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“Implementing Economic Value Added  
as Performance Measurement  
and Management System  
in Small and Medium-sized Enterprises”

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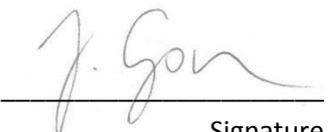


# I. Declaration of Honour

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## II. Abstract

Today's business environment is characterised by continuous change, a great deal of uncertainty and strong competition among existing market players. In order to survive on the market, companies, particularly small and medium-sized enterprises (SMEs), are required to be innovative and to constantly review and improve their performance. However, due to their lack of managerial expertise and limited resources, there are few performance metrics that apply well to SMEs. As Economic Value Added (EVA) incorporates both the profits and the costs of a firm's assets and better reflects economic reality, it appears to be superior to other comparable measures and can therefore be used as a comprehensive performance measurement and management system (PMMS). The qualitative empirical study, based on ten problem-focused interviews with consultants and industry experts, captures the usefulness of EVA as PMMS for SMEs and provides guidance on its implementation.

Key words: Economic Value Added, EVA, implementation, introduction, performance measurement and management system, PMMS, small and medium-sized enterprise, SME, value based management, VBM.



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- Mag. Engelbert PÜRRER
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- Dr. Thomas SUHIATER
- S. David YOUNG, PhD



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## V. Abbreviations

BRF	Business risk factor
CAPM	Capital asset pricing model
CEO	Chief executive officer
CFO	Chief financial officer
€	Euro
EBIT	Earnings before interest and tax
EU	European Union
EVA	Economic Value Added
Ex.	Example
FIFO	First-in first-out
IC	Invested capital
IS	Information system
IT	Information technology
KPI	Key performance indicator
LIFO	Last-in first-out
MVA	Market value added
NI	Net income
NOPAT	Net operating profit after tax
P&L	Profit and loss statement
PMMS	Performance measurement and management system
ROA	Return on assets
ROE	Return on equity
ROI	Return on investment
ROIC	Return on invested capital
RONA	Return on net assets
R&D	Research and development
SME	Small and medium-sized enterprise
VBM	Value-based management
WACC	Weighted average cost of capital



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# 1. INTRODUCTION

## 1.1 Problem statement

*“What if you could look at almost any business operation and see immediately whether it was becoming more valuable or less? What if you as a manager could use this measure to make sure your operation -- however large or small -- was increasing in value? What if you as an investor could use it to spot stocks that were far likelier than most to rise high? What if using this measure would give you a marked competitive advantage, since most managers and investors aren't using it?”* (Tully 1993, 38).

These teasing questions represented the introduction to a Fortune Magazine article published in 1993 about a measure which was supposed to fulfil these expectations. This metric was called Economic Value Added (EVA) and at that time, it was argued to be the *“hottest financial idea and getting hotter”* (Tully 1993, 38). Simultaneously, EVA was heavily advocated by the business consultancy Stern Stewart & Co. to be superior to traditional measures and outperform them in creating value for a company (Sharma and Kumar 2010).

Since then, the maximization of shareholder wealth has gained in importance and numerous large corporations including AT&T, Coca Cola and Merrill Lynch have incorporated EVA into their performance measurement and management system (PMMS) in various forms (Sharma and Kumar 2010; Stern, Shiely, and Ross 2001; Tully 1993).

The notion of creating wealth and providing shareholders with consistent returns has become even more important in today's volatile, dynamic and globalized markets. Companies have to continuously track and optimize their performance. However, it is not only large corporations that have to excel at these dimensions. Small and medium-sized enterprises (SMEs) are equally required to measure and manage their performance professionally in order to survive on the market (Bahri, St-Pierre, and Sakka 2011; Cocca and Alberti 2010; Olsen et al. 2011).

As a matter of fact, *“there are very few performance measurement and management systems (PMMS) that apply well to SMEs”* (Bahri, St-Pierre, and Sakka 2011, 604). Due to SMEs' typical shortage of managerial know-how and resources, it is particularly problematic to navigate this type of companies appropriately in today's unpredictable market environment (Bahri, St-Pierre, and Sakka 2011; Garengo, Biazzo, and Bititci 2005).

While EVA seems to provide benefits in managing performance in large corporations, it is unclear whether and in which form it represents an appropriate PMMS for SMEs.

## 1.2 Definition and delineation of the research questions

Based on the aforementioned problem statement, the following two research questions have been established to form the key subject of this paper:

1. Does EVA represent an appropriate PMMS for SMEs?
2. How should EVA be implemented in SMEs?

In order to clarify the essence of this topic, the individual parts of these research questions will be briefly defined. Detailed discussions with regard to the terms will be provided throughout the relevant chapters.

- In its narrow sense, the term “Economic Value Added (EVA)” refers to a measure representing *“the dollar value created for investors over a set period of time, like a quarter or a year”* (Gressle 1996, 28). Within this paper, EVA is considered as a holistic performance measurement and management system which *“aligns a company’s overall aspirations, analytical techniques, and management processes with the key drivers of value”* (Koller 1994, 88).
- The term “performance measurement and management system (PMMS)” refers to *“the set of metrics used to quantify the efficiency and effectiveness of past actions”* (Neely, Gregory, and Platts 1995, 81).
- The term “small and medium-sized enterprise (SME)” refers to a company with a staff headcount of less than 250. Other characteristics include the maximum thresholds for annual turnover and annual balance sheet total of € 50 million and € 43 million, respectively (European Commission 2003).
- The term “appropriate” refers to being *“suitable or right for a particular situation or occasion”* (Cambridge University Press 2012). In the context of this paper, it deals with the suitability of EVA as PMMS for SMEs in consideration of their particular characteristics.
- The term “to implement” means *“to put a plan or system into operation”* (Cambridge University Press 2012). In the context of this paper, it refers to putting EVA into operation.

### 1.3 Structure of the paper

In order to most effectively discuss both research questions, the content has been divided into 6 parts (see Figure 1).

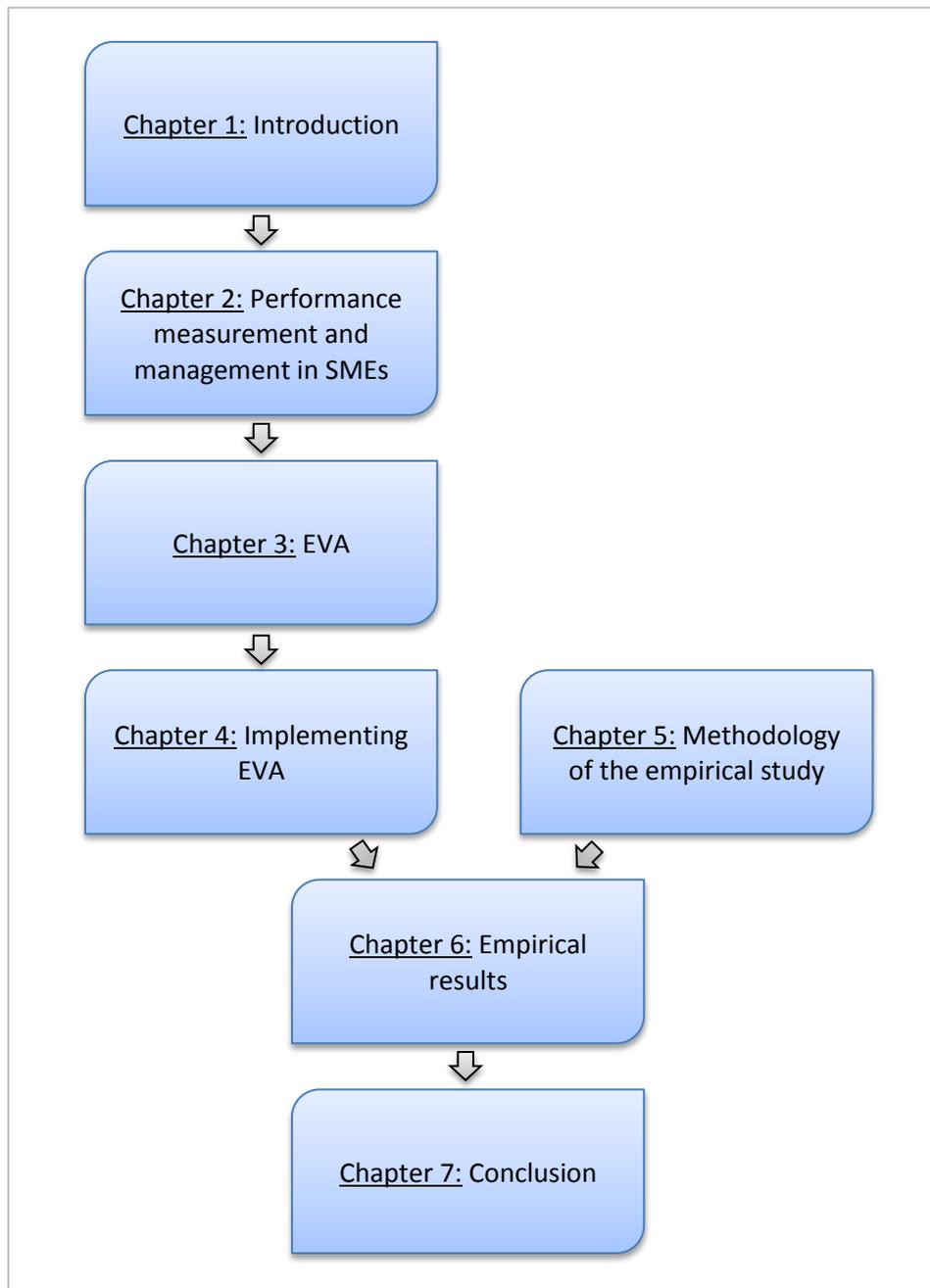


Figure 1: Storyboard of the paper

After the introduction, which is considered to be the first chapter, the second chapter deals with performance measurement and management in SMEs. Firstly, SMEs and their characteristics are discussed. Subsequently, PMMSs are defined and their required features for this type of companies are presented.

The third chapter focuses on EVA. After providing a short historical background on this metric, its calculation is explained in more detail. This part concludes with a discussion of EVA's major benefits and drawbacks.

Chapter four draws upon the previous part and deals with the implementation of EVA. In detail, a four-phase process is introduced and the main considerations of each step are highlighted.

While chapters two, three and four represent theoretical knowledge of the paper's topic, chapter five acts as a transition to the empirical study's outcomes. In this part, all details with regard to the used methodology are outlined. It includes information on the empirical approach, the developed heuristic framework and the interviewed experts.

Subsequently, the results of the empirical study are presented in chapter six. Apart from comparing the experts' opinions to the theoretical knowledge in chapter four, numerous hypotheses are generated with regard to both research questions.

The paper is concluded by a summary of the study's major findings. Furthermore, answers to the examined research questions are provided.

## 2. PERFORMANCE MEASUREMENT AND MANAGEMENT IN SMALL AND MEDIUM-SIZED ENTERPRISES

### 2.1 Small and medium-sized enterprises

#### 2.1.1. Definition

As highlighted by Günter VERHEUGEN, a former member of the European Commission, “*micro, small and medium-sized enterprises (SMEs) are the engine of the European economy*” (European Commission 2005). While accounting for 99 per cent of all companies in the European Union (EU), they create value and innovation, provide employment, foster competitiveness and are able to respond flexibly to new challenges on the market (European Commission 2005).

Due to the fact that there is no binding definition for SMEs in Europe, the recommendation of the Commission of the EU seems most appropriate to form the basis for their classification and further understanding throughout this paper. In general, an “*enterprise is considered to be any entity engaged in an economic activity, irrespective of its legal form*” (European Commission 2003, 39). Based on the factors of staff headcount, annual turnover and annual balance sheet total, all enterprises can be classified as follows:

**Table 1: Definition of SMEs (European Commission 2003; Austrian Economic Chamber)**

	<b>Enterprise category</b>	<b>Staff headcount</b>	<b>Annual turnover</b>		<b>Annual balance sheet total</b>
<b>SMEs</b>	<b>Micro</b>	< 10	≤ € 2 million	or	≤ € 2 million
	<b>Small</b>	10 - 49	≤ € 10 million	or	≤ € 10 million
	<b>Medium</b>	50 - 249	≤ € 50 million	or	≤ € 43 million
<b>Non-SMEs</b>	<b>Large</b>	> 249	> € 50 million	and	> 43 million

The staff headcount which is calculated in annual work units is the most important criterion and useful for an initial classification. The financial threshold values of annual turnover and annual balance sheet total are considered in order to take the significance, performance and market position of the company into account. Hereby, only one of both criteria must be met in order to remain in a particular cluster. Finally, to be recognized as SME, firms have to be independent, which means that they must possess at least 75 per cent of their own capital shares and voting rights (European Commission 2003; Austrian Economic Chamber).

### 2.1.2. Characteristics

In order to understand a SME's needs in terms of a performance measurement and management system (PMMS), it is indispensable to be aware of the unique features of this type of companies. Its characteristics can be separated into two clusters, external and internal ones (Cocca and Alberti 2010). The latter category, which includes factors that are under the management's control, is argued to be particularly influential with regard to the implementation of a PMMS. Rather negative factors comprise:

- Limited human capital: The entire workforce is typically occupied with the company's daily business and lacks the time resources to implement a PMMS.
- Limited financial capital: Implementing a PMMS is proportionally more expensive for SMEs than for large corporations. Therefore, the costs of such an endeavour may exceed a company's financial capabilities.
- Lack of managerial excellence: Whereas operational and technical expertise matter most in SMEs, managerial excellence is often neglected or non-existent. Consequently, the managers' lack of skills and techniques leads to poor corporate governance as well as "*short-term orientation and a reactive approach to managing the company's activities*" (Garengo, Biazzo, and Bititci 2005, 30). This shortfall in managerial excellence may represent a major obstacle for the introduction of a PMMS.
- Lack of formalization: Processes in SMEs are frequently poorly defined and rather based on tacit knowledge. This feature makes it more difficult to conceptualize and implement a PMMS (Cocca and Alberti 2010; Garengo, Biazzo, and Bititci 2005; Pansiri and Temtime 2008).

Although these factors appear to be substantial, there are equally features of SMEs that are believed to simplify the introduction of a PMMS, including:

- Less bureaucracy: As a result of their low hierarchies, SMEs are likely to be more flexible and adaptable to their environment. In addition, their structures favour face-to-face communication and allow for quicker operational changes and modifications.
- Fewer agency problems: Agency theory deals with the principal-agent problem between managers and owners. It argues that agency costs arise because managers pursue own objectives instead of maximizing the owners' benefits. Whereas these costs may be substantial in large corporations, they are believed to be negligible in SMEs with owner-managers, who are, as the name implies, both owner and manager of the firm (Cocca and Alberti 2010; Garengo, Biazzo, and Bititci 2005; Hudson, Smart, and Bourne 2001; Jensen and Meckling 1976; Neville 2011; Pansiri and Temtime 2008).

Even though it can neither be claimed that the benefits of less bureaucracy and agency problems outweigh the drawbacks of limited resources and managerial deficiencies, nor the opposite, any PMMS implementation projects must take these factors into account (Garengo, Biazzo, and Bititci 2005).

The major characteristics of SMEs are represented in the first version of the heuristic model developed throughout the course of this paper (see Figure 2).

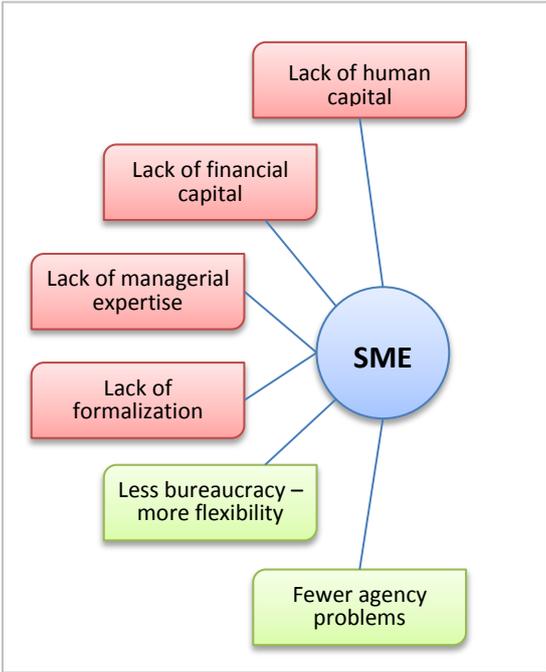


Figure 2: Heuristic model developed throughout the course of this paper – I

## 2.2 Performance measurement and management systems

### 2.2.1. Definition

After having discussed several important characteristics of SMEs, the focus will now turn to methods of measuring and managing performance within this type of companies. Even though it is occasionally referred to as performance measurement system in recent literature, the term performance measurement and management system will be used throughout this paper in order to accentuate the complementarity between the collection of financial and operational data and subsequent managerial decisions.

According to Neely, Gregory and Platts (1995, 81), a PMMS is defined as *“the set of metrics used to quantify the efficiency and effectiveness of past actions”*. As a result, it assists managers in taking knowledgeable decisions and translating them into action (Neely, Adams, and Kennerley 2002).

When being more specific, a PMMS should have the following characteristics:

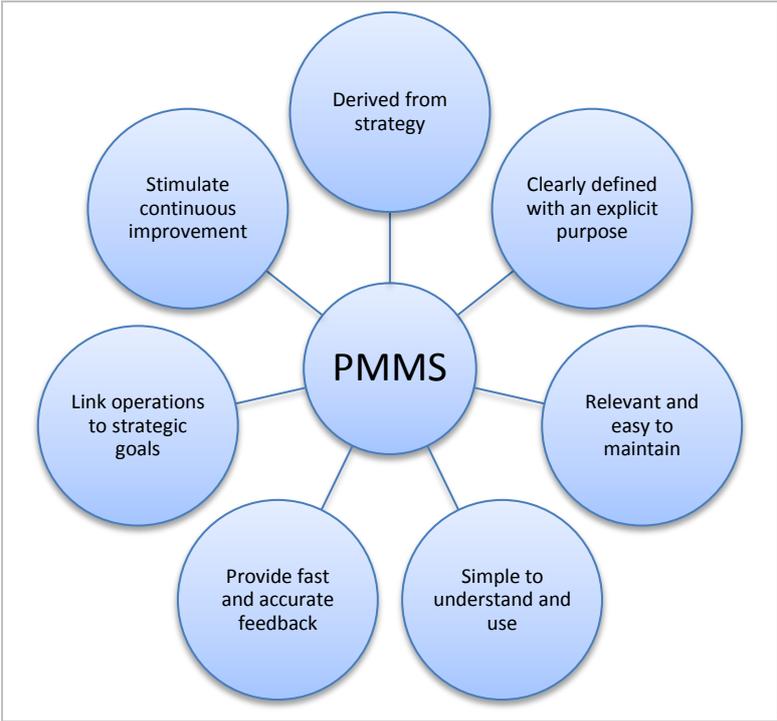


Figure 3: Characteristics of a PMMS (Hudson, Smart, and Bourne 2001, 1101)

According to the numerous factors discussed in the literature, a PMMS should primarily support managers in their operational and strategic decisions by providing cost-efficient ways to measure performance. However, it is indispensable to point out its main objective of creating value for the owner and shareholders, respectively (Garengo, Biazzo, and Bititci 2005; Goldberg 1999).

