924	46,120	48,426	50,847
Time-saving during onboarding in months	W	2	2	2	2	2
Financial gain due to faster onboarding	EUR	14,280	14,994	15,744	16,531	17,357
Efficiency effects	Unit	2016	2017	2018	2019	2020
Cost savings due to increased efficiency	EUR	56,112	58,918	61,863	64,957	68,204
Cost savings due to increased efficiency	%	11 %	11 %	11 %	11 %	11 %
	Unit	2016	2017	2018	2019	2020
Cost base after efficiency measures	EUR	447,888	470,282	493,797	518,486	544,411

4.5 Financial statements projection — 73

Source: Author's 2016 projection/survey.

General assumptions	Unit	2021	2022	2023	2024	2025
Number of plants	plants	20	20	20	20	20
Controller per plant	FTE	ę	¢	¢	ſ	ŝ
Plant controllers	FTE	60	60	60	60	60
Average salary for controller	EUR	10,721	11,257	11,820	12,411	13,031
Salary increase	%	5 %	5 %	5 %	5 %	5 %
Total salary	EUR	643,246	675,408	709,179	744,638	781,869
Fluctuation rate	%	17 %	17 %	17 %	17 %	17 %
Onboarding to compensate fluctuation	FTE	10	10	10	10	10
Efficiency assumptions	Unit	2025	2025	2025	2024	2025
General efficiency gain for on boarded FTE	%	10 %	10 %	10 %	10 %	10 %
Financial gain due to higher efficiency	EUR	64,895	64,895	64,895	61,805	64,895
Time-saving during onboarding in months	W	2	2	2	2	2
Financial gain due to faster onboarding	EUR	22,153	22,153	22,153	21,098	22,153
Efficiency effects	Unit	2025	2025	2025	2024	2025
Cost savings due to increased efficiency	EUR	87,048	87,048	87,048	82,903	87,048
Cost savings due to increased efficiency	%	11 %	11 %	11 %	11 %	11 %
	Unit	2021	2022	2023	2024	2025
Cost base after the efficiency measures	EUR	571,631	600.213	630.223	661.735	694.821

Table 4.9: Projected efficiency gains (continued).

Source: Author's 2016 projection/survey.

4.5.2 Sensitivity analysis and final remarks

Besides the described assumptions of the base case, the financial effects of the process documentation shall be analysed for a best and worst case scenario (see Table 4.10).

Table 4.10: Projected efficiency scenarios.

Projected efficiency scenarios	Unit	Best Case	Base Case	Worst Case
Time saving during onboarding in months	month	3	2	1
General efficiency gain for on boarded FTE	%	15 %	10 %	8 %

Source: Author's 2016 projection/survey.

Table 4.11 shows the calculated effects on the financial statements for all scenarios calculated for a project live time of 10 years at six percent discount rate:

Table 4.11: Projected KPI efficiency.

Projected KPI efficiency		Best Case	Base Case	Worst Case
Financial gain due to faster onboarding	NPV	135,875	129,139	122,404
Financial gain due to higher efficiency	NPV	567,454	378,302	302,642
Total financial gain	NPV	703,329	507,442	425,046

Source: Author's 2016 projection/survey.

The goal of the increased efficiency is clearly not to bypass the number of controller positions available in the company but to shift the time saved on consulting tasks in the pursuance of improving the decision making. The increasing expectations towards the controlling functions affect the expected efficiency gains and will, in most cases, not result in the reduction of controlling headcount. It is much more likely and recommended for the controllers to utilize the saved time in the pursuance of providing management support and focus on other value-adding activities.

The stability of the controlling organization with established back up roles is valuable all by itself beyond efficiency considerations. Also, process descriptions can support constant performance, despite the fluctuation or other absence of an individual controller.

Another effect outside the efficiency considerations is the positive effects of the harmonized processes on the data quality, as a process output. Harmonized processes increase the comparability of reporting's between business units and regional or functional segmentations.

4.6 Interim conclusion

In the field of management reporting, the interdependency between requirements, contributions and value-added reporting was illustrated in the model of "value-added management reporting". It was illustrated, how to analyse and benchmark an existing management reporting system using action research. Based on this action research, a best practice model for efficient management reporting using the "inventory of reporting processes" was developed.

The practical relevance of the above was validated by the implementation of the suggested model in an international manufacturing company. During the performed implementation, a major increase in reporting efficiency was realized by documenting clear process descriptions and by assigning process responsibilities explicit to the individual persons by using the above mentioned "inventory of reporting processes". Further optimization opportunities for management reporting were discussed to be reached in a changed company set up using controlling SSC.

The measuring and monitoring of cost/benefit ratio of the management reporting were described as crucial for the outcome of the improvement process itself. It was analysed, that although the majority of companies do such measuring, only a minority of companies had defined the proper KPI to do so. A systematic overview on suitable KPI was prepared by the author in the figure named "measuring controlling performance".

The effects of the proposed improvements were simulated in a business model based on the authors seasoned business experience in this domain as well a survey made by the author in 2016 with 16 multinational companies and 19 executives in West Romania. The results of the case study indicate that though the controlling function receives more and more interest from multinational companies, the competence level from fresh graduates in the controlling field is with 26 % the lowest competence level out of all skill sets. This happens because newly graduates enter the financial controllers market without the needed skills as the educational system does not prepare them for the actual work.

The estimated time for a newly graduate to learn be able to do simple tasks on his own is of six months while for advanced tasks the needed time and training investment for multinational companies is of more than 12 months. The survey revealed that especially the combination of low start competence level and high fluctuation rate is a severe limiting factor for reaching a competitive knowledge level in the multinational companies interviewed by the author in the survey. The projection based on the survey results illustrated how the standardization of processes and better training documentation contributes to speed up the onboarding of fresh controllers and hereby improves the value added of the controlling function.