## 2.2.2. Requirements for small and medium-sized enterprises

Whereas many models for measuring and managing performance have been developed in recent decades, there is only a small ratio of SMEs that has a complete and high-quality PMMS. Many companies of this type either forgo its implementation or apply it incorrectly. Integrated solutions are rarely found because managers decide to employ only certain dimensions or focus on specific parts without a holistic and formal plan. It is thus not surprising that such systems lead to inconsistency, confusion and bad decisions (Chew 1998; Garengo, Biazzo, and Bititci 2005; Hudson, Smart, and Bourne 2001).

Even though most managers are aware of the potential value of a PMMS, some significant obstacles to its implementation must exist considering most companies have not implemented such a system. One possible reason is the limited suitability of developed systems for SMEs. While having the specific features of this type of companies in mind (see Chapter 2.1.2), different authors suggest that the lack of resources and short-term orientation are the main reasons why SMEs have problems employing PMMSs. In addition, managers are afraid of losing flexibility by applying such a theoretically rigid system (Garengo, Biazzo, and Bititci 2005; Hudson, Smart, and Bourne 2001).

Even though these causes appear to be understandable, SMEs must overcome such problems in order to survive in today's highly competitive and complex markets (Young and O'Byrne 2000). Whereas a suitable PMMS must always be customized to the individual needs of a company, some general requirements with regard to a PMMS for SMEs include the following:

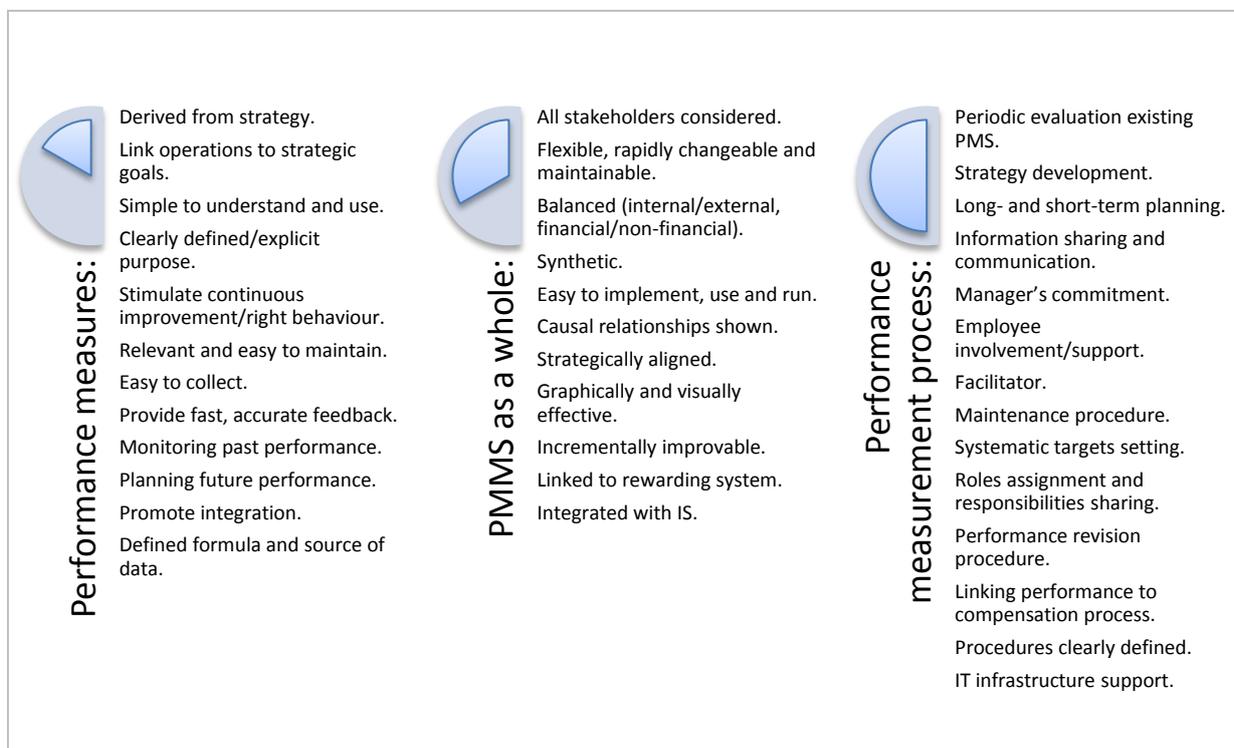
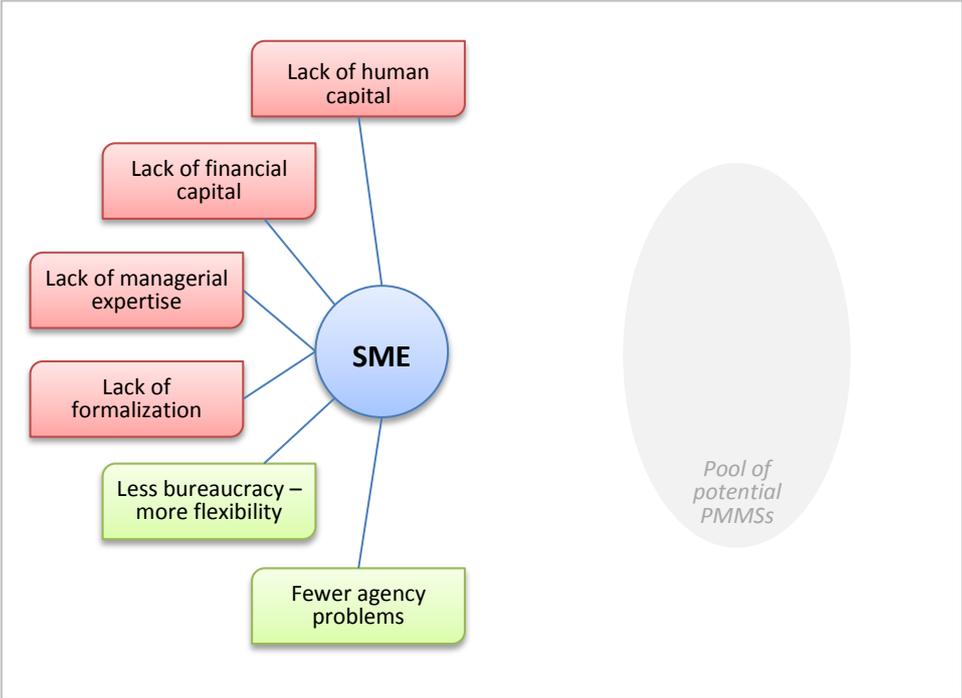


Figure 4: Characteristics of a PMMS suitable for SMEs (Cocca and Alberti 2010, 193–194)

Despite the importance of all mentioned factors, it is particularly crucial to have a PMMS that is simple, easy to implement and run, focused on both short- and long-term planning, flexible, fully supported by the management and linked to the rewarding system.

Based on the information gathered throughout the recent subchapters, the heuristic model developed throughout the course of this paper is extended by the pool of potential PMMSs for SMEs (see Figure 8).



**Figure 5: Heuristic model developed throughout the course of this paper - II**

A PMMS that was initially created for large enterprises is Economic Value Added. It has been argued to *“be an appropriate starting point in developing a balanced and easy-to-use PMMS for SMEs”* (Bahri, St-Pierre, and Sakka 2011, 604). Its development as well as its main features will be discussed in the subsequent chapter.

## 3. ECONOMIC VALUE ADDED

### 3.1 Short historical background

Before highlighting the concept of Economic Value Added (EVA) in more detail, its origin and development will be outlined. The theoretical framework of making profit, only if revenues outweigh the total of operating and capital costs, was first developed more than 120 years ago by Cambridge professor Alfred MARSHALL (Young 1997). During the 1920s, a similar system was introduced by General Electric. At that time, the company's management was unsatisfied with the method of measuring performance and implemented a metric termed residual income. Being similar to today's EVA, it was calculated by subtracting a capital charge from operating profits (Chew 1998).

As the implementation of residual income at General Electric was an isolated case, EVA's rise only began more than 60 years later. In 1989 the management consultancy firm Stern Stewart & Co. presented their residual income concept called EVA. Since then, several hundred corporations throughout the world have implemented this metric, including Coca-Cola, Siemens, Polaroid and Whirlpool (Stern, Shiely, and Ross 2001; Stewart III 1991; Tortella and Brusco 2003).

Although its underlying principles have been around for more than a century, EVA is nevertheless an important innovation compared to its earlier versions. It makes *"modern finance theory, and the managerial implications of this theory, more accessible to corporate managers who are not well trained in finance or never thought they had to be"* (Young and O'Byrne 2000, 5). However, EVA is not supposed to be solely used by top managers, but equally by the workforce at lower organizational levels. It is argued that value creation is a task undertaken by every employee throughout a firm (Chew 1998; Young 1997).

How EVA is measured and how it can help managers to enhance a company's performance will be dealt with in detail throughout the following subchapters.

## 3.2 Definition

The concept of EVA is based on the notion that a company is only profitable if its operating income covers both operating and capital costs (Stern, Shiely, and Ross 2001). Accordingly, EVA is defined as *“the dollar value created for investors over a set period of time, like a quarter or a year. The value added is any excess of after-tax operating profit minus all the costs of doing business, including the interest cost of debt and the opportunity cost of equity. In other words, EVA is after-tax operating profits, less a capital charge equal to the amount of profit needed to cover interest expense and provide an adequate return for equity investors”* (Gressle 1996, 28).

Being an absolute performance measure may act as a drawback compared to ratios such as the return on assets (ROA) or the sales growth rate. This apparent deficiency can be easily overcome by standardizing EVA to account for different invested capital levels (Stewart III 1991).

### 3.2.1. Calculation

Based on the aforementioned definition, EVA is calculated as follows:

Table 2: Calculating EVA (Young and O’Byrne 2000, 35)

	Net sales
-	Operating expenses
=	Operating profit (or earnings before interest and tax, EBIT)
-	Taxes
=	Net operating profit after tax (NOPAT)
-	Capital charges (Invested capital x Cost of capital)
=	EVA

Two short, convenient formulas appear as follows:

$$EVA = NOPAT - (IC \times WACC)$$

$$EVA = IC \times (ROIC - WACC)$$

Where,

NOPAT = Net Operating profit after tax

IC = Invested capital (also referred to as capital employed)

WACC = Weighted average cost of capital (also referred to as cost of capital)

ROIC = Return on invested capital (also referred to as return on net assets (RONA))

Figure 6: EVA calculation formulas (Sharma and Kumar 2010; Young and O’Byrne 2000)

In order to perform these calculations, several variables have to be initially determined and adapted, respectively. Although the approach in Table 2 seems straightforward, there are several issues to be taken into account. In order to remove distortions caused by today's accounting rules, it is recommended to make several adjustments to the net operating profit after tax (NOPAT) and the invested capital (IC).

Another essential variable is the cost of capital. Being often referred to as weighted average cost of capital (WACC), it accounts for the taken risk of both shareholders and creditors by providing funds to the company. After having generated the cost of equity and the cost of debt, the WACC is computed based on the ratios of equity and debt in the capital structure. The determination of the cost of equity may turn out to be a difficult endeavour, particularly for private companies (Stern, Shiely, and Ross 2001).

It cannot be stressed enough that the cost of capital is composed of the cost of debt and the cost of equity. Without including both of them, it is not possible to gauge whether an enterprise creates value for its owners. As EVA accounts for the aggregate cost of capital, it is capable of providing this information. Consequently, value has been created if EVA shows a positive figure. By contrast, accounting measures such as earnings before interest and tax (EBIT) or net income (NI) do not consider the cost of equity and are therefore not suited to evaluate the profitability of companies (Atrill 2009; Ehrbar 1999; Young and O'Byrne 2000). Peter DRUCKER (1995, 59) gets to the heart of this aspect and claims that *"until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes, as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources... until then it does not create wealth; it destroys it."*

The calculation of each variable of the EVA formula requires a lot of care in order to obtain reliable measures of corporate performance. These issues will be discussed in more detail in Chapter 4.4.5 and Chapter 4.4.6.

### **3.2.2. How value can be created**

As a means of measuring and managing performance in a company, it is indispensable to understand the drivers of EVA. With regard to the second formula of Figure 6, the three key variables, comprising IC, WACC, and operating profitability in the form of ROIC, can be altered in the following ways to enhance shareholder value:

- Improving operating profits: While keeping IC and WACC constant, EVA can be increased by a higher ROIC, representing enhanced operational efficiency or higher profit margins.
- Reducing capital costs: While keeping any other variable constant, the decrease in WACC has the same effect as the increase in ROIC. The spread between those two ratios increases and value is created (Stewart III 1991; Young and O'Byrne 2000).

- Profitable growth: If returns of additional investments offset the additional costs of capital, value is created. It is important to bear in mind that it is irrelevant whether the incremental ROIC decreases. As long as it is larger than the incremental WACC, EVA rises.
- Profitable divestment: Capital employed can be reduced when closing divisions, forgoing investments or reducing working capital. If the saved capital charge outweighs the potential loss in earnings, EVA augments.

### 3.2.3. More than a performance measurement and management system

Throughout the previous subchapters, EVA has been represented as a method of measuring performance. As it was expressed by its co-developer G. Bennett STEWART III, EVA could be the answer to many corporations' question of how they should *"go about designing and implementing an integrated, cohesive, but nevertheless simple and readily understandable financial management system"* (Chew 1998, 248).

As shown in Figure 7, this statement is based on EVA's capability of performing both past-oriented evaluations as well as future-oriented valuations. Moreover, there is widespread acceptance that an incentive compensation system belongs imperatively to every PMMS based on EVA. While the arrangement of such a system will be discussed in more detail in Chapter 4.4.4, it shall be stressed that only appropriate rewards facilitate and foster value-increasing behaviour of managers and employees (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

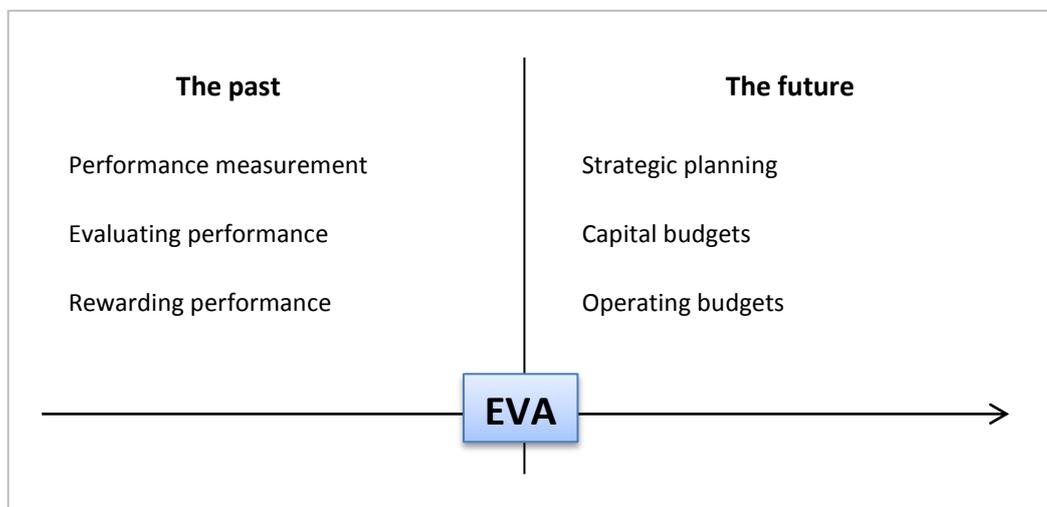


Figure 7: Bridging the gap between future and past (Young and O'Byrne 2000, 74)

With this comprehensive view in mind, EVA can be equated with a holistic value-based management (VBM) system which *"aligns a company's overall aspirations, analytical techniques, and management processes with the key drivers of value"* (Koller 1994, 88; Young and O'Byrne 2000).

The heuristic model developed throughout the course of this paper is extended by EVA as a potential PMMS for SMEs (see Figure 8).

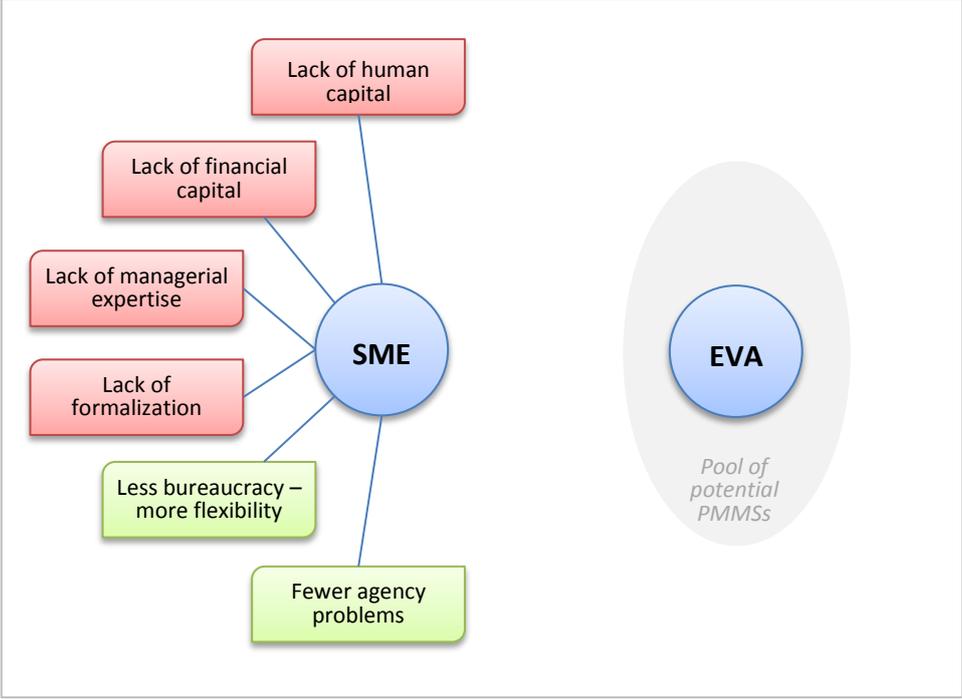


Figure 8: Heuristic model developed throughout the course of this paper - III

How and under which conditions companies can benefit from such a PMMS based on EVA will be delved into throughout the following subchapter.

### 3.3 How companies benefit from Economic Value Added

Due to the fact that EVA was developed for large corporations, there are hardly any relevant articles dealing with its suitability for SMEs. The subsequently discussed benefits and drawbacks draw upon existing literature and are applicable to different SMEs to a greater or lesser extent.

#### 3.3.1. Better performance measurement

One of the major advantages of EVA as a PMMS is its more realistic reflection of economic reality. Traditional accounting measures, such as net income (NI), are widely criticized for their distortions. Such metrics were actually introduced to provide a conservative valuation of a company's assets in order to minimize principle-agent problems between shareholders and bondholders. As their main objective is the protection of creditors, they are unsatisfactory in evaluating true performance (Sharma and Kumar 2010; Stern, Shiely, and Ross 2001).

A representative example is the accounting approach of considering all R&D expenditures in the year of their occurrence. However, such outlays are usually valuable for several subsequent years. From a shareholder's point of view, it would be thus more economically reasonable to capitalize and depreciate them over an appropriate time horizon. This particular and many other potential distortions are accounted for by adjustments made to the variables used to calculate EVA (see Chapter 4.4.5 and Chapter 4.4.6) (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

Another weakness of traditional measures is represented by failing to account for the opportunity cost of equity. Without its consideration, it is hardly possible to assess the performance of companies (Atrill 2009; Ehrbar 1999; Young and O'Byrne 2000).

Apart from the inherent shortcomings of traditional accounting figures, they are equally prone to be easily manipulated by managers. At the end of an accounting period, individual variables may be rearranged or modified in order to quickly fix results and maximize one's bonus. It is therefore indisputable that such measures are inefficient in gauging corporate performance (Stern, Shiely, and Ross 2001; Tortella and Brusco 2003).

As accounting measures typically enter relative figures such as return on equity (ROE) or return on assets (ROA), respectively, they are equally flawed metrics of corporate performance. Moreover, focusing on rates of return may set wrong incentives. On the one hand, profitable divisions may forgo principally lucrative projects when seeking to maximize their rate of return. On the other hand, loss-making divisions may accept unprofitable projects just to increase their rate of return (Stewart III 1991).

It can therefore be concluded that *“traditional performance metrics such as earnings per share (EPS), book value (BV), return on equity (ROE), return on assets (ROA) and return on invested capital (ROIC) ... do a poor job of capturing the three fundamental determinants of value creation: the amount, timing, and risk of the future cash flows of a company”* (Morin and Jarrell 2000, 309).

If implemented appropriately, EVA is able to eliminate the aforementioned shortcomings. By including the entire cost of capital, it properly accounts for all incurred costs in the quest for operating profits (Stewart III 1991; Young and O'Byrne 2000). As a holistic measure, EVA considers both the entire balance sheet and profit and loss statement (Young and O'Byrne 2000) and is claimed to be *"the best way to integrate the often competing goals of growth and operating efficiency"* (Gressle 1996, 28).

Apart from being superior to each individual accounting figure, EVA can, furthermore, be used as the only metric for decision-making and compensation. For this reason, it removes confusion and misunderstandings when using different financial indicators that are likely to suggest mixed actions (Kudla and Arendt 2000).

As SMEs often suffer from a lack of managerial expertise (Garengo, Biazzo, and Bititci 2005), a single and comprehensive PMMS based on EVA may be particularly beneficial for this type of companies.

### **3.3.2. Making employees into owners**

The principle-agent conflict between owners of a company and its managers is one of the central dilemmas of corporate governance. Referred to as agency costs of outside equity, it deals with the gap between managers' and shareholders' interests. The former group is argued to be more concerned about increasing personal benefits and extracting perquisites instead of pursuing profitable projects and enhancing shareholder value (Jensen and Meckling 1976; Abor and Biekpe 2007; Stern, Shiely, and Ross 2001).

According to its co-developer, Joel M. STERN, *"the alignment of managerial and shareholder interests is precisely what an EVA system is designed to accomplish"* (Chew 1998, 244). By using an appropriate incentive compensation plan based on this PMMS that properly reflects economic reality of companies, managers are induced to act in the owners' interests and forgo value-destroying activities (Goldberg 1999; Stern, Shiely, and Ross 2001).

The aforementioned argumentation reflects the prevalent separation of control and ownership in large corporations. However, as already argued in chapter 2.1.2, SMEs are mostly managed by their owners and therefore experience fewer agency problems (Neville 2011).

Even though there might not be any principal-agent conflicts between the owner and manager, EVA may even be able to reduce conflicts of interest between the owner-manager and employees. Therefore, the EVA incentive compensation plan should be ideally implemented throughout the entire organization and involve every single employee (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

Although managers and not employees were the examination focus of his study, James S. WALLACE (1997) was able to show that compensation plans similar to EVA are capable of changing agents' behaviour. The results generally confirm all expected positive predictions of EVA by claiming that actions of individuals are strongly influenced by what is measured and remunerated (Wallace 1997).

Consequently, it may be argued that *“including employees in the value creation process will change their entire view of themselves, their colleagues, their superiors, and their company; they will think and act like owners and want to win together with managers and investors”* (Schönburg and Stern 1999, 17).

The specific features of such an incentive compensation plan and how it can be adjusted to different company levels will be discussed in Chapter 4.4.4.

### **3.3.3. Other benefits**

Apart from the two mentioned advantages of EVA, which are heavily debated in the literature, there are further less significant benefits, including:

- Empowerment of the workforce: As companies are operating in a highly complex and competitive world, large corporations in particular must face the necessity of dispersed decisions-making power. While control must be decentralized, EVA may help to align the interests of the entire staff with those of managers and owners (Chew 1998).
- Creating a common language: By using EVA throughout the whole company, everybody is oriented towards the goal of value creation. Such a common mind-set leads to better investment and budgeting decisions and avoids unprofitable compromises (Gressle 1996).
- Aligning shareholder and stakeholder interests: It is a contentious topic whether shareholder and stakeholder interests can be aligned or whether they are inherently opposed. In several companies using EVA, a common belief can be found, suggesting that their *“number one job is to create shareholder value, a task that is achieved only by delivering value to everyone else”* (Young and O’Byrne 2000, 14). This view accepts that there may be opposing concerns in profitable companies the short run. However, there will be aligned interests in the long run, as bad relationships with stakeholders harm the value creation agenda of shareholders (Stern, Shiely, and Ross 2001).

## 3.4 Limitations of Economic Value Added

As discussed in the previous subchapter, EVA has the potential to address several major problems of corporate governance and increase performance, if used properly. However, the boom after its introduction in 1989 has been accompanied by sometimes exaggerated and misleading marketing campaigns. Stern Stewart & Co. has published appealing advertising slogans and charts in reputable journals such as the Harvard Business Review, documenting the positive effects of EVA on stock prices. Moreover, consultants and other proponents have strongly advocated its implementation in trying to canvass new customers. As a matter of fact, many of these claims overstate the advantages of EVA and many displayed graphs show only those parts of a company's stock development that support the marketing messages (Lougee, Natarajan, and Wallace 2006; Young and O'Byrne 2000).

Whether EVA is correlated with a firm's stock returns or its market value added (MVA), is one of the most debated issues in EVA-related literature. The mixed results show that it is a topic of high controversy among researchers and that it cannot be clearly answered at this time (Sharma and Kumar 2010; Tortella and Brusco 2003). However, several other limitations and drawbacks have equally been identified in recent decades. They will be discussed subsequently.

### 3.4.1. Economic Value Added does not solve business problems

Companies can profit in many ways by introducing EVA as a PMMS. However, it must be borne in mind that EVA is not a recipe for success in every case. As even argued by its proponents, every *"company must have a viable business strategy and appropriate organizational architecture before EVA can boost performance"* (Stern, Shiely, and Ross 2001, 203). First and foremost, an enterprise must establish a suitable strategic plan. Its products and services, respectively, must be competitive and create a demand among potential customers (Gressle 1996; Stern, Shiely, and Ross 2001).

According to Alfred CHANDLER's famous phrase "structure follows strategy" (1969), the organizational form of the company must be adapted to the strategy in a subsequent step. Only with an appropriate structure will it be possible to put what has been conceived by the executive team into action (Stern, Shiely, and Ross 2001).

### 3.4.2. Substantial need of resources

One potential drawback that may discourage managers from implementing EVA is the need for considerable financial and human resources required for its introduction. Apart from apparent costs for the design and implementation, including an appropriate IT infrastructure and possibly support from consultants, a lot of training is required to communicate the functionality and benefits of the new metric (Lovata and Costigan 2002).

Furthermore, EVA entails a lot of administration in daily business. In order to be able to reflect economic reality, many inputs have to be adjusted and calculated additionally to available accounting measures (Lovata and Costigan 2002; Young and O'Byrne 2000).

As SMEs are usually characterized by a lack of financial and human resources, the costs of an EVA system constitute a significant barrier for its introduction. Even though its benefits may outweigh the expenditure in the long run, managers may be reluctant to shoulder such a large financial burden (Lovata and Costigan 2002).

### 3.4.3. Shortcomings of Economic Value Added as a measure of performance

Besides the aforementioned limitations of EVA, several shortcomings have been identified with regard to its accuracy and meaningfulness, including:

- Distortion of EVA: Despite the wide range of prevalent adjustments, EVA is argued to be highly contingent on traditional accounting measures, resulting in equally distorted values. In order to minimize these negative effects, it is therefore recommended to rely on EVA changes rather than EVA itself (Damodaran 1999; Gressle 1996).
- Promoting short-term thinking: A company's value is composed of the current value of its assets and its inherent growth potential. As argued by Aswath DAMODARAN (1999, 49), *"managers may trade off the economic value added from future growth for higher economic value added from assets in place"*. Such an approach may increase present bonuses at the expense of future shareholder value (Damodaran 1999; Gressle 1996). While this argumentation may be correct with regard to usual compensation plans, it is argued that long-term orientation can be achieved by using a modern EVA compensation plan with a bonus bank. Such a bonus bank partly withholds a certain year's bonus and its payout becomes subject to the performance in subsequent years (Young and O'Byrne 2000). Moreover, the incentive to focus on short-term profits is supposed to be smaller for owner-managers of SMEs who are highly concerned about their company's future.
- Determinants of EVA's development: Even though traditional accounting measures suffer from the same deficiency, it may be sometimes difficult to assess whether managers or external market developments are the drivers of EVA increases and decreases, respectively. While this issue may cause problems in setting appropriate targets for managers and employees, its negative effects are mitigated by the aforementioned bonus bank as part of an EVA compensation plan (Stern, Shiely, and Ross 2001). The design of such an EVA bonus plan will be discussed in chapter 4.4.4.

After having defined the concept of EVA and discussed its major benefits and limitations, the groundwork has been laid for the central topic of this paper. The next chapter will turn to the implementation of EVA in SMEs and highlight important aspects to consider when designing and introducing this particular PMMS.

## 4. IMPLEMENTING ECONOMIC VALUE ADDED

### 4.1 Implementation process

As pointed out by a former consultant, implementing EVA in a company “is more than just putting one additional row in the income statement. It is of course some kind of change process which should be given some management effort. However, if right actions are taken straight from the beginning, then implementing EVA should be one of the easiest change processes that a company goes through” (Mäkeläinen 1998).

Even though such a process will be highly company-specific, a suggested approach consists of the following four steps:

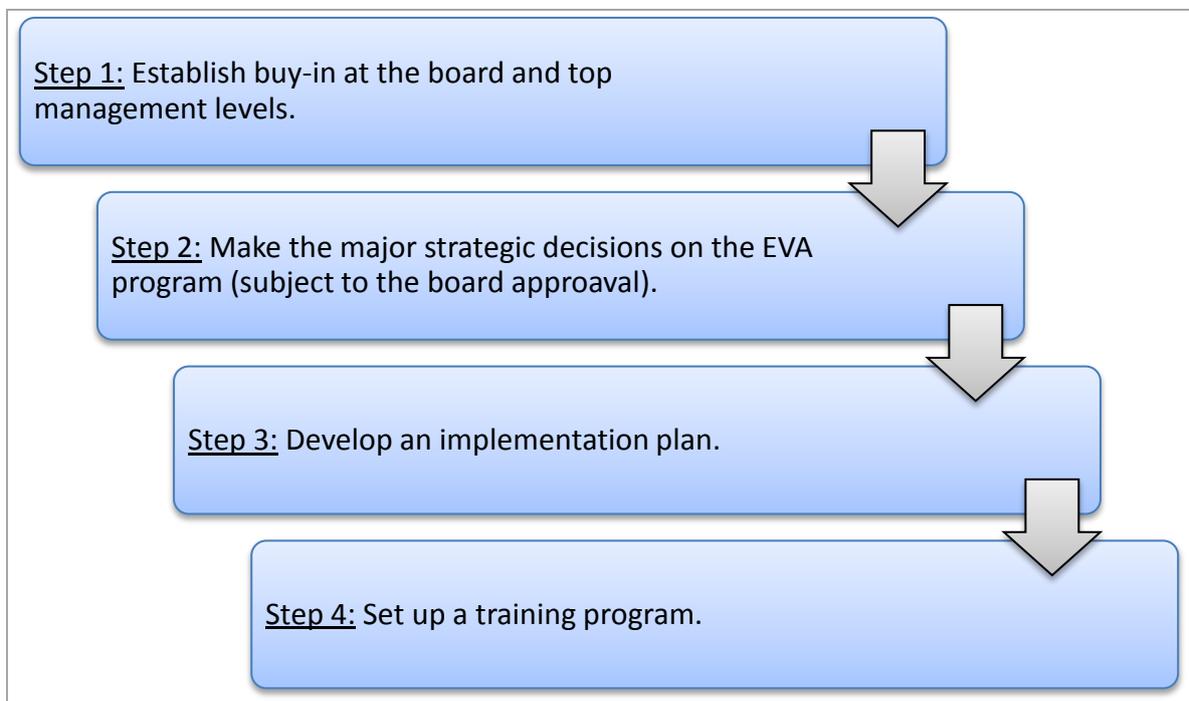


Figure 9: Basic steps in implementing EVA (Young and O’Byrne 2000, 88)

In order to assure a smooth and efficient course of action, several rules have been suggested in the literature. The four most important ones are:

- „top management support;
- everybody on board;
- clear explicit objectives;
- time framed project management” (Hudson, Smart, and Bourne 2001, 1100).

These principles will be touched on during the subsequent discussion of the four-step implementation process.

## 4.2 Step 0: Initial considerations

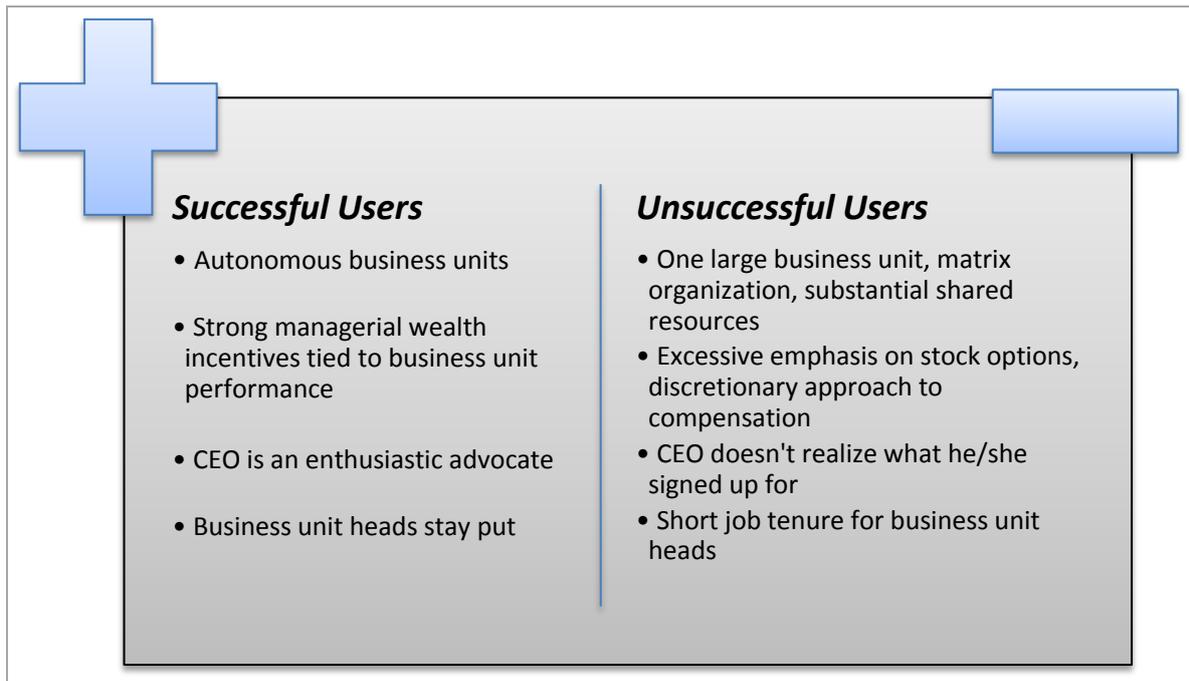
### 4.2.1. Prerequisites

Before delving into the first processing step, it should be pointed out that there are several preconditions with regard to such an endeavour, including:

- Viable strategy with suitable structure: As has been discussed in Chapter 3.4.1, EVA is not a remedy for any kind of business problem. Providing a company has a promising strategic plan and an appropriate organizational design, a PMMS will be able to increase performance and create value (Gressle 1996; Stern, Shiely, and Ross 2001).
- Provision of financial measures: EVA is a PMMS that is dependent on accounting figures that can typically be found on a balance sheet and a profit and loss statement. The provision of financial information based on these reports is an indispensable condition for the introduction of EVA (Stern, Shiely, and Ross 2001).
- Understanding EVA: Apart from knowing what it stand for and how it works, decision makers are strongly advised to consider whether EVA's implementation will in fact increase performance and how it will affect a company's daily business. Managers should be aware of shortcomings of the current PMMS and identify potential for improvement (Gressle 1996; Hudson, Smart, and Bourne 2001).

### 4.2.2. When Economic Value Added works best

Whereas the aforementioned prerequisites are regarded as indispensable, there are several firm characteristics that have been found to favour or to speak against the introduction of EVA, respectively. The major dimensions are displayed in Figure 10:



**Figure 10: Profiles of successful and unsuccessful EVA users (Young and O'Byrne 2000, 92)**

According to this enumeration, EVA is supposed to work better in companies with clearly regulated responsibilities and little fluctuation of managers. As discussed thoroughly in the next subchapter, it can make a big difference whether the CEO is actually convinced of EVA or whether he/she pursues different objectives with its implementation (Young and O'Byrne 2000).