5 Operative planning by objectives

This chapter is based on two presentations held by the author in May 2016 on the 23rd International Economic Conference – IECS 2016 "Economic Prospects in the Context of Growing Global and Regional Interdependencies" in Sibiu, Romania. One paper was published in the "Revista Economica" (Laval 2016b) and the other paper was accepted to be published in the "Studies in Business and Economics" (Laval 2016d).

5.1 Involvement of the controller in budgeting and forecasting activities

Following the "Controlling Process-Model" set up by the International Group of Controlling (see Table 5.1), the scope of this chapter relates to process number one "strategic planning", process two "operative planning and budgeting" and process number three "forecasting":

The chapter aims to illustrate how the controlling function can improve the value added of these three processes and thus to contribute to the success of the company.

The controlling departments nowadays spend a large share of their time on activities related to planning, forecasting and budgeting. Despite the high effort, surveys indicate that many companies are not satisfied with the planning and budgeting process as well as the outcome of these activities. Some major fields of complaints relate to the quality of guidance and decision support out of the planning process as well of the magnitude of resources needed for the planning, which consumes up to 50 % of controlling capacity (Beyer and Reinhard 2014).

Several authors have suggested concepts needed to improve the budgeting process. These improvements consist of a bundle of measures, which like recopies shall lead the companies to a modern planning. This chapter will discuss why so many companies are still struggling with their planning activities and why the holy grail of planning still seems to not have been found by all companies.

In the first part of the chapter, we will define and distinguish the often synonymously used terms of planning, budgeting, and forecasting and discuss their different goals and contributions. The second step will be to review commonly mentioned inefficiencies and problems in contemporary planning processes based on recent surveys. This chapter will summarize and compare improvement concepts discussed in the literature, such as "better budgeting", "advanced budgeting", "modern budgeting" and the "10 theses for planning". Based on the above, this chapter will analyse how the strategy orientation determines the willingness of the companies to move from traditional budgeting to more improved concepts. It will be outlined why so many companies that pursue a cost leadership strategy are still reluctant to open themselves to improved budgeting concepts. Table 5.1: Controlling main processes.

1.	Strategic Planning
2.	Operative Planning and Budgeting
3.	Forecasting
4.	Cost accounting
5.	Management Reporting
6.	Project- and Investment Controlling
7.	Risk Management
8.	Function Controlling
9.	Management Support
10.	Enhancement of Organization, Processes, Instruments and Systems

Source: International Group of Controlling (2012).

5.2 The terminology "planning", "budgeting" and "forecasting"

Planning, budgeting and forecasting are terms that many actors which are involved, understand to be very similar or even use as synonyms. It is especially easy to mix up the terms "planning" and "budgeting" and the purpose of their usage. For a clearer understanding, the terms and their different purposes shall be defined and distinguished from each other:

Planning can be understood as the overall expression for structured processes, defining and setting targets. A plan bridges the current situation to the desired future by specifying measures and actions. Depending on the time-horizon, the short and middle term operative planning can be distinguished from the long-term strategic planning. The operative planning should be based on a defined strategy and a corresponding strategic long-term planning (Rieg 2015; Zimmermann 2014).

Budget is one outcome of the planning process and normally includes standard financial reporting formats such as balance sheet, P&L and a cash flow statement. The budget specifies the OPEX amounts that can be spent. Typically, also CAPEX, headcount, order volume, NWC will be included in the budget. Each budget amount is normally assigned to a person who is held responsible for this amount (International Group of Controlling 2012; Zyder 2007).

Besides budgets who by definition can only describe financial performance figures, the so-called Hybrid Measurement Systems (HMS) evaluate and monitor in addition also nonfinancial performance figures. One of the most prominent HMS is the balanced scorecard (Gates and Germain 2015; Schäffer 2013).

A forecast is a financial projection of the future that is based on objective or subjective methods. Examples of the objective methods are simply extrapolated past values or more complex forecast models. In comparison to these, subjective methods might involve guessing or the gut feeling to prepare a forecast, however, this is not a recommended approach. The forecast figures naturally deviate from the budget, which is a result of the planning process. The forecast deals with the question: to what extent the planned targets can be reached (Jessberger and Kappes, 2011)? The discussed terms "planning", "forecast" and "budget" can be separated from each other (see Figure 5.1).

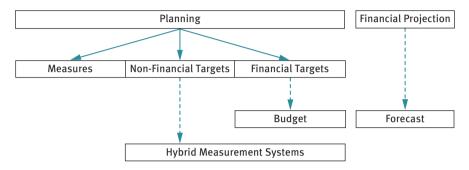


Figure 5.1: Distinction of planning, budgeting and forecasting. **Source:** Author's processing.

The figure 5.1 summarizes and illustrates that planning is defined as the target setting process which leads to financial and non-financial targets and to measures which are needed to reach those targets. The reflection of the financial targets is the budget. The hybrid measurement systems can widen the target setting and also include non-financial targets. The forecast is not the result of a planning process but is the result of a financial projection of the future.

In literature and business life, the term "budgeting" is often used synonymously (Günther and Schomaker 2012) on the one hand with "planning" to describe the planning system in its total and on the other hand with the partial activity to prepare "budget" contents such as the balance sheet, P&L and cash flow statement (see Figure 5.2).

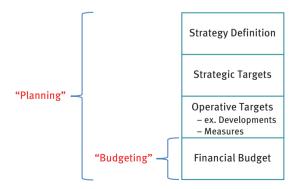


Figure 5.2: Important planning contents. **Source:** Author's processing.

The synonymous usage of these terms makes a distinct analysis not easier and basically makes one of the terms obsolete (Zyder 2007). The distinct usage of the terms "planning" referring to the overall planning process and the term "budgeting", when it solely relates to the preparation of the financial budget figures (Schön 2012) would be beneficial in the opinion of the author.