### 4.3 Step 1: Getting top management's commitment

The request to apply EVA in a company is usually put forward by the controlling department or the chief financial officer (CFO). While the CFO is likely to be responsible for the implementation, the entire top management and the chief executive officer (CEO) in particular, are required to be totally committed to its introduction. Being committed to this concept entails two important traits:

- Being aware that traditional accounting measures do not properly reflect economic reality and can lead to wrong decisions with regard to any value creation effort.
- Knowing that the introduction of EVA requires substantial human and financial resources in order to achieve a common understanding among all managers and employees (Gressle 1996; Young and O'Byrne 2000).

As the entire workforce must be won over, the CEO *"must not only identify value creation as the mission of the company, but must seize every opportunity – the annual sales meeting, a monthly operations review, or the annual shareholders' meeting – to preach the benefits of EVA"* (Stern, Shiely, and Ross 2001, 205–206). Unless he/she is fully convinced of this endeavour and manages to communicate it credibly, EVA will be perceived as a short-time management trend (Dierks and Patel 1997; Young and O'Byrne 2000).

The senior executives' commitment is required throughout the entire implementation process. Regardless of the scope of implementation and the project's duration, it is crucial that managers behave like role models and provide employees with guidance and support from the beginning to the end (Spero 1997; Stern, Shiely, and Ross 2001).

Even though this issue will be outlined in more detail in Chapter 4.6.1, it should be pointed out that the EVA system and its communication should be as simple as possible. Every employee should be able to link their own decisions to the ultimate objective of value creation. It is therefore suggested that the CEO advertises EVA as a new strategic and not a solely financial approach. Such a course of action is equally beneficial for employees from accounting and controlling departments, as they are prone to get lost in their numerical world instead of understanding EVA's general messages (Spero 1997; Stern, Shiely, and Ross 2001).

## 4.4 Step 2: Taking the major decisions on Economic Value Added's design

Before a company is able to actually use a PMMS based on EVA, a lot of preparatory work is necessary. In designing an EVA system, it is essential to tailor both the concept and the course of action to the unique characteristics of the company. As a lot of insightful operational knowledge is present at different levels of the company, top management must seek input from the entire organization instead of imposing a system based on their top-level perspective (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

Throughout the present chapter, the most important design issues of an EVA system will be discussed.

### 4.4.1. The scope of implementation

The introduction of a PMMS based on EVA is likely to affect the following four dimensions under management's control:

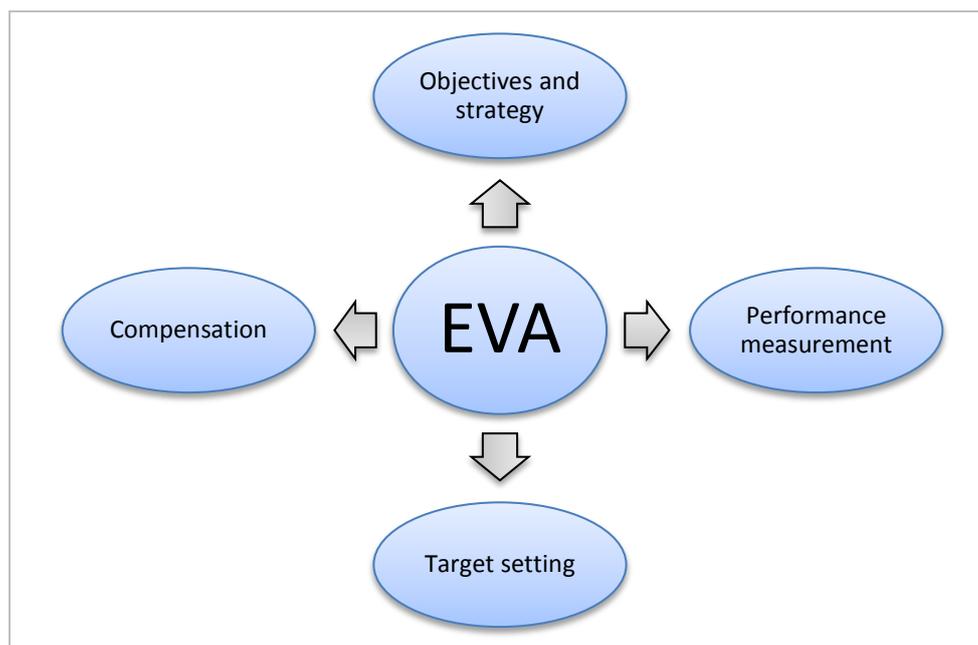


Figure 11: Affected dimensions by EVA (Malmi and Ikäheimo 2003, 247)

As suggested by a study conducted by Teemu MALMI and Seppo IKÄHEIMO (2003), the degree of adoption varies considerably among different companies. Whereas some implement it only superficially without any consequences on the four aforementioned dimensions, others adopt it thoroughly and experience substantial changes with regard to decision making and management control (Malmi and Ikäheimo 2003).

In order to unfold its full potential, it is however indispensable to introduce both a PMMS and an appropriate compensation system based on EVA. Using a PMMS without any incentives will neither change an individual's behaviour, nor will it increase a company's performance (Stern, Shiely, and Ross 2001).

Another decision related to the scope of implementation concerns the organizational levels EVA should be applied to. In accordance with the former CFO of Pitney-Bowes, it is necessary *"to push EVA all the way down to the individual operating units to get people's attention and produce results"* (Chew 1998, 251).

Most firms initially introduce the EVA concept at the top management level. In succession, some companies extend it to lower levels. Even though the impact of their decisions is likely to be comparatively small, employees on the shop floor possess a great deal of operational knowledge that shapes the output and quality of a company's products. If the workforce at these levels can be familiarized with EVA, its effectiveness is likely to be significantly increased (Stern, Shiely, and Ross 2001).

#### **4.4.2. Economic Value Added centres**

In the process of determining the scope of EVA's implementation, it may be useful to define so called EVA centres. They can principally be compared to investment centres. In addition to their responsibility for revenues and expenses, managers also have power over investment decisions. As all of these factors enter the calculation of EVA, managers can thus be held responsible for EVA in their division (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

As the decision power of divisional managers can range from making proposals, implementing and monitoring forwarded decisions, to actually having full control (Fama and Jensen 1983), it must be carefully analysed when it is meaningful to establish an EVA centre. This decision will require the consideration of the independence, the decision rights, the knowledge and the size of the division (Stern, Shiely, and Ross 2001).

EVA centres enable companies to better assess performance of individual divisions and business units. As the sum of lower level EVAs is equal to the EVA figure of the entire firm (see Figure 12), top management is provided with data to determine the performance of single business parts. While it is beneficial to calculate EVA at as many levels as possible, this approach may suffer from two problems, namely transfer pricing and asset sharing (McLaren 2005; Young 1997).

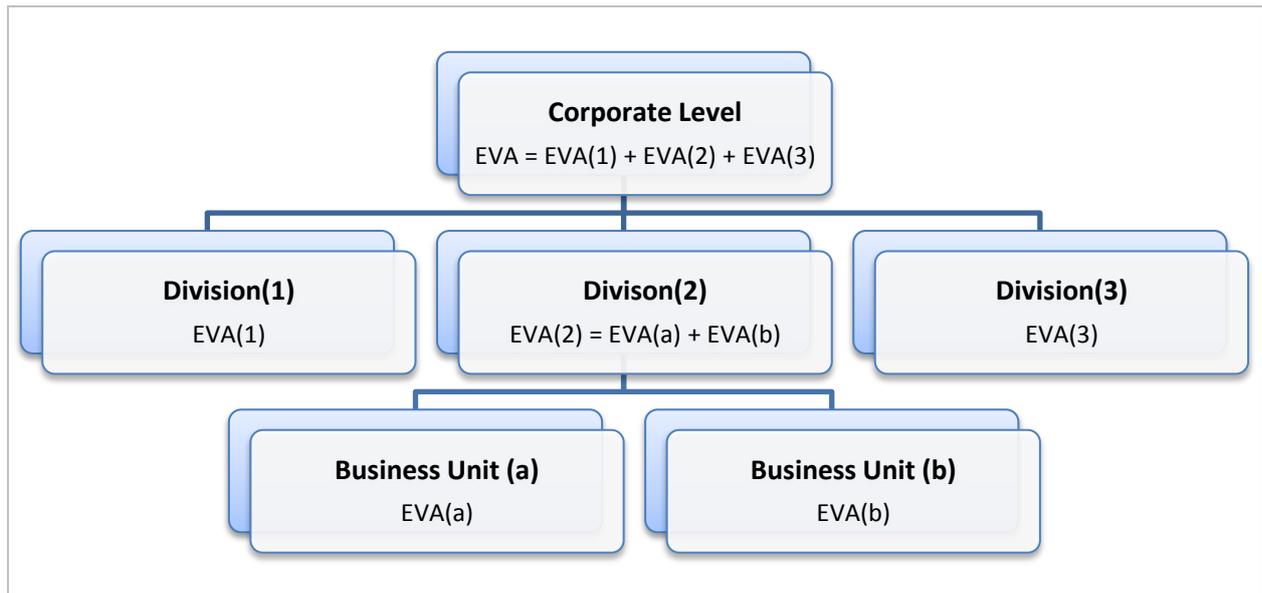


Figure 12: EVA centres at different levels (McLaren 2005, 6)

The terms refer to synergy and controllability problems of divisional interdependence. In detail, it describes allocation problems if assets and services are collectively used by two or more units. Consequently, EVA values may be considerably inaccurate, leading to tough negotiations between divisions and a loss of EVA's motivational power (Stern, Shiely, and Ross 2001; Young 1997; Young and O'Byrne 2000).

Whereas the developers of EVA do not provide any recommendations, several approaches have been proposed to account for these difficulties:

- Combining divisions: If there is substantial interdependence between units, it may help to combine them. As a result, the interests of all involved parties could be aligned and each member would be incentivized to create value for the entire unit.
- Mutual incentives: If the bonus of group A's managers depend to some extent on the EVA of group B, they will be less inclined to expropriate their counterparts. This approach can be costly and is not guaranteed to solve the initial problem perfectly.
- Value drivers: They are supposed to be a widely used option in avoiding problems associated with transfer pricing and asset sharing (Young and O'Byrne 2000).

While several different approaches have been proposed to account for the difficulties caused by transfer pricing, they are typically costly and resource-intensive. Additionally, they do not actually solve the underlying problem, but only mitigate it to some extent (Young and O'Byrne 2000).

### 4.4.3. Value drivers

EVA is an appropriate measure to gauge the performance of senior executives who have the power to influence all inputs of the EVA formula. However, it may be an inaccurate figure in assessing employees' and managers' performance at lower levels in the hierarchy. In order to overcome this shortcoming, companies are advised to link performance to individual drivers that influence a company's EVA and are attributable to divisions and workers (Young and O'Byrne 2000).

Value drivers can be divided into financial and nonfinancial ones. Whereas the former dimension includes measures such as working capital, the latter focuses on indicators such as customer satisfaction or production efficiency. While value drivers will be highly dependent on a firm's business and its chosen strategy, they are usually reflected in several key perspectives of a business. A framework that has unintentionally *"proven to be highly complementary to EVA"* (Young and O'Byrne 2000, 291) is the balanced scorecard introduced by Robert S. KAPLAN and David P. NORTON (1992). It shows that even though value creation is the ultimate objective, it can only be achieved by focusing on four interrelated dimensions (see Figure 13):

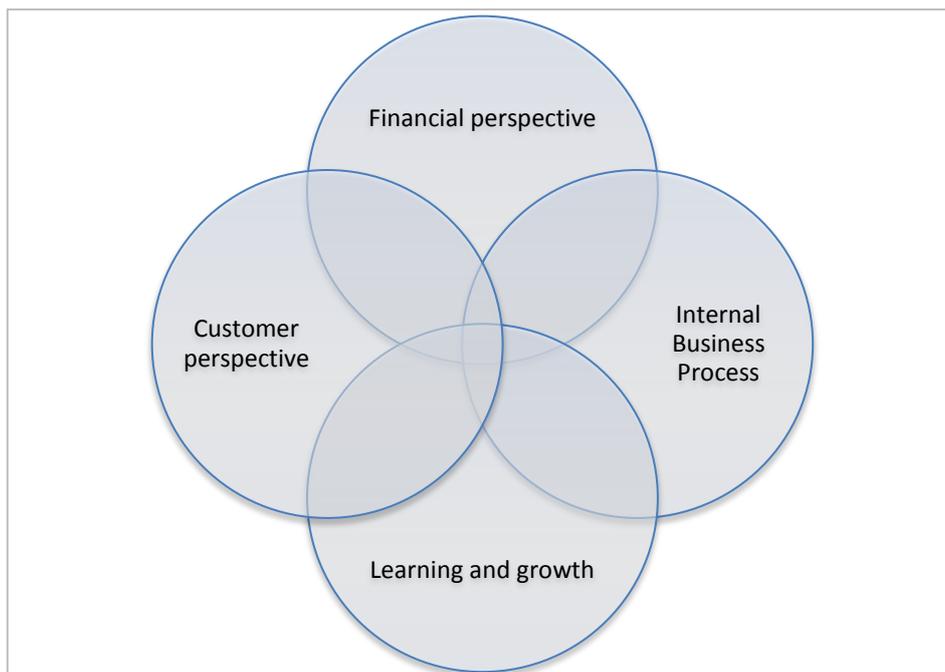


Figure 13: Value drivers derived from the balanced scorecard (Kaplan and Norton 1992, 72)

It is important to point out that these value drivers must be consistent with a company's strategy and be correlated with EVA as the ultimate goal of value creation (Young and O'Byrne 2000).

### 4.4.4. Economic Value Added bonus plan

It is generally believed that nothing *"is more important to a successful EVA implementation than a carefully designed EVA incentive program"* (Stern, Shiely, and Ross 2001, 147). Implementing EVA is *"largely pointless unless management pay is tied to it in a systematic way"* (Young and O'Byrne 2000,

90). Due to its high relevance, it is crucial that senior executives and especially the CEO continuously take part in its design (Young and O’Byrne 2000).

The two aforementioned statements express the importance of proper compensation schemes for managers as well as employees at all organizational levels in a company. However, it is not only the use of an EVA bonus plan, but also its characteristics that make it advantageous over traditional bonus plans.

In order to be able to understand the virtue of a compensation scheme based on EVA, its traditional counterpart’s weaknesses will be initially presented.

Besides being based on flawed measures such as ROI or EBIT, its objectives are negotiated annually for the upcoming period. Consequently, these goals are short-term oriented and desist from focusing on the company’s durable development. Moreover, a lot of time and resources are wasted on the bargaining process. It can easily be seen that such incentives may lead to serious competitive problems in the long run (Ehrbar 1999; Stern, Shiely, and Ross 2001).

A traditional non-EVA bonus plan is shown in Figure 14. A certain level of performance must be reached in order to receive a bonus at all. Beyond a certain limit, the bonus is capped and cannot be further increased. Outside the upper and lower thresholds, managers are literally incentivized to forgo any performance-increasing efforts in order to defer value-enhancing profits and save up bonus potential for subsequent years (Ehrbar 1999; Stewart III 1991; Young 1997).

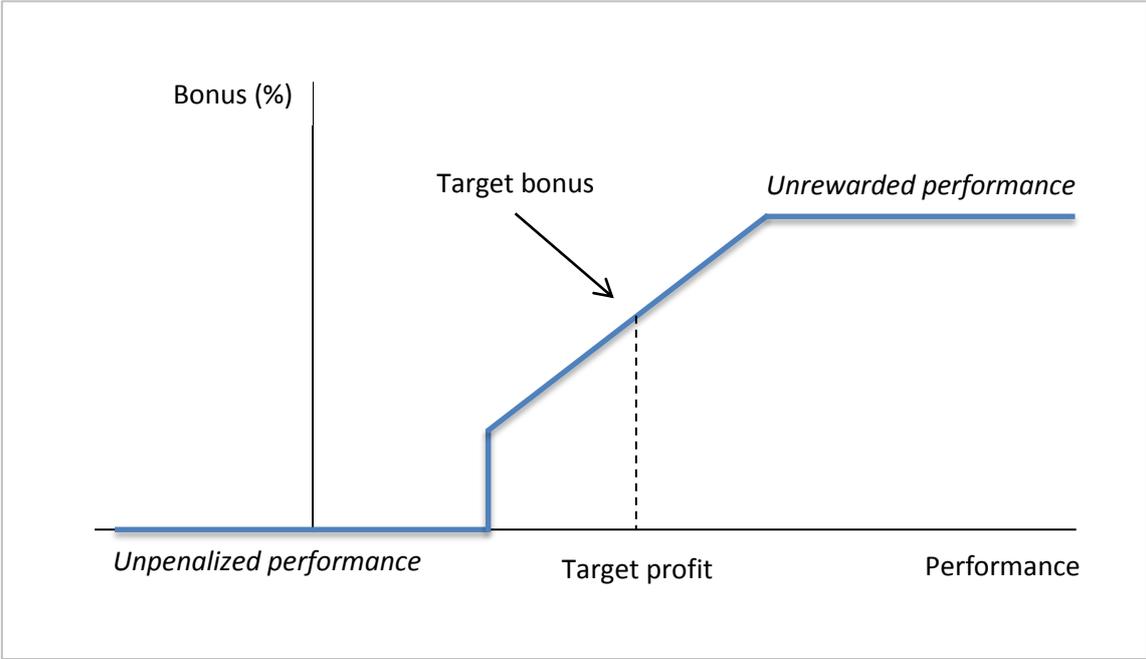


Figure 14: Traditional bonus plan (Stewart III 1991, 234; Young and O’Byrne 2000, 132)

The EVA bonus plan overcomes these deficiencies by putting “managers on the same footing as shareholders, rewarding them for actions that increase shareholder returns and penalizing them for

*failure*” (Stern, Shiely, and Ross 2001, 24). In response to its short-term orientation and the opportunism involved in the negotiation of performance goals, the EVA compensation scheme intends to compute EVA objectives beforehand for a time frame of three to five years (Young and O’Byrne 2000).

The earned bonus is calculated using the following formula:

$$\text{Earned Bonus} = \text{target bonus} + y\% (\Delta\text{EVA} - \text{EI})$$

Where,

$\Delta\text{EVA}$  = change in EVA

EI = expected EVA improvement

y = certain percentage value

**Figure 15: Calculating the bonus earned (Young and O’Byrne 2000, 138)**

The target bonus is earned if the expected EVA improvement based on market expectations is exactly matched. This corresponds to the situation of shareholders earning the required rate of return corresponding to the company’s cost of capital. If managers succeed in outweighing the expectations, they will be able to increase their bonus as a reward for creating additional value for shareholders. If they fall short of their target performance, they will earn proportionately less or potentially nothing at all (Stern, Shiely, and Ross 2001; Young and O’Byrne 2000).

The use of EVA improvement can be explained by its higher motivational effect in varying circumstances as compared to EVA itself. By using EVA, managers of companies with large EVAs do not fear decreases as their bonus is guaranteed to some extent. At the same time, they are not incentivized to increase performance as their additional rewards will be comparatively small. There will not be any additional motivation for managers whose companies produce strongly negative EVAs either. Small improvements would not result in a bonus and large improvements are usually unrealistic to be achieved. Focusing on EVA improvements remedies this problem (Stern, Stewart III, and Chew 1997).

The graphical illustration of the EVA bonus plan is provided in Figure 16. As symbolized by the black rising line representing the bonus earned, the first difference to traditional bonus plans can be recognized. The bonus earned is not capped and unlimited in both directions. Consequently, managers are incentivized to increase performance and create value for owners in every state of the world (Ehrbar 1999; Young 1997; Young and O’Byrne 2000).

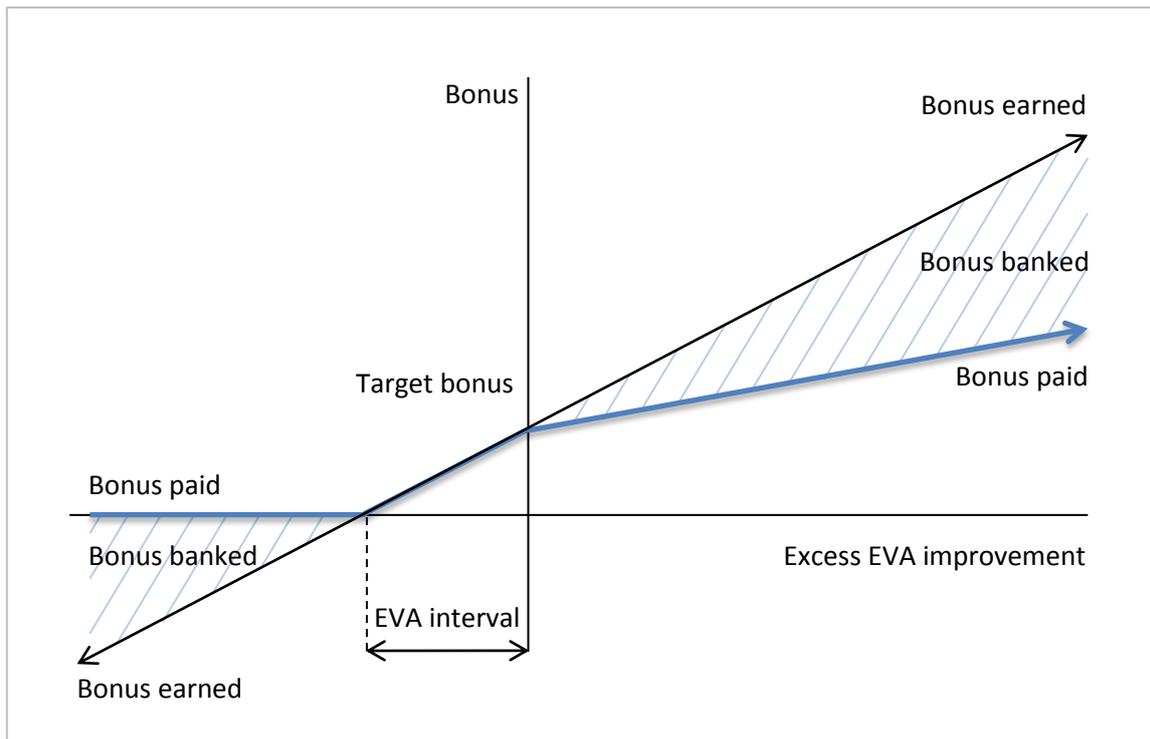


Figure 16: EVA bonus plan (Young and O'Byrne 2000, 307)

However, as represented by the bold blue line, the bonus paid to managers differs significantly to the aforementioned bonus earned. Each year, the bonus earned is virtually deposited in a so called bonus bank. Usually, the entire amount of the bonus bank up to the value of the target bonus is paid out. Beyond this, only 33 per cent is distributed to the manager. In the case of a negative bank balance, nothing is paid out (Young and O'Byrne 2000).

The bonus bank's concept is required to ensure the orientation toward durable performance. It incentivizes managers to focus on long-term value creation, as the payout of current excess bonuses relies largely on future performance. Moreover, it is recommended to introduce cancellation clauses that lead to a loss of the entire bonus bank if employees resign (Dierks and Patel 1997; Stern, Shiely, and Ross 2001).

For managers at lower organizational levels, the division's EVA should determine the major part of the bonus payment. In addition, it may be useful to base a certain ratio of about 25 per cent on the company's EVA in order to encourage collaboration across divisional borders. Shop-floor employees' compensation schemes are advised to be mainly based on value drivers that directly contribute to an increase in EVA (Stern, Shiely, and Ross 2001).

In the process of designing and implementing EVA, it is equally important to define set values for the calculation of bonuses. In contrast to traditional bonus plans, all values are determined based on market expectations and not by negotiations. An initial calibration may look as follows:

- *“The target bonus is based on peer company compensation levels.*
- *Expected EVA improvement targets are chosen that, if met, will provide shareholders with a cost-of-capital return on the market value of their investment.*
- *An EVA interval is used to define the amount of EVA shortfall that makes the investor return equal to zero and therefore leads to a zero bonus for the manager” (Young and O’Byrne 2000, 307).*

Apart from defining a bonus plan’s main factors, managers must decide on the proportion of incentive compensation of the total salary. The target bonus usually corresponds to the percentage of an employee’s remuneration, ranging from 10 per cent for shop-floor workers, up to 100 per cent for senior executives (Young and O’Byrne 2000).

With regard to SMEs that are usually private companies whose equity is not traded publically, a different approach must be used to determine all required values. However, there are no approaches suggested in the literature.

#### **4.4.5. Calculating the cost of capital**

The next step in designing an EVA system is a proper computation of the EVA formula’s variables (see Figure 6). Managers have to decide how accounting measures will be adjusted and how to set the cost of capital. While the following paragraphs deal with the latter issue, the recommended adjustments to operating income and invested capital will be discussed subsequently.

The cost of capital represents the lower limit of return for the provision of funds by shareholders and creditors. It must be earned by the company in order to compensate investors for the risks taken. It should be used as follows:

1. *“As the discount rate to bring projected free cash flows (or EVAs) to their present value*
2. *As the hurdle rate for accepting new projects*
3. *As the capital charge rate in the calculation of economic value added*
4. *As the benchmark for assessing rates of return on capital employed” (Stewart III 1991, 431).*

As the cost of capital is likely to be applied to numerous corporate decisions and calculations at different organizational levels, it must be understood by all managers. A common problem is to communicate that it consists of both the cost of debt and the cost of equity. It is crucial to convey that capital costs do not solely correspond to the interest payments made to creditors. Additionally, they include opportunity costs for the equity provided by owners and shareholder, respectively. These costs are based on future expectations and are not equivalent to historical values (Stewart III 1991; Young and O’Byrne 2000).

The calculation of the cost of capital is as follows:

$$WACC = \frac{D}{D + E} r_D (1 - T) + \frac{E}{D + E} r_E$$

Where,

WACC = weighted average cost of capital (also referred to as cost of capital)

D = Market value of debt

E = Market value of equity

$r_D$  = cost of debt

$r_E$  = cost of equity

T = marginal tax rate

Figure 17: Calculating the WACC (Stewart III 1991, 434)

The cost of debt represents the interest companies would have to pay for new long-term funds provided by creditors, subject to current market conditions. As private firms such as SMEs do not issue bonds, the cost of debt can be either approximated by the yield to maturity of similar firms' public debt, or by the future-oriented interest rate based on a company's rating. The fact that debt is tax-deductible is equally considered in the aforementioned formula (Stewart III 1991; Young and O'Byrne 2000).

Whereas it is straightforward to gauge the cost of debt, it is far more demanding to derive the cost of equity. As it is not directly observable, several models have been proposed to convert shareholders' return requirements into specific numerical rates. The most common approach was established independently by John LINTNER and William SHARPE and is referred to as capital asset pricing model (Young and O'Byrne 2000). According to the model (see Figure 18), the expected rate of return on a risky asset is equal to the sum of the return on a riskless investment and the risk premium adjusted to the asset's riskiness, referred to as beta (Sharpe 1964). Whereas the riskless return and the risk premium are approximated by historical values, the only unknown is the beta.

$$E(r) = r_f + \beta [E(r_m) - r_f]$$

Where,

$E(r)$  = expected return on a risky asset (in our case the cost of equity)

$r_f$  = risk-free rate of return

$E(r_m)$  = expected return on the market

$\beta$  = beta as a measure of the asset's riskiness (in our case the company's riskiness)

Figure 18: CAPM (Young and O'Byrne 2000, 165)

This beta can be computed for publicly traded firms by using their historical stock data. However, in order to be able to determine the beta of private firms and individual divisions, respectively, another approach must be applied.

The starting point of the so called operating approach, proposed by Stern Stewart & Co., is a business risk factor (BRF), which represents the average operating risk of a certain industry. This business consultancy has determined BRFs for 42 industries by examining the beta of more than 1,000 publicly traded North American firms and excluding their inherent financial risk (see Annex IX.i) (Stewart III 1991).

In the subsequent step, an industry's BRF is adjusted for differences among companies of the same industry. The dimensions of operating risk, strategic risk, asset management as well as size and diversity have shown to be major drivers of a firm's beta. Based on a predetermined valuation and weighting process, a company's variances with respect to the four dimensions are incorporated into its individual BRF. Its value corresponds to the beta of the CAPM formula (see Figure 18) and allows the calculation of the cost of equity (Stewart III 1991).

The presented operating approach is particularly useful for private companies such as SMEs and provides an accurate estimate of a company's beta. However, it is crucial to also utilize industry data that reflects the current market environment and a country's industrial nature.

#### **4.4.6. Using adjustments to operating income and invested capital**

As argued in Chapter 3.3.1, there are several shortcomings associated with today's accounting rules. Among other things, they often require certain types of outlays to be expensed in the current year instead of capitalizing them in the balance sheet and writing them off over an appropriate period of time. This leads to the undervaluation of invested capital and thus capital charges. Moreover, it results in distortions of operating profits (Stern, Shiely, and Ross 2001; Young 1997).

In response to this and other weaknesses of accounting based figures, Stern Stewart & Co. has proposed more than 150 applicable adjustments. Even though they are likely to enhance the accuracy and economic significance of accounting measures, they are equally prone to result in increased complexity and additional effort (Young and O'Byrne 2000).

It is generally recommended to use less than 15 adjustments. However, as experience has taught firms that most adjustments have negligible impact on operating profits, the majority of companies applies as little as four, or even less (Ehrbar 1999; Young and O'Byrne 2000).

While such statistics may give EVA adopters a broad idea of the amount of modifications to make, they must focus on customizing the system to their strategy, their organizational structure and their accounting policies. With this in mind, each company must seek to optimize the balance between accuracy and simplicity (Ehrbar 1999). The minimum criteria with regard to the use of adjustments are:

1. *“the amounts are significant,*
2. *the required information is readily available, and*
3. *nonfinancial professionals can understand them”* (Young 1997, 338).

As soon as the particular adjustments to use have been determined, there should be no further modifications to the system in order to prohibit any kind of manipulations (Ehrbar 1999).

After having discussed the major aspects in terms of their selection, some of the most important adjustments will be outlined subsequently:

- Research and development (R&D): Companies profit from investments into R&D over several years. However, according to accounting principles, these outlays are expensed in the year incurred. In order to account for their long-term value, they should be capitalized and amortized over an appropriate period of time. This period depends on how long firms can benefit from such expenditures and is suggested to be equal to five years on average (Dierks and Patel 1997; Ehrbar 1999; Young and O’Byrne 2000). Just as R&D outlays, it is economically reasonable to capitalize marketing expenses and amortize them over an appropriate time horizon (Ehrbar 1999).
- LIFO reserves: The use of the last-in first-out (LIFO) method of managing inventory has substantial taxation benefits in periods of growing prices. While this approach is obviously beneficial for companies, it may result in inaccurate accounting figures. Whereas inventory is prone to be undervalued, operating profits may be overvalued. In the process of calculating EVA, an individual balance sheet and profit and loss statement based on the first-in first-out (FIFO) technique should be produced in order to account for the aforementioned inaccuracies (Dierks and Patel 1997; Young and O’Byrne 2000).
- Deferred tax: Deferred taxes occur *“whenever companies have timing differences between their taxable income and the book income”* (Young 1997, 337). This inconsistency can be mainly but not solely attributed to accelerated depreciation allowances for tax purposes, leading to higher book than tax profits and a deferred tax liability. In order to account only for the real, usually lower tax payments of a year, any increase in deferred taxes should be added back to operating income, and vice versa (Ehrbar 1999; Young 1997).
- Provisions: The underlying purpose of provisions is to account and be prepared for expected future expenses. However, they are often used to smooth profits. In order to reduce taxes, companies increase provisions in highly profitable years. When calculating EVA, it is recommended to adjust operating profits by adding any positive variation in provisions and subtracting any negative one (Young 1997; Young and O’Byrne 2000).

- Goodwill: *“When companies acquire other companies for a price exceeding the fair market value of all identifiable assets net of liabilities, the result is goodwill”* (Young 1997, 338). Regardless of a country’s accounting rules with respect to goodwill, any write-offs must be added back to the balance sheet when computing EVA. Otherwise, the invested capital and thus the capital charge would be lowered, while overvaluing EVA (Ehrbar 1999; Young 1997).
- Operating leases: The concept of operating leases allows companies to treat their outlays as expenses without including the assets on the balance sheet. Thereby, the invested capital and thus the capital charge as well as operating profits are understated. In order to counteract this accounting deficiency, operating leases must be treated as if they were capitalized when calculating EVA (Young 1997; Young and O’Byrne 2000).
- Depreciation: Using straight-line depreciation for long-lasting assets may incentivize managers to hesitate to replace old assets, which are prone to errors, with new, more efficient ones. This effect occurs because the EVA capital charge decreases in conjunction with the asset’s net book value. It is therefore economically reasonable to use sinking-fund depreciation for such assets. The write-offs are fairly small in early years and accelerate until the end. Thereby, the EVA capital charge remains constant (Ehrbar 1999; Young and O’Byrne 2000).

Adjustments are likely to adjust accounting measures to better reflect economic reality. However, as mentioned before, it is recommended to use only adjustments that make a real difference and are understood by the workforce. By using as little as six adjustments, approximately 80 per cent of their potential advantages can be exploited (Gupta and MacDonald 2000).

How to calculate and adjust the basic variables for the EVA calculation is the final step in designing a PMMS based on EVA. After having taken the major decisions on the design, the next major step is to implement the system accordingly. It will be discussed in the next subchapter.

## 4.5 Step 3: Translating the plan into action

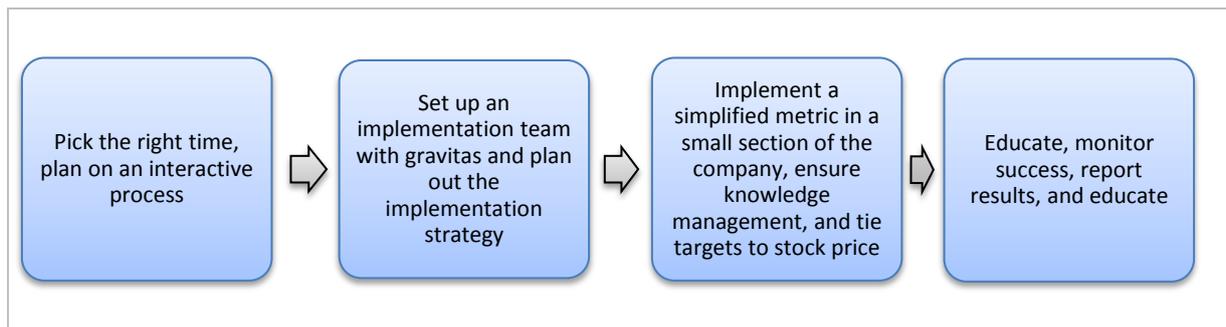
It is not without good reason, that *“a coherent implementation plan is the single most important prerequisite to becoming a successful EVA company”* (Gressle 1996, 28). Even the best design is nothing more than a stack of paper if it isn't properly employed. The success of the implementation is therefore measured against whether managers throughout the entire company understand how EVA can be calculated, how its key drivers can be shaped and how current and future EVAs can be maximized. Although being separated in this paper, EVA's introduction comprises both the EVA system's implementation per se as well as its communication and training (Gressle 1996; Gupta and MacDonald 2000).

The former step is mainly concerned with the subsequent questions, which are contingent on a company's unique characteristics:

- *“Should you start with the smallest division (to get the bugs out) or the largest division (to get everyone's attention)?”*
- *Should EVA be tied to management incentive compensation in the first year or not until later?*
- *Should EVA replace all other measures such as NPV, or should it be used with other measures?”* (Gressle 1996, 30)

As has been pointed out in Chapter 4.4.4, it is meaningless to implement EVA without an appropriate incentive reward system. Therefore, compensation should be tied to the new metric as quickly as possible. Moreover, proponents of EVA argue against the use of other financial metrics with regard to bonus compensation. If traditional accounting measures such as operating income provided the same incentives for value creation as EVA, it would not be necessary to introduce a new PMMS based on EVA. As these figures promote different and often opposing behaviour, it should be therefore refrained from using other measures (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

In terms of the first aforementioned question, it can be observed that the majority of companies start implementing EVA at the top management level and continue to push it gradually down the organization (Stern, Shiely, and Ross 2001). As proposed by Raja GUPTA and Craig MacDONALD (2000), it may be equally beneficial to introduce EVA within a small unit first. The lessons learned could be subsequently used to correct errors and convince sceptics. As displayed in Figure 19, their proposed process includes three further steps.



**Figure 19: EVA Implementation process (Gupta and MacDonald 2000, 241)**

The first instruction suggests introducing EVA in conjunction with a large-scale restructuring project in order to allow activities to reinforce each other. Employees are usually more willing to undergo change after a major crisis has questioned the firm's way of doing business. Having taken the decision to kick-off the project, companies must commission a person in charge who will be occupied with the employment of EVA. While working full-time on the project, this coordinator should be supported by an implementation committee. The whole team should be widely recognized within the company and have full support of the CEO (Gupta and MacDonald 2000; Stern, Shiely, and Ross 2001).

After having discussed three of the four presented steps of Figure 19, the focus will now shift to the last one. It deals with communication and education strategies in conjunction with the introduction of EVA.

## 4.6 Step 4: Getting the message out

### 4.6.1. Communicating the change

The decision to implement EVA entails much more than modifying accounting figures for measurement purposes. In fact, it is supposed to be a cultural shift that changes the way managers and all other employees think about performance and value creation. In order for a company to live by the new values, all users must understand EVA's underlying ideas (Young and O'Byrne 2000).