However, the term "budgeting" is well established in the common expression of the entire planning process, in practice including the strategic level (Dillerup & Stoi, 2013b).Therefore, both meanings need to be kept in mind, to clearly distinguish in the discussion between the term budgeting as the synonym for the entire planning process and the term budgeting as the synonym for the narrow process to prepare a financial budget (see Figure 5.3).



Figure 5.3: Synonymous usage of the term budgeting. Source: Author's processing.

Based on the above definitions, each planning process should follow some key steps. The first step is to define the target, defined by the desired outcome. Benchmarking is often used as a method to define such targets. It is common to distinguish the operative targets, which are set for short and medium time spans, from strategic targets, which are basic decisions that indicate the direction the business shall be steered to and which are valid for a longer period of time. In the best case, both targets are related to each other (Hoch and Heupel 2014; Mäder 2015). This means that the strategic plan determines the operative plan on the one hand but also that the operative steps lead consecutively to the realization of the strategic target (see Figure 5.4).



Figure 5.4: Interaction of planning and budget. Source: Author's processing.

Between the starting situation and the strategic target situation normally there is a gap which needs to be bridged (Fineran and Matson 2015; Schäfer 2009). For the bridging, externally induced developments, as well as internally induced measures, need to be considered (Hagel 2014a). For example, positive expectations towards the growth of the industry as a whole in many cases have a beneficial effect on the economic growth of the single company. In the worst case such as in the case of a recession, it could increase the gap and thereby make it more difficult for the company to reach its target. Based on the remaining gap, internal measures need to be planned in order to close it. The measures will influence business drivers and business processes such as space and production capacity or marketing efforts which will reflect themselves in the budget figures. The budget can be seen as a financial reflection of the planned operative targets.

The planning of the consolidated corporate target in many cases adds up several sub-plans such as sales plan, production plans or investment planning. The planning process should, in general, start with the sub-plan which represents the bottleneck of the planning. The bottleneck is the factor that limits the company from reaching its target situation. In many of today's competitive markets, the achievable sales volume is a bottleneck limiting the expansion. In such cases, it is recommendable to first start with the sales planning and then to follow by aligning the capacity planning to the sales plan (Benker 2015).

Based on the above statements the main planning objectives include "target setting", "coordination" and "performance measurement". In practice, those planning objectives are interfered by competing objectives which will be discussed in a later paragraph.

From the controller's point of view, the processes of setting up the budget are important tasks that need to be performed at the end of the year. The yearly routine is seen as a financial exercise that aims to come to a budget and it is accompanied by budget files and instructions to ensure that the controller fulfils his/her tasks in the manner and the time the business management requests. For this, the doing part of the budget seems normally clear for the controller. By above definition of the planning process, it, however, appears that companies often do not apply rather forecasting methodologies than a full planning process in their budgeting routine. It might be the misconception and the reason why so many companies are deeply unsatisfied with the outcome of the "budgeting process".

5.3 Problems associated with the planning process

Following the definition introduced above, the term "budgeting" will be used when referring to the planning process with the budget, as the financial expression of the planning process. To outline the current application of the planning process, the results of recent surveys regarding the planning process are further analysed (see Table 5.2).

Survey	Year
Voußem, Weber, and Rehring	2010
Deloitte	2011
Deloitte	2013
Schäffer et al.	2013
	Voußem, Weber, and Rehring Deloitte Deloitte

Table 5.2: Analysed planning surveys.

Source: Author's processing.

(1) A 2010 survey (Voußem, Weber, and Rehring, 2010) analysed the time spent during the planning process and differentiated it by managers and controllers (see Figure 5.5). For this, they evaluated 400 responses. 39 % of the respondents were head of controlling and 21 % was head of finance and controlling. 62 % of the companies had a medium size between 50 and 1,000 million EUR, 23 % were of big size above 1,000 million EUR sales volume. Following this study, the majority of controllers spent more than 9 weeks with the planning while the majority of managers spent less than two weeks. The reduced planning time, in comparison with the study from 2013, is due to the mix of company sizes in this analysis of 2010:

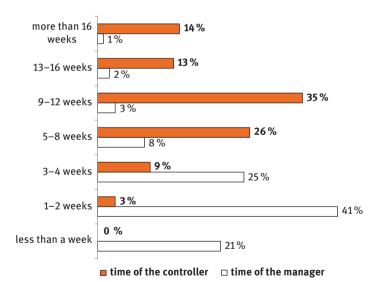


Figure 5.5: Time spent for corporate planning by function. Source: Voußem et al. (2010).

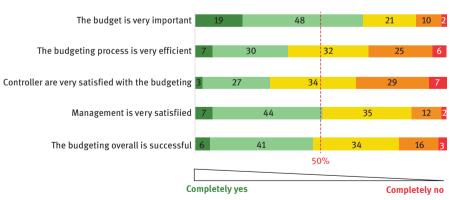
According to this study, the level of dissatisfaction rises with the time spent on the planning process. The increased dissatisfaction level of the controllers with the

planning process, in comparison with the satisfaction of the management, can therefore be explained by the increased time the controllers typically invest in the planning process.

(2) Deloitte conducted a survey in December 2011 with 72 participants, asking for the main drivers of high resource usage for the planning process. For 71 % of the participants, the resource usage was highly correlated with the number of line items. 78 % stated that the necessity of coordinating different planning sub-plans is a driver for the resource usage (Epstein, Witzemann, and Witze 2015). The time needed to fulfil the planning is directly related to the level of detail of the planning package. The level of detail refers to the number of reporting lines on the one hand and the number of reporting periods on the other hand.

(3) A second study performed by Deloitte in 2013, with 597 worldwide companies, confirmed these results, stating that in 40 % of the analysed companies the planning process took more than four months (Epstein et al., 2015). In the same Deloitte survey, 37 % of the companies stated that there is an insufficient integration between operative and strategic planning and 61 % stated that the planning was mainly focused on financial KPI.

(4) The 2013 survey (Schäffer, Weber, and Mahlendorf 2013) evaluated 441 responses from company representatives, of which 51 % were head of controlling and 22 % were CFO. Half of the companies had a medium size between 50 and 1,000 million EUR, 30 % were big sized, above a 1,000 million EUR sales volume. According to the study, the majority of respondents agreed that the planning process is very important. However, almost half of the respondents were not fully convinced that the current planning process was very efficient. Almost half the managers were not fully satisfied with the budgeting process. Asking the controllers, the level of non-satisfaction rose to above 50 % (see Figure 5.6).



Satisfaction with the planning process

Figure 5.6: Satisfaction with the planning process. Source: Based on Schäffer et al. (2013).

The 2013 study (Schäffer et al. 2013) further revealed that in 44 % of the big companies with sales more than 1,000 million EUR spent more than 4 months for the budgeting process. In medium-size companies this is decreasing but still, 40 % of the companies between 50 and 1,000 million sales spent more than three months per year with the budgeting process. In average, the companies mentioned in the survey, spent 13 weeks for the budgeting process (see Figure 5.7).

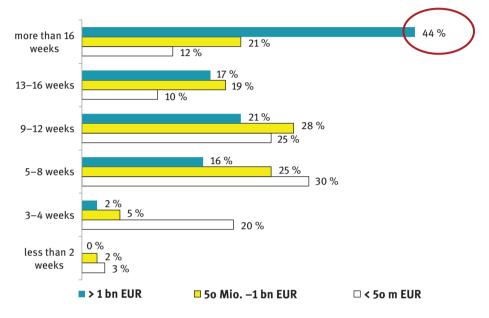


Figure 5.7: Time spend on planning by company size. Source: Schäffer et al. (2013).

The general criticism with traditional planning can be summarized with too much time and be a resource consuming for the planning process and thus offer too little guidance as a planning output. The Figure 5.8 summarizes and structures the most common aspects mentioned in the literature (Barkalov 2015; Berens, Berding, and Sommer 2010; Gleich 2015; Horngren 2007; Mäder 2015; Paul and Traber 2015; Pfläging 2015; Wilkens 2015).

The expectation gap increases as the industry are moving from the Taylorism orientated industry age of the 19th and 20th century towards the knowledge-based modern industry of the 21st century. In other words, the higher the market dynamic is, the more importance the knowledge and individual local decision making gets and the lower the decision usefulness of central planning gets (Pfläging 2015). The following paragraph will review recent concepts suggested in the literature to increase the value-added of corporate planning and to close the expectation gap.

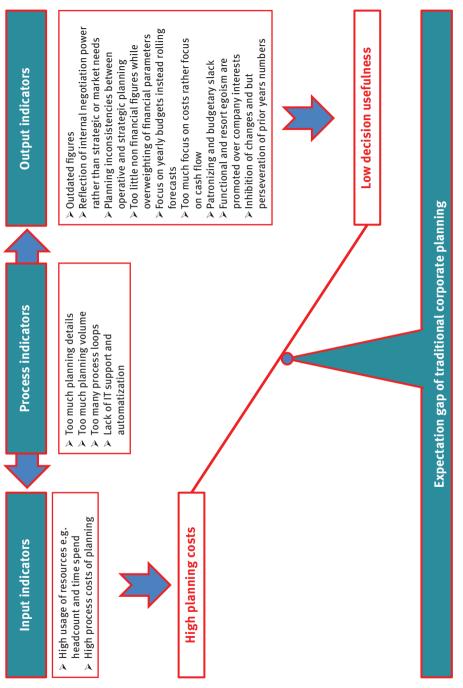


Figure 5.8: Expectation gap of corporate planning. Source: Author's processing.

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5.4 Synopsis of concepts and measures to improve planning

Because of the common dissatisfaction with the planning process, several measures in order to "fix the problem" are regularly brought up in literature. According to the survey of Schäffer et al. (2013), 27 % of the participants suggested measures they considered necessary to improve the planning process. According this survey the most prominent suggestions were the shortening and simplification of planning together with the modernization of planning tools (see Figure 5.9).

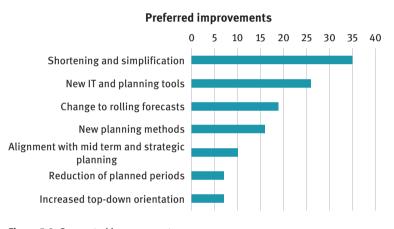


Figure 5.9: Suggested improvement measures. Source: Translation of the author from Schäffer et al. (2013).

Beside single measures, the literature suggests several improvement concepts which can be understood as bundles of "optimized measures" for improvement. The concepts vary in composition of ingredients and fluctuate due to the intensity of change from traditional budgeting. The concepts which will be further analysed are "better budgeting", "advanced budgeting", "modern budgeting" and the "10 theses for planning". The concept "beyond budgeting" will be briefly reviewed as well, although it does not include any measures on how to improve budgeting. In contrary, it represents a management concept to overcome budgeting.

"Better budgeting" is an early concept to improve the efficiency of planning in an evolutionary way. The concept is relatively moderate in measures to improve traditional budgeting and consists out of five principles (see Table 5.3). Table 5.3: Principles of "better budgeting".

1.	Improved IT support (BI) to reduce redundant work
2.	Improvement of data models used in the budgeting
3.	Harmonization of data used to avoid data inconsistencies
4.	User-friendly planning forms and better training of the people involved
5.	Gently reduction of the budget detail

Source: Based on Gleich, Greiner, and Hofmann (2012) and Paul (2014).