Any fundamental change of this sort is likely to lead to resistance. However, if *"employees are given a clear, detailed description of expected changes and the reasons they are being made, a good deal of anxiety can be blown away"* (Stern, Shiely, and Ross 2001, 107). It is therefore indispensable to be in constant contact with the entire workforce and to seize every opportunity to communicate EVA's benefits as well as its functioning (Stern, Shiely, and Ross 2001; Young and O'Byrne 2000).

As mentioned in Chapter 4.3, it is primarily the CEO's duty to win the staff over. Unless he/she is able to convey EVA's virtue credibly, EVA will not be considered as the powerful management technique it actually is (Dierks and Patel 1997; Young and O'Byrne 2000).

### 4.6.2. Training

While communication is the first step in spreading the broad concept of EVA, it will not be sufficient to establish a deeper understanding of value creation at the individual level. For this reason, an extensive training program must be set up (Stern, Shiely, and Ross 2001).

Companies consist of employees with financial and nonfinancial backgrounds who come from different hierarchical levels. While it is necessary to provide training for every future EVA user, each session should be adjusted to the group's existing knowledge and its specific needs (Spero 1997).

It is recommended to divide the training into several parts in order to avoid overburdening participants. A first session should focus on EVA's basic concept and the reasons for its implementation. A longer subsequent meeting should delve into the calculation features of EVA. In conjunction with the trainer, participants should explore possibilities to increase EVA in their own divisions. As the treatment of bonus plans linked to EVA is a rather sensitive topic, it should be discussed in a separate session (Spero 1997; Young and O'Byrne 2000).

Even though the costs for training may be substantial, it makes sense to keep it running beyond a few initial sessions. The cultural change associated with the EVA's implementation requires continuous refreshment to be durable. However, training costs can be reduced if the EVA system is kept as simple as possible and is communicated accordingly (Spero 1997; Stern, Shiely, and Ross 2001).

The information discussed in this chapter extends the heuristic model developed throughout the course of this paper (see Figure 20). The implementation process thereby connects a SME with EVA as a specific PMMS.

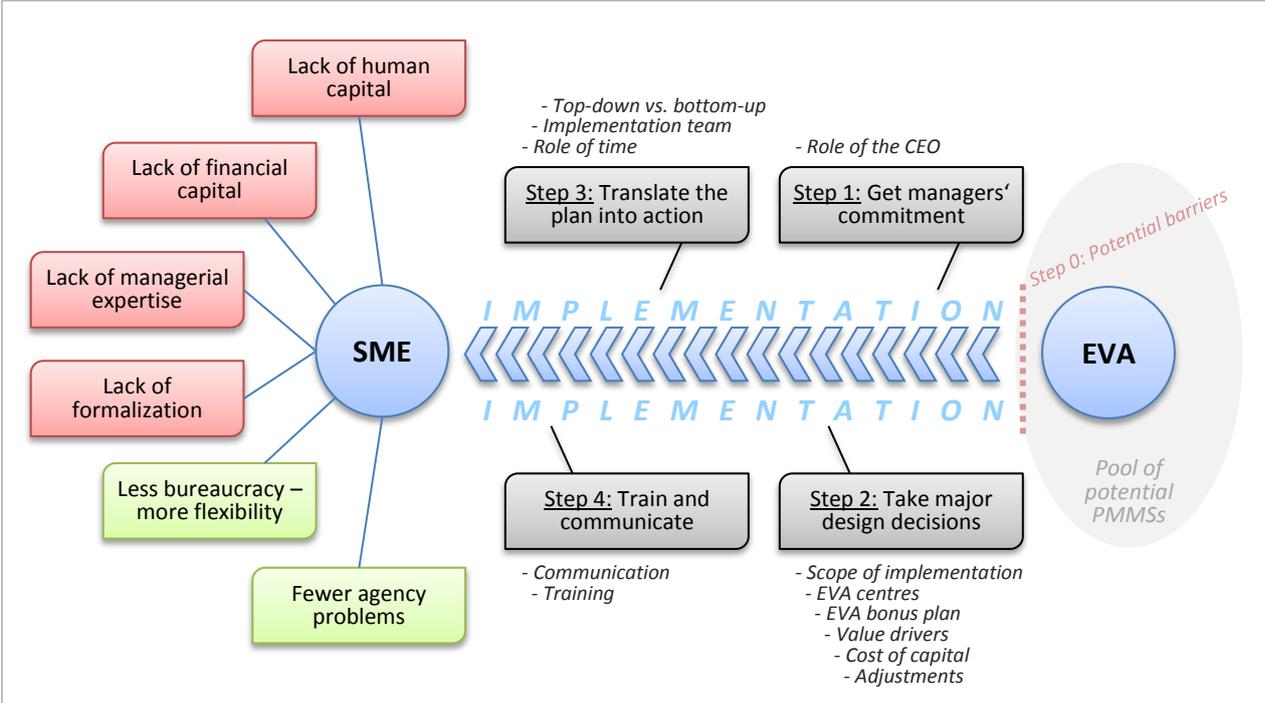


Figure 20: Heuristic model developed throughout the course of this paper – IV



## 5. METHODOLOGY OF THE EMPIRICAL STUDY

### 5.1 Qualitative social research

#### 5.1.1. Preference of qualitative social research over quantitative research

Empirical studies require the thorough examination of a certain subject. In principle, two approaches with different underlying concepts and methodologies can be distinguished, namely quantitative and qualitative research (Mayer 2008).

For the realization of quantitative research, only historical and observable data, that is quantifiable and traceable, can be used. In contrast, experience, common sense and expert knowledge are not accepted as methodological inputs (Lamnek 1993).

With regard to the paper's research question, the prerequisite of observable data is not satisfied and therefore, quantitative research can be ruled out as a methodology of choice (Mayer 2008). In concrete terms, it is not possible to investigate any EVA implementation efforts of SMEs as there are hardly any smaller companies with this PMMS. Consequently, it is neither possible to gather numerical, nor descriptive records with regard to this issue.

The method of choice is thus qualitative social research. It differs fundamentally from the above mentioned approach and will be discussed in the following subchapter.

#### 5.1.2. Characteristics of qualitative social research

Qualitative research methods are characterized by inductive reasoning. This term refers to the process of developing general hypotheses derived from single observations. The paper's final hypotheses are thus directly derived from the conducted empirical study (Mayer 2008). Although they strive for current validity, they are prone to be based on random events and false conclusions. This problem is generally solvable by the subsequent verification of derived hypotheses by means of quantitative methods (Lamnek 1993; Mayer 2008). However, such a quantitative verification cannot be carried out for the prevalent research question as quantitative data is not available.

Another issue emerging from the description of qualitative social research concerns the necessity of theoretical preparatory work. It appears as if hypotheses and results will solely arise from the empirical study. However, a qualitative approach is more than just an uncoordinated search for general theories. The following principles are supposed to define it in more detail and clarify its appropriateness for this paper:

- Fundamental theoretical knowledge: The starting point of any qualitative investigation is a detailed analysis and description of the topic in focus. Theoretical concepts and ideas form the basis of empirical studies. Accordingly it is indispensable to acquire basic knowledge

about the study's subject in order to avoid overlooking important aspects (Flick 1999; Lamnek 1995).

- Openness: Although researchers need to have a clear idea about the subject, it is crucial to remain open to new and unexpected findings. This openness is necessary in order to authentically capture the perspective of each concerned party. However, a trade-off between openness towards new insights and focus on the actual problem should be sought for the purpose of a large but not a too large amount of information (Flick 1999; Mayer 2008).
- Interpretation and generalization: Human actions and thoughts are permanently influenced by situational factors and are therefore subjective. With regard to the conducted interviews for this paper, this issue should always be kept in mind. The real significance of declarations and opinions are only accessible through a thorough and traceable interpretation. Equally, each interview's individual characteristics have to be taken into account in order to be able to generalize theories (Mayring 2002).

## 5.2 The heuristic framework as basis for qualitative research

As mentioned in the previous subchapter, it is essential to have an understanding of the treated topic. However, the exact comprehension is expected to vary between different researchers as it is shaped by their educational path as well as their professional and social environment. Due to the subjectivity of this understanding, it is required to envisage and represent the researcher’s knowledge with the aim of allowing readers to comprehend and verify the relevance of the approach as well as to lay out the groundwork for future research. The underlying objective of an intersubjectively observable theoretical process can be achieved by the use of a so called heuristic framework (Kubicek 1977).

The heuristic framework developed throughout the course of this paper is represented in Figure 21. It can be understood as the author’s understanding and knowledge before having started the empirical investigation. Moreover, it serves as guidance by illustrating the mutual relations of objects and identified scientific issues to be further examined within the scope of the empirical study (Kubicek 1977).

A feature of heuristic frameworks is their specification throughout the process of acquiring knowledge. During the course of this paper the model has been gradually extended, resulting in its temporary form. This detailing process has been explained in detail in the particular chapters and should be referenced in the case of misunderstandings (see Chapter 2.1.2, Chapter 3.4.3 and Chapter 4.6.2).

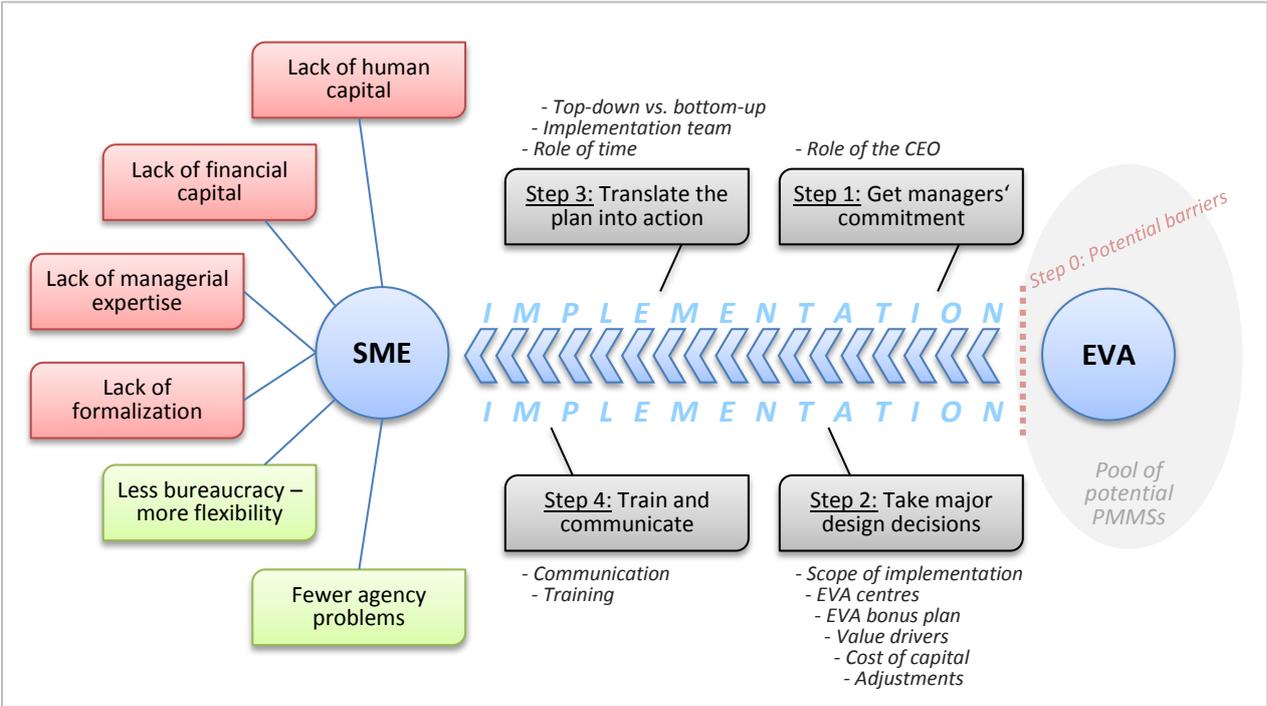


Figure 21: Heuristic model developed throughout the course of this paper - V

Heuristic frameworks are furthermore characterized by the deduction of questions instead of hypotheses (Kubicek 1977). Likewise, qualitative research does not aim at establishing and subsequently verifying hypotheses but rather using questions as a starting point (Mayer 2008). In conjunction with the conceptualized heuristic framework, questions arise with regard to issues associated with each implementation step in consideration of the unique characteristics of SMEs.

These questions serve as the starting point for the empirical study as well as for the development of the subsequently described empirical approach. They provide a good trade-off between openness and theoretically anticipated problems. However, it should be borne in mind that these questions are based on the temporary heuristic framework and are likely to change due to new insights gained during the empirical study.

## 5.3 The used empirical approach

### 5.3.1. Collection method

In order to fulfil the aforementioned demand for openness, so called problem-focused interviews were chosen to represent the empirical investigation's collection method of choice. They can be described as a balancing act between two opposing objectives. On the one hand, they aim at allowing the interviewee to answer without restrictions. Consequently, the interlocutors are free to mention everything they believe to be of importance. On the other hand, problem-focused interviews are centred on a previously defined guideline. This approach is particularly beneficial for the actual research question as specific issues and problems are paramount. Moreover, the resulting partial standardization facilitates the comparability of single interviews (Mayring 2002).

In the present case, the guideline comprises several keywords which serve as rough orientation and are derived from the heuristic framework. Initially the interviewees were free to answer without limitations. If necessary they were confronted with questions related to these main keywords (Meuser et al. 1997).

The openness within the approach provides several benefits, above all the following:

- The interviewer can examine on the spot if the interviewee understands the question.
- The interviewee can disclose their personal subjective perspectives and opinions.
- New connections can be developed and new insights can be gained throughout the interview (Mayring 2002).

### 5.3.2. Interview partners

A special form of a problem-focused interview, used within this paper, is the expert interview. In this connection the interviewee is regarded in his/her capacity as expert of an aspect of reality as well as a representative of a particular group (Mayer 2008). In general, an expert is someone who has clear and recallable knowledge within a certain area. Therefore, their assumptions and judgements are supposed to be not just guesses but fact- and experience-based statements (Meuser et al. 1997).

The set of experts for this paper consists of two basic clusters. The first group is made up of consultants who have carried out numerous EVA implementation projects. They are supposed to be a valuable source of information as they possess a great deal of experience in such endeavours in companies of different sizes.

Another group of experts has been consciously chosen in order to avoid biased results. It is composed of managers who have played a decisive role in the implementation of EVA in their companies.

A final interviewee, Mr S. David YOUNG, could not be clearly attributed to any of these two clusters. Nonetheless, he was included as an interlocutor, as his beliefs are supposed to be particularly enriching. As a professor of accounting and control at the INSEAD business school, Mr YOUNG has devoted a large part of his research to EVA and has published numerous influencing works on this subject.

In summary, the interviews were held with the following experts:

Name	Function	Company	Category	Date	Duration
<b>Mag. Manfred EGGER, MBA</b>	Head of Corporate Planning	Telekom Austria Group	Industry	24/02/2012	~ 75 min.
<b>Mag. Werner FLEISCHER</b>	Board member	Verbund Trading	Industry	06/03/2012	~ 40 min.
<b>Dr. Marco HOFFLEITH</b>	Consultant	Stern Stewart & Co.	Consulting	30/03/2012	~ 40 min.
<b>Dipl. oec. Niko HOFMANN</b>	Principal, Competence Centre Control & Finance	Horváth & Partners	Consulting	07/03/2012	~ 40 min.
<b>Mag. Nikolaus KÖCHELHUBER</b>	Partner	Contrast Management Consulting	Consulting	27/02/2012	~ 35 min.
<b>Dr. Andreas MATJE</b>	Senior Vice President Corporate Controlling & Accounting	OMV	Industry	08/03/2012	~ 35 min.
<b>Mag. Engelbert PÜRRER</b>	Managing director	Pankl (former employer: Sattler)	Industry	06/03/2012	~ 45 min.
<b>Dr. Marc RODT</b>	Principal	Boston Consulting Group	Consulting	28/02/2012	~ 30 min.
<b>Dr. Thomas SUHIATER</b>	Competence Centre Strategic Management & Innovation	Horváth & Partners	Consulting	29/02/2012	~ 30 min.
<b>S. David YOUNG, PhD</b>	Professor of Accounting & Control, author of numerous relevant books and papers	INSEAD	Research	27/02/2012	~ 35 min.

An obvious limitation of the applied research method is the interviewees' shortage of experience in the implementation of EVA in SMEs. The vast majority of such endeavours have been carried out in large corporations. Nevertheless, the author is convinced that the used methodology is appropriate to move towards a best-practice guideline for the introduction of EVA in this particular type of companies.

### 5.3.3. Interviews and transcription

One week before an interview, each interlocutor was provided with all necessary information about the paper as well as a guideline for the interview. The guideline's aim was to convey the paper's central issues and to avoid a misunderstanding of the broader subject. It included the heuristic framework (see Figure 21) and some possible questions with regard to single implementation issues.

In order to ensure a pleasant atmosphere and a build-up of a culture of trust, all personally run interviews were carried out at the interviewees' location of choice. With the consent of the interlocutor, the conversation was recorded in order to allow the researcher to focus on the dialogue and to ask further questions where necessary.

In the following step, the interviews were transcribed entirely by transferring them into standard language. These transcripts represented the foundation for the subsequently conducted evaluation process. Furthermore, the surveyed experts were provided with the opportunity to make adjustments to the transcribed records and to be treated anonymously, if desired.

The final transcripts of the interviews can be found in Annex IX.i.

### 5.3.4. Evaluation method

The used evaluation method within this paper was introduced by Michael MEUSER and Ulrike NAGEL (1991). It considers all collected data and fulfils the demands of qualitative research procedures. The approach consists of five subsequent steps which will be outlined in the following:

1. Paraphrase: Within the first step, the conversation, including known problems as well new insights, is reproduced by the researcher in his/her own words. Care must be taken to avoid premature classifications and to consider all available data.
2. Thematic arrangement: The compression of the text is pursued by the allocation of paraphrased sections to topics which are represented by headlines. As a result, similar parts within a single interview are assembled.
3. Thematic comparison: For the first time, several interviews are jointly dealt with. In doing so, sections with equal or similar contents are assembled and their headlines are unified. Especially within this step, a loss of information can occur due to misinterpretations. Therefore, it is indispensable to continuously verify and check the performed actions.
4. Conceptualization: The interview source of identified parts is from now on disregarded. Similarities and differences within the single sections are aggregated and verbalized in scientific language.
5. Theoretic generalization and development of hypotheses: Only now within the last step are the created parts combined with the original theories and are arranged logically (Mayer 2008; Meuser and Nagel 1991). Based on this last step of the evaluation method, hypotheses with

regard to the research questions are established. They represent the final outcome of this paper (see Chapter 6).

With regard to outlined procedure, its developers highlight the importance of continuous interpretation and recursivity checks in order avoid misinterpretations and a loss of information (Meuser et al. 1997).