The level of IT support for the planning process depends in many cases on the company size. There are two reasons behind this. Firstly, in smaller companies, the degree of complexity is not seen as high enough in order to set up complex controlling tools. Secondly, due to the small-turn over, the costs for management systems in relation to the sales volume is too high and the smaller companies do not spend the extra costs (Lavia López and Hiebl 2015).

"Advanced budgeting" was introduced by Jens Kopp and Jörg Leyk, both consultants of Horvath & Partners, in 2002 (Linder 2003). It studies some of the suggestions of the "better budgeting" concept but includes further measures to increase efficiency and effectiveness of the planning process (see Table 5.4). The main suggestions are:

1.	Usage of global budgets and focus on relevant contents
2.	Replacement of year-end focus with rolling planning
3.	The strategic planning must give specific provisions for the operative planning
4.	Emphasis on all relevant KPI with focus on non-financial KPI
5.	Focus on business processes instead legal entities
6.	Output oriented process focus instead focus on input orientated costs
7.	Set targets based on benchmarks
8.	Usage of self-adjusting relative targets

Table 5.4: Principles of "advanced budgeting".

Source: Based on (Gleich, Kopp, and Leyk 2003).

"Modern budgeting" introduced by the "International Controller Verein" (ICV) relates to the improvement of budgeting from two angles (Gleich, Kraus, and Michel 2009). The first angle refers to processes and structures which include improving the simplicity and the flexibility of planning, as well the promotion of the better integration of strategic and operative planning (Alexander Becker, Leyk, and Riemer 2015). The second angle relates to the contents of the planning. In total the ICV suggests "6 principles" of modern budgeting (see Table 5.5): Table 5.5: Principles of "modern budgeting".

Simplicity, meaning reduction on decision-relevant planning contents based on limited input data preferable made top-down	es
Flexibility includes planning with sensitivities and scenarios, usage of relative targets based on benchmarks, rolling forecasts, flexible usage and shifting of resources	Processe
Integration of strategy, planning and forecasts. Only a few but related targets. To management, compensation should only be loosely connected to the budget	4
Organization, explicit targets based on the overall targets, the organization must support short decision processes	
Value creation, understanding of the own value chain, the planning should be determined by targets, bottlenecks and restrictions	Contents
Transparency, the core ideas of the planning and the responsible persons for implementation have to communicate and the planning iterations should be reduced by top-down targets	Ŭ
	 input data preferable made top-down Flexibility includes planning with sensitivities and scenarios, usage of relative targets based on benchmarks, rolling forecasts, flexible usage and shifting of resources Integration of strategy, planning and forecasts. Only a few but related targets. To management, compensation should only be loosely connected to the budget Organization, explicit targets based on the overall targets, the organization must support short decision processes Value creation, understanding of the own value chain, the planning should be determined by targets, bottlenecks and restrictions Transparency, the core ideas of the planning and the responsible persons for implementation have to communicate and the planning iterations should be reduced by

Source: Based on Gleich (2012a).

"Schmalenbach group" introduced the 10 these for planning (Günther and Schomaker 2012) an be seen as general rules to optimize the planning process (see Table 5.6).

Table 5.6: Principles of the "Schmalenbach Group".

1.	The operative planning has to be connected with the strategic goals using value drivers
2.	The operative planning must follow important strategic trends
3.	No planning without connection to the measures
4.	The planning should follow benchmarks and work with relative KPI instead absolute KPI
5.	The budget planning has to consider the cornerstones of the business model
6.	The budgeting systems need to be integrated
7.	Usage of global budgets and top financial KPI allow a reduction of planning detail
8.	The production cost should be calculated with actual costs unless there are structural changes
9.	Rolling forecasts support a flexible planning
10.	The efforts invested in the planning must be reduced and reallocated between operative and strategic planning

Source: Based on Günther and Schomaker (2012).

"Beyond budgeting" was introduced by Hope and Fraser (2001) and can be seen as an extreme position which replaces the budgeting as part of common management systems with 12 management principles with self-empowerment of the managers. In total 12 "beyond budgeting" principles were identified (see Table 5.7). Table 5.7: Principles of "beyond budgeting".

1.	"Beat the competition"	
2.	Reward team-based competitive success	
3.	Make strategy a continuous and inclusive process	
4.	Draw resources when needed	
5.	Coordinate cross-company interactions through "market-like" forces	
6.	Provide fast, open information for multi-level control	
7.	Create a performance climate based on sustained competitive success	
8.	Build the commitment of teams to a common purpose, clear values, and shared rewards	
9.	Devolve strategy to front-line teams and provide the freedom and capability to act	
10.	Champion frugality and challenge the value-added contribution of all resources	
11.	Organize around a network of teams that dynamically connect their capabilities to serve the external customer	
12.	Support transparent and open information systems"	

Source: Hope and Fraser (2001).

In contrast to the other concepts discussed, beyond budgeting is not targeting to improve the budgeting process but to introduce a management philosophy to replace budgeting (Schön 2012). Although beyond budgeting principles could be seen as a source of inspiration for the planning process (Schäffer and Weber 2015) it remains relatively undefined on specific improvement measures, which could be compared with the other planning concepts (Becker 2004; Heinzelmann 2015).

The concept synopsis had to consider three limiting factors (see Figure 5.10). First, the terminology used is not the same between all authors. Second, some authors mention individual measures explicit while others use more general terms which may or may not imply details. For example, if one author explicitly suggests improving the IT support of planning, this does not imply that other authors would exclude this measure. Third, the level of intensity for implementing the measures might differ.

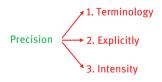


Figure 5.10: Precision of the synopsis. **Source:** Author's processing.

In other words, the recipes cannot be compared in "grams and millilitres" but in more general terms. Despite potential inaccuracies found in details, the following synopsis

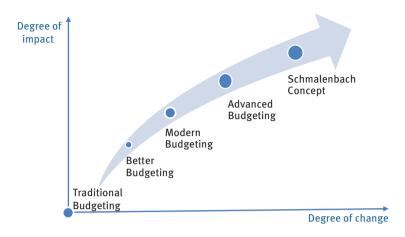
homogenizes the main measures discussed, in order to reveal the bigger picture of alternative budgeting concepts. The measures were grouped into three aspects which refer to the planning detail, to the strategy and business model and to technical aspects (see Figure 5.11).

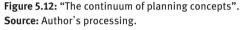
	Better Budgeting			Schmalenbach		
Year of Introduction	2001	2002	2009	2012	2013	
Aspect of planning detaill						
Reduce the level of detail	х	х	х	х	х	
Usage of global budgets		х		Х		
Self adjusting relative targets		х		х		
Strategy and business model						
Integrate mid term and strategic planning		х	х	х	х	
Inclusion of non financial KPI		х		х		
Inclusion of measures				х		
Usage of benchmarks		х	х	х		
Output orientation		х				
Inclusion of the buiness modell			Х	х		
Communication and training						
Increased top-down orientation			Х		x	
Technical aspects						
Flexibilization using rolling forecasts		х	х	х	х	h
Improved IT support to automate planning	Х				х	
Avoidance of data inconsistencies	х				х	

Figure 5.11: "Synopsis of planning concepts". Source: Author's processing.

The above synopsis made transparent, that the concepts have a different degree of impact on the budgeting process. The concepts can be seen as a continuum of from the traditional budgeting on the one side until the concept of the Schmalenbach group with the most measures included in their concept (see Figure 5.12).

The analysis further revealed, that all concepts explicitly emphasize the level reduction of details in planning. While analysing it, this paper will determine why this level of reduction in planning is surely one of the hardest measures to implement and how to overcome these difficulties.





5.5 The influence of strategy orientation on corporate planning

By defining optimized planning concepts, some authors imply that there might be a planning concept which would suit all potential companies. However, the reviewed surveys showed, that there is still dissatisfaction with the planning process and despite many concepts in literature it seems very difficult for companies to find and implement a suitable improvement concept (Rateike and Linder 2010). A reason for that is that the planning is a management tool which needs to reflect the demands of the management and the nature of the business. Some questions to be answered are:

- 1. What degree and method of control do the top management or the owners wish?
- 2. Who is responsible for what activities and their related costs?
- 3. What kind of motivation system and bonus system shall be followed?

The planning is only one aspect of the management system within a company and therefore it should not be seen isolated but should deliberate several internal and external context factors (Zyder 2007). Such important context factors were described and analysed above in this publication. The factors can change over time, e.g. a company can steadily grow in size and complexity which will later impose a growing pressure to adapt correspondingly measures of controlling within the organization (Küpper et al. 2012).

It would be helpful for the further analysis of the planning concept if those context factors could be bundled in one significant trigger. A study made by Gates and Germain (2015) showed, that the basic strategic orientation of the company significantly influences the management and control system and hereby the planning and budgeting process. For this, two basic orientations can be distinguished: first, the cost leadership strategy and second, the differentiation strategy (see Figure 5.13).

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Figure 5.13: Alternative strategy orientation. Source: Author's processing following Gates and Germain (2015).

In the modern complex business environment companies might not purely follow a cost leadership or purely follow a differentiation strategy but mix both strategies to some extent. In such case, it has to be evaluated which of both strategies is overweighed.

Companies who pursue a cost leadership strategy often seem to prefer a centralized, standardized and stable budgeting process (see Figure 5.14). This tight and detailed budgeting process is important to realize a cost management and hereby a cost leadership. A focus on non-financial performance indicators for such companies is often seen as not helpful and kind of distracting from the cost control aspect (Gates and Germain 2015).

Companies who follow a differentiation strategy prioritize a product/service leadership which requires a focus on activities such as research or product quality. Such companies often prefer a rather decentralized, flexible and less formal and detailed budgeting process with more sophisticated HMS systems (Gates and Germain 2015):

Cost Leadership	Differentiation		
Centralized	Decentralized		
Stabil	Flexible		
Standardized	Less formal		

Figure 5.14: "Characteristics of strategy orientation". Source: Author's processing based on Gates and Germain (2015).

Centralized planning relates in many cases to a top-down planning approach while decentralized planning considers more decentralized information in a bottom-up planning.

Bottom-up planning often supports a planning input that is not aligned with the corporate strategy as well as budgetary slack of avoiding ambitious targets (Epstein et al. 2015; Lingnau and Dehne-Niemann 2015). A change to top-down planning would support the connection between the strategic goals and the operative planning but

might lack the operative knowledge needed to set up realistic plans and hereby receiving acceptance by the line managers. The setup of targets by the top management should consider market developments, benchmarks and investors' expectations. If the top management has the operative knowledge (like in operationally active parent company "Stammhauskonzern") a top-down approach of planning could be beneficial (Epstein et al. 2015; Heidecke 2010).

The strategy orientation, therefore, can be seen as a trigger for the level of planning detail. A high level of planning detail enables the headquarters to sustain a tight cost control and reduce the decentral level of decision freedom. But this increase of centralized control comes with some trade-offs which we will analyse in the following paragraphs:

5.6 Introduction to planning by objectives

The desired results of the planning process influence the manner and the content of the planning. Vice versa, the planning process determines the value added to its outcome. The planning can pursue various goals (Dillerup and Stoi 2013a; Heidecke 2010) that sometimes correlate, but sometimes tend to exclude each other mutually. Following the planning principles introduced in the second paragraph, the most significant objectives of a planning process would consist out of:

- 1. Operative target setting following the strategic planning;
- 2. Coordination of actions inside the company towards this direction;
- 3. Performance measurement to support countermeasures.

According to the survey's respondents of Schäffer et al. (2013), the planning put in motion nowadays pursues a wider bundle of objectives, including the objectives mentioned above but also many goals such as prediction and prediction which to some extent interfere might with them (see Figure 5.15).