A representative example of the described approach can be found in Annex IX.iii.

## 5.4 Quality criteria of the used approach

As a standard of empirical research it has become important to assess the final results by means of quality criteria. In particular, such an evaluation is necessary for qualitative approaches in order to be able to validate the final outcomes (Mayring 2002).

From the range of possible quality criteria proposed by Philipp MAYRING (2002), the following were determined to be most significant for the outcome of this paper. They have been thus followed precisely in the course of the paper's development.

- Procedural documentation: The best result is worthless without a detailed documentation of the used approach. In terms of qualitative social research it is particularly essential to describe the procedure in order to ensure the traceability of outcomes. Within this paper, the demand for procedural documentation is satisfied by the heuristic framework (see Chapter 5.2) and the detailed documentary of the used empirical approach (see Chapter 5 and Annex IX.iii).
- Structural approach: Although qualitative research asks for openness towards examined objects, it equally dissociates itself from a completely unsystematic course of action. A structured procedure is intended to ensure the quality of the interpretation and thus of the outcomes.  
Within this paper, the demand for a structural approach is satisfied by strictly complying with the methodology outlined in this chapter.
- Validity of the interpretation: As results of qualitative research cannot be easily recalculated such as those of quantitative research, considerable attention must be assigned to the interpretation of outcomes. Therefore, the results should be argumentatively justified and it should be ensured that they represent the opinion of the surveyed experts. Within this paper the demand for validity of the interpretation is ensured by two measures. On the one hand, all interpretative statements are explained within the text in order to allow readers to follow the researcher's train of thought. On the other hand, the interview transcripts were verified by presenting them to the interview partners and ensuring that they correspond to their beliefs and opinions.
- Proximity to the objects: In order to achieve proximity to the interviewees, qualitative research suggests investigating them in their natural environment. Moreover, a match of interests between interview partners and the researcher is sought. Within this paper the demand for proximity to the objects is aspired to by two measures. Firstly, all interviews were carried out in the interviewees' preferred way and at their preferred location. It was aimed at establishing a culture of openness during the talks by guaranteeing the interviewees' anonymity, if desired, and allowing adaptations to the interview transcript. Moreover, the interlocutors were selected based on their expertise as

well as on their hypothesized interest in the subject. As a result, a close and honest collaboration was aspired to (Mayring 2002).

## 6. EMPIRICAL RESULTS

Based on the proposed methodology of the previous chapter, all expert interviews have been analysed. The derived results are presented in the following subchapters. In order to facilitate the comparison between the experts' recommendations and the theoretically proposed approach of implementing EVA (see Chapter 4), the same basic structure has been used.

### 6.1 Step 0: Initial considerations

#### 6.1.1. Importance of a value-driven culture

Before discussing the design and implementation issues of EVA in SMEs, it is necessary to consider whether EVA is appropriate for this type of companies at all. In order to be able to answer this question, the concept must be understood from both a financial and a general point of view. In a narrow context, EVA is only a financial indicator. However, in a wider context, it is a holistic management philosophy that concerns a company's entire culture (Hofmann 2012; Pürrer 2012; Suhiater 2012; Young 2012).

The much more important perspective is the latter. All questioned experts agree that the basic idea of EVA is worthwhile to be implemented in SMEs. It is not the KPI, but the value-driven culture that must be the centre of attention (Fleischer 2012; Hofmann 2012; Matje 2012; Pürrer 2012; Rodt 2012; Suhiater 2012; Young 2012).

In recent years, there has been a tendency to attach value to comprehensive, albeit complex KPIs. While it is undisputed that such indicators may improve the quality of a company's performance measurement system, there is the risk of getting lost in technical details and lose sight of their original aim. As indicated by Werner FLEISCHER (2012), *"financial measures are always the outcome of actions."* Therefore, even the best KPI does not necessarily change anything. Moreover, while the focus on indicators may improve the figures in the short run, this development will often occur at the cost of the company's long-term worth. In order to create value, managers and employees must focus on the KPI's underlying drivers like customers, processes, technologies, etc. (Fleischer 2012; Hofmann 2012; Matje 2012; Pürrer 2012; Rodt 2012; Suhiater 2012; Young 2012).

This thought is equally expressed by S. David YOUNG (2012), whose *"focus now is on creating the holistic value-driven culture. You never want an indicator to be the major centre of attention, because if it is, you are going to try to manage the indicator. The usefulness of the indicator as an indicator is going to be compromised. I want the indicator to tell the truth but I want managers to focus on the underlying value drivers and not on the indicators."* The requirement for EVA's implementation is therefore to have a value-driven culture that is spread across the entire enterprise and not limited to financial departments. Its major aim is to change the behaviour of all employees and to create value in all processes and actions (Fleischer 2012; Hoffleith 2012; Hofmann 2012; Matje 2012; Pürrer 2012; Young 2012).

Only if the right mind-set is in place does it make sense to implement EVA as the firm's PMMS. Once the shift in thinking has taken place and "you have the culture, people are hungry for the right KPI" (Pürner 2012). And the right indicator is certainly required in this phase in order to evaluate the company's performance (Fleischer 2012; Pürner 2012). Whereas some questioned experts argue that EVA is the best figure for this purpose, others do not attach too much importance to this issue and suggest that value creation can be equally measured by other KPIs (Fleischer 2012; Pürner 2012; Rodt 2012; Suhiater 2012).

**Hypothesis 1:** *EVA as a holistic management approach is a worthwhile concept to be implemented in SMEs. In this sense, it is more important to establish a value-driven culture than to only introduce a financial indicator.*

**Hypothesis 2:** *Once a value-driven culture has been implemented in a SME, there are several possible options in terms of the right PMMS, one of them being EVA.*

### 6.1.2. Prerequisites

Assuming that the required culture is in place, several conditions must be met in order to successfully implement EVA in a SME.

#### 6.1.2.1. Sufficiently good accounting figures

In Chapter 4.2.1, three requirements are identified for EVA's introduction, namely the need for a viable strategy with an appropriate organization, the availability of accurate financial data and the understanding of EVA's implications. The availability of accurate accounting figures has been equally identified as a crucial prerequisite by the questioned experts.

In order to be able to use a metric like EVA regularly in steering a company, it is essential for a SME to have proper controlling and accounting systems. Particularly if value drivers are supposed to be used throughout the entire company, good reports about all required measures and smooth processes have to be at hand. The more comprehensive such an EVA system is, the higher the demands are with regard to the quality of available data (Fleischer 2012; Hofmann 2012; Pürner 2012; Rodt 2012).

Whereas companies with a headcount of 100 to 250 are expected to have sufficiently good bookkeeping systems to build an EVA system on top of their reports and systems, this problem may still be an issue for SMEs with less than 50 employees. Many enterprises of the latter type outsource finance-related tasks to accounting or tax-advisory firms. As a consequence, the reports are not very accurate and prone to be updated irregularly. It is therefore not feasible to implement a system like EVA. For all other SMEs, this should either not be a problem at all or require only few adaptations (Hoffleith 2012; Pürner 2012; Rodt 2012).

**Hypothesis 3:** *In order to be able to use EVA in a SME, proper controlling and accounting systems and procedures have to exist.*

**Hypothesis 4:** *SMEs with a headcount of less than 50 employees often outsource their finance-related tasks. These companies may not possess sufficiently accurate and regular financial reports to implement an EVA system.*

#### **6.1.2.2. Understanding**

One of the reasons why several questioned experts are in favour of a value-driven culture, but advice against the use of EVA as PMMS, is its complexity. EVA is based on theoretic concepts like the capital asset pricing model, betas, the tax shield or the weighted average cost of capital.

Finance professionals are familiar with these models. However, as expressed by Werner FLEISCHER (2012), *“SMEs are very often set up by people coming out of the operational business. They are craftsmen, people who have ideas, people able to sell things, but they are not necessarily people with an accounting or controlling background.”* They are usually not managers by profession and thus may have problems in understanding and believing in EVA’s underlying concepts. It is therefore unrealistic to promote EVA systems in SMEs that are characterized by such a lack of managerial expertise. Without the full understanding and support of top executives, it will be impossible to take advantage of EVA’s numerous benefits (Fleischer 2012; Hofmann 2012; Köchelhuber 2012; Matje 2012; Rodt 2012).

**Hypothesis 5:** *As many SMEs are managed by people coming from the operational business, there may be a lack of managerial expertise impeding the use of a theoretically complex concept like EVA.*

#### **6.1.2.3. Financial resources**

If the two aforementioned prerequisites can be met, the financial resources needed to set up an EVA system in SMEs are not very large. Although cost may become an issue if the accounting systems are not in place or if a comprehensive training program is sought. Generally speaking, the lack of financial capital is not a valid argument against the implementation of EVA (Hoffleith 2012; Hofmann 2012; Pürerrer 2012; Rodt 2012). This argumentation is surprising as it contradicts the theoretic view of a cost-intensive implementation process (see Chapter 3.4.2).

Whereas the financial requirements for an EVA implementation project are usually reasonable, there may still be hesitation whether to invest in a concept that does not provide any obvious return. Closely related to the misunderstanding of EVA, operational managers may prefer to spend money on new products instead of on a concept that does not seem to provide direct benefits (Rodb 2012).

**Hypothesis 6:** *If the right culture and proper controlling standards are in place, the financial needs to implement EVA will not be high for SMEs.*

**Hypothesis 7:** *As EVA does not provide any obvious return, SME’s managers may be reluctant to invest money in it.*

After having discussed several prerequisites for the implementation of EVA in SMEs, the subsequent subchapter will outline its major advantages and disadvantages in this type of companies.

### **6.1.3. Benefits and drawbacks of Economic Value Added in small and medium-sized enterprises**

#### **6.1.3.1. Benefits**

The main benefits of EVA in SMEs correspond to the advantages of the metric itself (see Chapter 3.3.1). EVA mitigates the deficiencies of measures such as EBIT, ROCE or revenues and thus improves the quality of decisions. It incorporates the costs for the asset side of the balance sheet and thus provides a valuable insight for managers of SMEs. As a holistic figure, it therefore defines a minimum return requirement and results in a more realistic performance measurement of companies (Hoffleith 2012; Köchelhuber 2012; Rodt 2012).

Apart from its financial benefits, EVA highlights which factors drive a company's value. By breaking the metric down into its component parts, it is possible for managers to identify the key drivers of the business and take measures to improve the company's performance (Fleischer 2012; Köchelhuber 2012). More details on the use and definition of value drivers are provided in Chapter 0.

Due to their size, SMEs often have less rigid organisational structures and lower external pressure. As a result, the implementation of EVA in this type of companies is supposed to be easier and shorter than in large corporations (Egger 2012).

Finally, as stated by Andreas MATJE (2012), *“the basic thinking of Economic Value Added should be closer to the heart of owners of SMEs compared to other companies, because it is really their money they invest.”* On the one hand, this notion suggests that there may be less resistance at the top management level with regard to EVA's implementation, particularly if led by an owner-manager. On the other hand, if the owner is simultaneously the manager of the SME and the agency problems are automatically fewer, it questions the necessity of the introduction of a system whose benefit is to reduce such problems (Matje 2012; Young 2012).

**Hypothesis 8:** *Using EVA provides SMEs with the benefits of having a more realistic and accurate PMMS as well as indicating a company's value drivers by breaking EVA down into its component parts.*

**Hypothesis 9:** *It is easier to implement EVA in SMEs than in large corporations, because smaller companies have less rigid organizational structures and an owner-manager's thinking better corresponds to the concept's underlying idea.*

#### **6.1.3.2. Drawbacks**

The subsequently presented drawbacks are partly disadvantages of EVA and partly lost advantages due to certain characteristics of SMEs.

Among other things, EVA has been argued to provide the possibility to allocate funds to different business units based on their future profit potential. Managers can benefit from EVA's expressiveness and decide where to invest limited resources more easily. As SMEs will often consist of only one individual EVA centre, this major advantage is eliminated. While there are still other benefits, the necessity of this metric is at least reduced. Moreover, there will not be any other comparison points, as it is generally pointless to compare EVA across companies due to its unstandardized calculation (Hoffleith 2012; Suhiater 2012).

Another lost benefit of EVA in SMEs is the requirement to discipline employees. In large corporations it is impossible to control and steer the entire workforce. As the management's reach is limited, financial measures are often used instead. In SMEs it is in principal possible to contact every single person and discuss problematic issues face-to-face (Rodt 2012). As suggested by Marc RODT (2012), *"this is probably always the better way than relying on a methodology."*

While not necessarily being a drawback, managers of SMEs must be aware that EVA does not permit to refrain from looking at other financial figures. It is certainly true that EVA can replace certain measures like EBIT which are already incorporated in it. However, it is not possible to reflect all possible dimensions of running a business in this single metric. It is at least necessary to include a cash-flow figure, because EVA does not provide this perspective (Matje 2012; Pürerer 2012).

Due to the mentioned limited benefits of EVA in SMEs and due to the lack of managerial expertise in this type of companies (see Chapter 2.1.2), it is questionable whether EVA may add value for all SMEs. Therefore, each company will have to weigh up the arguments in favour and against using this metric. As stated by Thomas SUHIATER (2012), it makes equally sense *"to establish a value-driven culture and to calculate single components of EVA, without actually implementing EVA."*

**Hypothesis 10:** *The necessity to implement EVA is lower for SMEs than for large corporations, because EVA cannot be used to allocate funds to different business units if only one such unit exists. Moreover, it is possible to steer and control the workforce in person and without such a comprehensive financial system.*

**Hypothesis 11:** *While being more holistic than many other KPIs, EVA does not permit to refrain from looking at other financial KPIs such as a cash-flow figure in managing SMEs.*

## 6.2 Step 1: Getting top management's commitment

As already argued in the theoretical discussion of the management's importance when introducing EVA (see Chapter 4.3), the questioned experts have confirmed that it is one of the most significant success factors for this endeavour.

The idea of implementing EVA often arises in the controlling department. Consequently, the initial crucial step is to gain the top management's understanding and commitment. Particularly, the owner-manager must be completely sure that this is the right approach for the company. Once he/she is convinced of this concept, the aim shifts to persuading the entire workforce of this new management philosophy (Fleischer 2012; Hoffleith 2012; Matje 2012; Pürrer 2012; Rodt 2012; Suhiater 2012).

In order to win the staff over, the reason for EVA's implementation must be regularly communicated. The owner-manager must seize every opportunity to mention EVA's benefits and its basic idea. Otherwise, employees will perceive it as a management fad and the introduction will fail (Hoffleith 2012; Pürrer 2012; Rodt 2012).

Apart from the owner, there is another important target group that must be committed to the use of EVA. The staff of the accounting and controlling department must be involved in the implementation process and be convinced of the feasibility of such an undertaking (Fleischer 2012).

**Hypothesis 12:** *The commitment of the owner-manager and of employees of the accounting and controlling department is required to ensure EVA's successful implementation in SMEs.*

**Hypothesis 13:** *The SME's owner-manager must constantly convey EVA's benefits and characteristics to win the entire workforce over to this concept.*

Further details about the communication aspect will be discussed in Chapter 6.5.1.

## 6.3 Step 2: Taking the major decisions on Economic Value Added's design

If the owner-manager decides to implement EVA, the next step towards turning this vision into reality is to design a system tailored to a SME's specific characteristics.

### 6.3.1. The scope of implementation and Economic Value Added centres

On the one hand, the scope of implementation concerns the affected dimensions of the business, namely objectives and strategy, target setting, performance measurement and compensation (see Chapter 4.4.1). If the owner is convinced of this concept, EVA will automatically embrace all of these categories. For example, it is pointless to define objectives without tying the compensation to their attainment (Fleischer 2012; Pürerer 2012).

On the other hand, the question is about the depth of EVA's implementation in a SME. There is no explicit answer, because it will always depend on the company's size and structure. However, while it is advisable to push the system down as deep as possible by using value drivers (see Chapter 0), there is a limit for the EVA metric itself. According to Andreas MATJE (2012), owner-managers should "try to push it as deep down as reasonable" (Fleischer 2012; Hoffleith 2012; Matje 2012; Pürerer 2012).

In order to be able to define EVA centres with own EVA measures, these centres have to be investment centres with sufficient management accountability for profits and investments. Without responsibility for both aspects, a lot of effort is required with regard to asset allocations and transfer pricing. Such an approach would most often not capture economic reality and result in ambiguous figures. Only in cases in which the capital employed can be easily and exactly attributed to profit centres, would it make sense to turn them into EVA centres (Fleischer 2012; Hofmann 2012; Matje 2012; Pürerer 2012; Young 2012).

Therefore, as suggested theoretically, SMEs have to determine whether there are several business units with sufficient responsibilities. Due to their size, SMEs will mostly consist of one large centre and only calculate EVA at the top management level (Egger 2012; Fleischer 2012; Hofmann 2012; Köchelhuber 2012; Matje 2012; Pürerer 2012; Young 2012).

**Hypothesis 14:** EVA should embrace all dimensions of a SME's business, including: objectives and strategy, target setting, performance measurement and compensation.

**Hypothesis 15:** The depth of implementation of EVA as a financial KPI is subject to a SME's number of available business units. Due to their size, many SMEs will calculate only one EVA figure for the entire company.

### 6.3.2. Value drivers

Whereas EVA can be replaced with other KPIs at the top management level, it is indispensable to introduce value drivers at lower levels of SMEs that want to focus on value creation. It is advisable to push them down as deep as possible throughout the organization in order to get the entire workforce involved. Thereby, the staff should understand how they can influence certain value drivers in their daily business and how this contributes to the overall EVA figure. While there may be both financial and non-financial factors, employees should rather be concerned with operational drivers related to new technologies, relationships with clients or their personal development instead of financial KPIs such as EVA or working capital (Hoffleith 2012; Pürrer 2012; Rodt 2012; Suhiater 2012; Young 2012). According to S. David YOUNG, the staff should *“focus on the underlying drivers of value and not on the indicators themselves. Let the indicators indicate, let them do their job. They are certainly important, but you do not want people to focus on them but on the underlying drivers of performance.”*

As already mentioned, EVA can but does not necessarily have to be the starting point in defining a company's value drivers. The business logic initially lays down important financial KPIs. Whereas a profit figure like EBIT can be broken down into revenues and costs, the capital charge is derived from net assets that are made up of fixed assets and working capital. These measures are continuously taken apart until they finally can be transformed into operational KPIs (Hoffleith 2012; Köchelhuber 2012; Matje 2012; Suhiater 2012).