The above survey indicates the numerous objectives associated with the planning. Besides the planning objectives introduced before which are "target setting", "coordination" and "performance measurement" in practice many additional planning objectives are pursued. The most prominent competing planning objectives are the "control", "prediction" and "motivation", which will be referred to as traditional planning objectives later.

There seems to be a trade-off between the competing objectives, meaning that not all objectives can be maximized at the same time. For example, the goal to control or predict with a high level of details can exclude the goal to plan fast and flexible. Also, too many details can make it difficult to connect the operative planning with strategy because one might "lose the wood for the trees". Because of such conflicts of interest, the objectives should be sorted in a reasonable hierarchy to ensure the positive effects for the company's success.

The prioritization of planning goals is seen by the author as one core factor of the planning success. This chapter will outline why and how the focus might be moved from the traditional goals towards the value added objectives in order to increase the

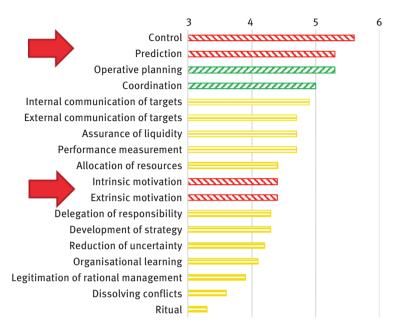


Figure 5.15: Common planning objectives. Source: Based on Schäffer et al. (2013).

value-added of the budgeting for multinational companies. In the following paragraphs, the three traditional objectives "control", "prediction" and "motivation" will be further analysed.

The balancing out depends on the preferences of the individual company and its top management. The negative influence of the objective control and prediction on the planning process is summarized in Figure 5.16.

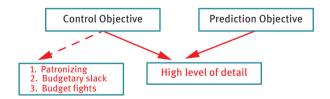


Figure 5.16: Planning detail as result of objectives. Source: Author's processing.

To control the spending behaviour of the management is the top-ranked objective of planning. Besides, increasing the level of detail the control objective can lead to several negative "side effects":

(1) The overweighting of the control aspect can reduce ownership e.g. *patronize* management to defer the necessary expenditures or to accelerate sales at the risk of big discounts to reach the budget at the end of the year. On the other hand, it can motivate the departments to make unnecessary spending, in the case that the cost budgets are not fully used by the end of the year (Horngren 2007; Jonitz and Schäffer 2015).

(2) If the control aspect is overweighed, management tends to also increase the number of budget reserves, which might end in a tough budget negotiation round, also referred to as *budgetary slack* (Douthit and Stevens 2015).

(3) *Budget fights* are the consequence that happens when the budget is seen as a negotiation result made by different functional heads, who are struggling for the same money (McCoanty 2014). When the allocation of funds depends mostly on political influence and negotiation skills, that consumes lots of energy in budget fights. Fighting to gain budget amounts can also lead to a decoupling of the budget amounts and the true drivers of financial performance. The control approach further leads to tough negotiation processes using existing information asymmetries and can lead to conflicts of interests between the subordinates and the superiors (Arnold 2015).

If the motivation of managers shall be influenced by connecting the remuneration of managers with reaching budget goals, the magnitude of the described side effects can intensify. Following the 2013 study (Schäffer et al. 2013) 56 % of the participants from big companies said that reaching the budget had a high relevancy for the remuneration of the managers. However, budget performance might not be related to the individual performance but to windfall profit out of external factors such as general economic development. Therefore, motivation and planning should be separated (Stoi, Asenkerschbaumer, and Bley 2015) and the motivation objective should be clearly related to relative performance targets.

The prediction objective of the financial figures is empirically the second raked objective in the current business environment, which unfortunately dominates the planning process and outcome in many companies. To increase the prediction quality, companies tend to increase the level of planning detail. As it will be illustrated in the following paragraphs, an increasing level of planning detail unfortunately often undermines the ability of the budget to deliver usable predictions. It is important to use the forecasting methodology to generate usable predictions. In general, the goal of planning should not be to generate exact predictions of the financial future but to set up a consistent and coordinated approach to be prepared for the future (Eisl et al. 2011; Rieg 2015).

Both the "control" and "prediction" objective, in practice, often lead to an increasing level of detail in the planning package can have has several unfavourable consequences such as higher planning efforts and longer planning time (see Figure 5.17).

According to the surveys analysed above, a high level of detail implies high planning efforts and longer planning time. In consequence, controlling departments often spend a major part of the working time for the planning process. 56 % of the respondents from the 2013 survey (Schäffer et al. 2013) choose not to update the budget during the year.

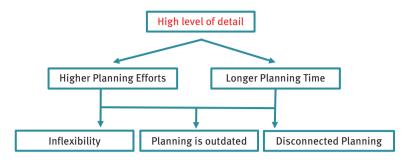


Figure 5.17: Consequences of high level of planning detail. Source: Author's processing

Considering the long planning time, budgets become inflexible and, in many cases, it is almost impossible to be adapted to new information during the business year. In case of major external shocks or change of assumptions, a fast reallocation of the budget amounts cannot be performed in order to keep the budget usable. Another negative effect of long planning time is that important planning assumptions might be outdated during the time the planning process is finished. In both cases the planning becomes irrelevant and companies must "drive by sight".

The more the controllers focus on planning detail the easier it gets "to miss the wood for the trees". This means that the controllers might focus so much on details that they lose the bigger strategic picture out of sight. This leads to a disconnection between the operative and the strategic planning.

As an interim conclusion, we can summarize, that the specification of planning level leads to a trade-off (see Figure 5.18). To include more details in the planning

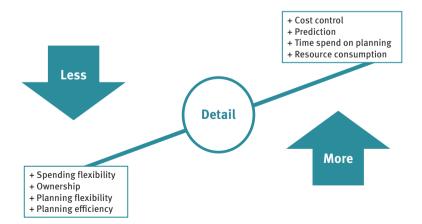


Figure 5.18: The cost of planning detail. Source: Author's processing.

support the planning objectives "control" and "prediction". These advantages are offset by disadvantages such as less flexibility, and high resource consumption in the planning process. Especially companies following a cost leadership tend to include too many details in the planning process.

5.7 Solving the trade-off between competing planning objectives

The top three objectives: "control", "prediction" and "operative planning" have a high importance for a company's top management. However, there is a trade-off between the objectives, meaning that not all can be reached at the same time and there is somehow an "either-or" situation. If companies prioritize goals such as "control" and "prediction", they should be aware what price tag this implies. The trade-off shall be solved by reviewing if the budget is the appropriate management tool to pursue control and prediction objective, and how these objectives can be reached without misusing the budget.

The control objective in modern companies is challenged by shared responsibilities in multidimensional matrix organizations. In many companies, overlapping responsibilities such local responsibilities, regional responsibilities, divisional responsibilities and functional responsibilities lead to detail budget control ad absurdum. Complex organizational setups make it very challenging to assign clear budget responsibilities. After clear responsibilities have been assigned, the control objective can be further enhanced by assigning clear output orientated relative targets as far as possible (see Figure 5.19).



Figure 5.19: Alternative ways to improve control. Source: Author's processing.

The figure above illustrates with a red flash, that a high level of detail is a negative consequence from overweighting the control objective in the budgeting process. The alternative ways to reach this control objective outside the budgeting process are illustrated with a green arrow. The question mark in the middle illustrates the trade-off situation and the decision area of the company's management how to realize the control objective.

Assigning *clear organizational responsibilities* for measures and budgets is mandatory in the pursuance to ensure that one person has the operative power to influence these measures and budgets. This principle is also referred to as the "controllability principle" (Benker 2015; Rieg 2015). Organizational overlapping of responsibilities and unclear responsibilities contradict the idea of budget control. The bottleneck of efficient cost control, however, cannot be found by increasing the detail level of planning. If the responsibilities are not clear, cost control with budgets remains meaningless.

The usage of *output orientated relative budget targets* (Pfläging 2015), also referred to as "performance-based budgeting", allocates budget by considering output-oriented performance targets allocated to the budget holder. These performance targets should be in line with the overall company strategy (McCoanty 2014). A problem with output oriented techniques, however, can be that some functions do not create a quantifiable output which can be measured.

Assigning global budgets shifts more spending responsibility to the managers. When the planning is too detailed, it can occur that the management needs to justify a budget shift between cost centres or different kinds of costs. Rather than being held responsible for spending each budget amount exactly as planned, managers should be responsible to reach a fixed target within a global budget (Jonitz and Schäffer 2015).

The prediction objective of the budget should also be targeted outside the budgeting/planning routine (see Figure 5.20). High-level of fluctuations make the cumbersome budget process too slow and inflexible to adjust. Instead of detailed yearly budgets, the rolling forecast should be implemented (Dworski 2005). This can work with fewer but correlated input variables (Alexander Becker et al. 2015). The most important input variables should be subject to most important scenarios which most likely are sales volume and possibly exchange rates.

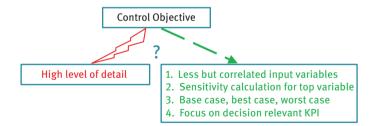


Figure 5.20: Alternative ways to improve prediction. Source: Author's processing.

Less but correlated input variables in the budgeting process help to reach the prediction objective (Böhle 2014). For this to happen, external and internal input variables need to be distinguished. External input factors are factors which cannot be influenced by the company such as currency exchange rates raw material prices. Internal factors can

be influenced by the company such as production volumes or efficiency KPI's (Epstein et al. 2015). The selected KPI should be of high significance and should be influential by the management. The main cost drivers should be observed, their measurement should be defined and they should be benchmarked regularly (McCann 2014).

For *sensitivity calculations*, the budget should be seen as the result of business drivers. In driver-based planning models, the budget is the result of mathematical linked relationships between operational drivers such as output units or the number of employees or production utilization rates. Thereby, the number of input variable is lower than in traditional budgeting models and this means it is much easier to calculate the different scenarios. *Different scenarios* would mean changing certain operational drivers to add to the base case complementary worst case and best case scenarios (McCoanty 2014).

However according to Hagel (2014a) 56 % of companies indicated, that they do not include that scenario planning in their planning process. Giving the increased volatilities of today's markets this neglecting of thinking in scenarios and sensitivities seems dangerous.

A high level of details during the planning process often does not lead to higher plan precision. Too many details hinder the focused discussion about the driver for future success (Epstein et al. 2015). Therefore, it is recommended to limit the discussion to the most relevant success factors of the business. The usage of relative KPI's enables the usage of internal and external benchmarks and it is especially recommendable in dynamic business environments (Dworski 2007; Epstein et al. 2015; Stoi et al. 2015).

The planning detail should be focused on the *decision-relevant KPI*. Increasing the level of planning details might make it difficult to "see the wood for the trees". Focusing the planning on the most important operative KPI's might make it easier to keep the strategic goals in mind and to adjust the planning parameters if needed.

5.8 Financial statements projection

The financial statement effect of improved planning effectiveness will be illustrated in a business case simulation. This simulation of planning effectiveness builds on the business case described in the prior chapter.

The described considerations target to increase the effectiveness of the planning process and can be seen complementary to the improvements in process efficiencies of standard reporting processes described before. Several of the initiated improvements of effectiveness are of qualitative nature:

- 1. Increasing planning flexibility;
- 2. Linking operative planning to strategic goals;
- 3. Reducing budgetary fights and budgetary slack;
- 4. Less patronizing but empowering management.