The process of identifying a SME's relevant value drivers is of crucial importance. Defining proper drivers is more significant in creating value than establishing a technically smooth model. A lot of effort should be invested to get the former issue right. With this in mind, it is often helpful to combine the know-how of the owner-manager and of shop-floor employees in this process. While the top management is aware of the complete value creation concept, the workforce at lower levels better understands the operational business. For example, a warehouse worker knows that he/she can only produce the product when there are enough raw materials. However, he/she equally needs to understand that every time the warehouse is full, the company has to bear high capital costs. So he/she should try to ensure the production while minimizing capital costs. While the owner provides the basic objective of having a low stock level in order to decrease the cost of capital employed, the warehouse worker can put this idea into action (Hoffleith 2012; Köchelhuber 2012; Pürrer 2012; Suhiater 2012).

The final logical step is to attribute responsibilities for individual drivers to departments and managers. They have to understand what issues must be considered and how to act in order to contribute to the creation of value (Hofmann 2012).

***Hypothesis 16: Both financial and operational value drivers should be pushed down throughout the entire company in order to get the entire workforce involved in the value creation approach.***

**Hypothesis 17:** *The definition of a business' relevant drivers is of crucial importance and should thus combine the top-level view of managers with operational know-how of shop-floor workers.*

### 6.3.3. Economic Value Added bonus plan

#### 6.3.3.1. Designing the bonus plan

Compensation plays an essential role in EVA's management philosophy. While opinions on its importance range from being helpful to being indispensable, it is argued that an appropriate bonus system motivates the workforce to pursue the objectives set by different KPIs (Fleischer 2012; Matje 2012; Pürrer 2012).

Whereas the significance of certain characteristics of the system may vary between SMEs and large corporations, the basic components are the same for all companies. In this sense, the bonus should be uncapped and involve the staff in both opportunities and risks of the business. This notion ensures that each employee maximizes his/her current efforts and forgoes safekeeping strategies to increase his/her next year's bonus (Hoffleith 2012; Köchelhuber 2012).

Similar to the EVA concept itself, the compensation system should be equally pushed down the entire company. However, there will be several differences for managers and shop-floor workers in terms of their bonus plan's characteristics. The bonus of managers of EVA centres will directly depend on the business unit's EVA that they are in charge for. In contrast to the owner-manager and other senior executives with sufficient responsibility, it will not make sense to compensate lower level employees on the basis of EVA. They should be rewarded based on operational or financial measures they can actually influence (Fleischer 2012; Hoffleith 2012; Köchelhuber 2012; Pürrer 2012).

**Hypothesis 18:** *The use of EVA bonus plans is argued to motivate the workforce to pursue a SME's value creation objectives.*

**Hypothesis 19:** *Employees at different levels should be compensated based on different figures, including EVA for the top management and value drivers for shop-floor workers.*

#### 6.3.3.2. Economic Value Added bonus bank

Another difference between employees at different levels of a SME's hierarchy concerns the use of a bonus bank. At lower levels, the performance-related reward comprises a smaller stake of one's total remuneration. Moreover, the employee loyalty is less important and the consequences of a worker's actions are also limited. Therefore, the bonus can be paid out entirely at the end of the year (Hoffleith 2012).

The situation is considerably different for executives with responsibility for both profits and investments or for the owner-manager himself/herself. As discussed in detail in Chapter 4.4.4, it is a

bonus bank's aim to encourage influential employees to take beneficial actions with regard to a company's long-term value instead of only focusing on their short-term bonus payments (Dierks and Patel 1997; Stern, Shiely, and Ross 2001).

While the bonus bank's theoretical concept seems to provide such necessary incentives, it is rather difficult to implement it within SMEs. On the one hand, it would be beneficial to withhold a substantial part of the reward for several years. However, it will be difficult to convince good managers to agree to such terms. On the other hand, there would not be a sufficiently high incentive to focus on long-term objectives if the retention was limited to a small amount and a short period. A feasible setting could entail the distribution of two thirds of the bonus and the retention of the remaining one third over a period of three years. In this scenario, managers are at least incentivized to increase a SME's value in the medium term (Fleischer 2012; Hoffleith 2012; Köchelhuber 2012; Pürrer 2012; Young 2012).

Short-term thinking can be a problem in all types of companies and a bonus bank is only able to mitigate it. However, it is argued that both the problem and the bonus bank lose importance if the owner is equally the manager of the enterprise. In such a setting, which is representative for many SMEs, the mind-set is automatically right and there is less reason to fear a company's short-term exploitation at the expense of its long-term value (Köchelhuber 2012; Matje 2012; Pürrer 2012).

**Hypothesis 20:** *The characteristics of a bonus bank system must be a compromise between the SME's long-term value perspective and appropriate rules to keep and attract good managers.*

**Hypothesis 21:** *The bonus bank concept is of less importance for SMEs in which the manager is simultaneously the owner.*

### **6.3.3.3. Implementation issues**

As the bonus plan concerns the personnel's remuneration, it is a delicate topic and must be implemented carefully. In order to understand its functioning and its possible consequences, it should be monitored and reviewed over a longer period of time. Only when all uncertainties have been resolved should the EVA bonus plan be introduced (Fleischer 2012). This caution is useful, but contradicts the theoretic recommendation of establishing an EVA compensation system as soon as possible (see Chapter 4.4.4).

One important characteristic of any compensation scheme is the definition of each employee's target performance. As opposed to traditional bonus systems, the EVA bonus plan calls for a separation between these objectives and a SME's planning and budgeting efforts, respectively. Otherwise, compensation becomes a matter of negotiations and fails in rewarding the staff's real performance (Hoffleith 2012).

Consequently, there are two possible ways how SMEs can establish proper targets. The first approach is based on external benchmarks. Depending on the results of competitors and the overall

market, desirable values for main KPIs such as EBIT, ROCE, etc. are determined. Finally, these values are transformed into appropriate EVA goals (Hoffleith 2012; Köchelhuber 2012).

The second possibility is to use the owner's desired rate of return and derive the required performance as foundation for rewards. As this method is straightforward and easy to carry out, it seems equally appropriate for SMEs (Hoffleith 2012).

A hot topic of the EVA bonus plan is the setting of objectives in the face of a volatile market environment, such as during and after the recent economic crisis. Let us assume that a company's performance targets are coupled to the competitors' results during an economic downturn. On the one hand, it seems reasonable to reward managers for outperforming the competition. On the other hand, it is not possible to reward employees for outstanding performance if the company does not sell enough products and loses money itself. This example shows that it becomes even more difficult to design an appropriate EVA incentive system during such times and managers are challenged to create motivating but financially acceptable goals (Hoffleith 2012; Pürner 2012; Young 2012).

Apart from all discussed implementation issues, there are further important concerns that have to be kept in mind. For example, these matters include the tax-efficiency of rewards across different countries. There are continuous research efforts trying to eliminate existing inefficiencies with regard to EVA bonus plans and introduce better ways of remunerating employees (Young 2012).

**Hypothesis 22:** *As an EVA bonus plan determines the personnel's remuneration, it should only be implemented after an appropriate review and adjustment phase.*

**Hypothesis 23:** *The EVA bonus plan's targets must be independent of a SME's planning and budgeting efforts. They can be based on external benchmarks or the owner's desired rate of return.*

#### 6.3.4. Calculating the cost of capital

Determining a company's cost of capital is a challenging task. As it is even difficult for large corporations to calculate their WACC, this exercise is even harder for non-listed SMEs (Egger 2012; Matje 2012).

When looking at the WACC formula (see Figure 17), several inputs can be determined fairly easy. The cost of equity typically represents the biggest challenge for SMEs. According to the questioned experts, two possible approaches can be used:

- Use comparable listed companies as proxy: The standard approach involves determining a SME's beta by looking at comparable, publicly traded companies of the same industry and computing the cost of equity with the CAPM. This method benefits from available data and uses theoretic concepts that can be easily found in most finance text books. However, non-finance professionals may have problems in understanding these notions. When using this approach, it is indispensable to analyse the results and account for differences between the

own SME and used comparable corporations. For example, a premium for a SME's size may be added in order to reflect possible difficulties in selling the business (Egger 2012; Köchelhuber 2012; Matje 2012; Pürrer 2012; Suhiater 2012; Young 2012).

- Use the return expectations of the owner: The second, much easier but more subjective approach is to convert the owner's return expectations into the cost of equity. This value can be determined by considering the appropriate return for an owner's alternative investment with a similar risk level (Egger 2012; Fleischer 2012; Matje 2012).

The final step is to incorporate every input into the WACC formula and compute the business' cost of capital (see Figure 17).

**Hypothesis 24:** *In determining the cost of equity as input factor for the cost of capital, SMEs can use comparable listed companies as a proxy or refer to the owner's return expectations.*

### 6.3.5. Using adjustments

Even though more than 150 possible adjustments have been proposed, the trend of recent decades has been to use as few adjustments as possible (see Chapter 4.4.6). If companies feel the need to use them, then each adjustment should have a significant effect on the KPI, be understood and be based on available financial data (Young 1997; Ehrbar 1999; Young and O'Byrne 2000).

With these criteria in mind, it is necessary to weigh up whether improvements of the EVA figure are sufficiently high to make up for the costs associated with it. According to the questioned experts, this is rarely the case and SMEs are therefore advised to keep their EVA system as simple as possible (Fleischer 2012; Hoffleith 2012; Köchelhuber 2012; Pürrer 2012; Rodt 2012; Young 2012).

For some businesses it may make sense to apply one or two specific adjustments. However, in general, SMEs should refrain from using them (Egger 2012; Fleischer 2012; Hoffleith 2012; Young 2012). In order to create business impact, the EVA system *"should be an easy-to-understand, readily-available KPI which I can calculate monthly or quarterly in a timely manner"* (Matje 2012). There are several reasons for this appeal to simplicity:

- The primary reason for not using adjustments is the cost of having to explain them. While certain changes may be comprehensible for employees of the accounting or controlling department, the majority of the workforce will have problems doing so. The need to clarify each change requires a lot of effort and often exceeds the adjustment's benefits. In particular, if the bonus is coupled to a certain KPI like EVA, concerned employees must put their trust in the system (Fleischer 2012; Pürrer 2012; Young 2012).
- The use of adjustments is often associated with additional effort in the context of required upgrades of IT systems. Such modifications may be complex and very costly. Therefore, it is

usually better to have KPIs that are closely linked to available accounting and controlling systems and can be easily calculated in a timely manner (Fleischer 2012; Matje 2012; Young 2012).

- Additional complexity due to adjustments can lead to the loss of the workforce's focus on key issues. Employees become distorted and lose sight of the ultimate objective of creating value. Moreover, such distortions facilitate manipulations and enable the system's abuse (Fleischer 2012; Matje 2012).
- The initial aim of adjustments was to reconcile the distortions caused by accounting rules in the 90s. As a result of IFRS and revised principles, the gap between accounting standards and economic reality has steadily declined. Therefore, the need for adjustments has gradually decreased and made their use obsolete for many companies (Hoffleith 2012).

Despite this list of arguments, it is possible that KPIs may be improved by using adjustments. However, as stated by S. David YOUNG (2012), *“the question is not, whether the EVA number is better, but whether the EVA number leads to better results and better incentives. I think that, generally speaking, the answer is no.”* This statement is an appeal to take priorities and contradicts the theoretically emphasized importance of adjustments (see Chapter 3.3.1 and Chapter 4.4.6). It is thus more useful to focus on a business' value-drivers and refrain from wasting time on perfecting technical details of a KPI that does not create value per se (Köchelhuber 2012; Young 2012).

**Hypothesis 25:** *As EVA's computation should be as simple as possible for SMEs, this type of companies should refrain from using adjustments.*

## 6.4 Step 3: Translating the plan into action

### 6.4.1. General information

The implementation of the previously designed EVA concept is an important step of the whole process and requires a lot of persistence and effort. This subchapter discusses the experts' opinion on this phase's major characteristics.

While large corporations are able to start carrying out pilot implementation projects in single departments before extending their plans across the entire company, SMEs will typically start EVA's introduction as a top-down approach. Initially, the concept will be established at the top management level. Only afterwards, will it be broken down into value drivers and spread throughout all subsequent levels (Fleischer 2012; Hoffleith 2012; Köchelhuber 2012; Young 2012).

The duration of the implementation process obviously depends on a company's size as well as on its characteristics and capabilities with regard to available reporting systems. Moreover, the project's scope may increase significantly if a value-driven culture is not in place. However, it will generally be easier and faster to implement EVA within a SME due to its greater flexibility and lower bureaucracy, respectively (Egger 2012; Hoffleith 2012; Hofmann 2012).

Assuming that the appropriate value creation mind-set exists, the preliminary step of developing the concept for the EVA system should not take longer than three months. At the same time, it is advisable to start communicating this change project. The actual implementation phase of adjusting processes, reports and IT systems in order to calculate all required KPIs may last up to six months. This step depends to a large extent on the quality and flexibility of a SME's reporting standards (Hofmann 2012; Suhiater 2012).

**Hypothesis 26:** *EVA's actual implementation in SMEs is supposed to be a top-down process of establishing EVA at the top management level and continuously pushing down value drivers from one company level to the next.*

**Hypothesis 27:** *The duration of EVA's implementation is subject to the availability of a proper value-driven culture and the reporting systems' quality. The process is supposed to take less for SMEs than for large corporations.*

### 6.4.2. Implementation team

The first question with regard to the implementation team is whether the capabilities are available in a company or whether external help of consultants is required. The answer to this question is largely dependent on the expertise and experience of the management and the involved functions, namely accounting, controlling and human resources (Fleischer 2012; Hoffleith 2012). The questioned experts' differing opinions suggest that there is no general solution to this problem and that each SME has to take this decision based on its own characteristics.

On the one hand, it is argued that SMEs need external help due to the lack of managerial expertise. Start-ups are often set up by entrepreneurs who are specialists in the operational business but lack knowledge about managerial concepts. For example, doctors would require external support in running their healthcare company and implementing a PMMS. Even if managers were knowledgeable in value based management, its implementation would not be part of their daily business. Consultants have considerable experience in this field at their command. Therefore, they can help to avoid typical problems and particularly provide benefits in the conceptual phase of the process. Consequently, a lot of effort and time can be saved (Egger 2012; Fleischer 2012; Hofmann 2012; Köchelhuber 2012; Rodt 2012; Suhiater 2012; Young 2012).

On the other hand, some experts claim that external help should not be the major focus of attention. While some external support may be useful in achieving a cultural change, there is no need to employ consultants for the definition of EVA and its component parts. These concepts have been comprehensively discussed in the literature and a controller should usually be able to develop an appropriate model for a SME. However, if the knowledge is really not available, Engelbert PÜRRER (2012) recommends doing everything to get it. His suggested approach is to rather hire a well-educated person with experience than just providing training sessions with short-term effects. Consequently, it is important that both the owner-manager and finance-related departments have the understanding to design and introduce the concept throughout the entire company. Otherwise, all suggested solutions will be quickly forgotten (Hoffleith 2012; Matje 2012; Pürerer 2012).

After having decided if external support is used, an implementation team must be set up. While it is important to have a separate project team to drive the project, it is mostly not feasible, as suggested in recent literature (see Chapter 1), to attribute its members to this undertaking on a full-time basis. Therefore, it is recommended to engage a group of employees who allocate approximately 20 per cent of their time to this endeavour (Fleischer 2012; Pürerer 2012).

**Hypothesis 28:** *While it is beneficial to utilize own know-how to implement EVA, some SMEs are required to deploy external consultants due to management's lack of expertise and experience.*

**Hypothesis 29:** *EVA's implementation should be driven by an internal project team dedicating a part of its time to this endeavour.*

## 6.5 Step 4: Getting the message out

As discussed in Chapter 4.6, communication and training are required to reach an understanding of EVA and its implied principles on a conceptual and technical level. In order for a SME to carry out the cultural shift to a value-driven culture, communication and training are the crucial success factors (Hoffleith 2012). The next two subchapters will deal with these issues and explain how to execute them in practice.

### 6.5.1. Communicating the change

Generally speaking, communication is crucial in many business situations. Some managers focus too much on data like KPIs and forget to stay in contact with the drivers of these figures, namely people. In particular in a situation of change and insecurity, communication becomes even more important (Hoffleith 2012; Pürerer 2012; Rodt 2012). In this sense, Engelbert PÜRRER (2012) claims that *“you cannot communicate too much, but many communicate too little”*.

Introducing a new PMMS is associated with a lot of different positive and negative perceptions. While some employees may favour the implementation of EVA, others may have fears, such as to be made redundant. As a logical consequence, this fear translates into resistance. In order to overcome opposition and promote the sought cultural change, transparency and communication are invaluable (Hoffleith 2012; Pürerer 2012; Rodt 2012).

In this sense, executives and particularly the owner-manager have to convey why the company requires a PMMS like EVA. All employees should have an idea of what it stands for and what benefits it provides. However, the communication approach should not only focus on the advantages and changes for the company itself, but also on issues that employees at different levels will be concerned with. As expressed by Niko HOFMANN (2012), this would rather *“correspond to a stakeholder-approach instead of a shareholder-approach”* (Hofmann 2012; Pürerer 2012; Young 2012).

Whereas it is essential to reach a fundamental understanding of the EVA system, it is not necessary to communicate details such as each calculation step. With this in mind, the breadth of explanation is rather dependent on the hierarchical level and each employee’s responsibilities (Pürerer 2012; Suhiater 2012; Young 2012).

Due to SMEs’ limited financial resources, smaller companies are suggested to replace some of the required training demand by a broad communication strategy. As the entire workforce is usually within the owner-manager’s management range, it is his/her duty to spread the idea continuously (see Chapter 6.2). The communication of the concept is something that is done more than once. With each new effort, a new piece of information can be added in order to strengthen and deepen the staff’s understanding (Pürerer 2012; Rodt 2012).

**Hypothesis 30:** *The top management has to communicate the reasons for EVA’s implementation and its benefits in order to reduce fear and resistance to its introduction.*

**Hypothesis 31:** *Communication should be an important tool for SMEs to explain EVA on a conceptual level.*

### 6.5.2. Training

While communication is supposed to convey EVA's basic principles, training is required to reach a profound understanding. As SMEs are typically more financially constrained than large corporations, it is not feasible to set up a comprehensive training program for the entire workforce. In order to make it work, Werner FLEISCHER (2012) advises to "understand it at different levels in an appropriate profundness." Consequently, it must be adapted to the needs of certain functions (Egger 2012; Fleischer 2012; Hoffleith 2012; Hofmann 2012).

A viable approach is to train managers who bear responsibility for EVA results. They should be knowledgeable about EVA's components, its calculation and how it can be influenced. Moreover, it is useful to train employees from finance-related departments who will deal with the figure as part of their daily business (Egger 2012; Fleischer 2012; Hoffleith 2012; Hofmann 2012; Köchelhuber 2012; Rodt 2012).

The workforce at lower levels only needs to have a basic understanding of EVA. As they have fewer possibilities to affect it, it is sufficient if they know how they can positively influence certain operational value drivers to contribute to value creation. Trained managers must thus engage in discussions with shop-floor workers and communicate clear, appropriate objectives based on essential value drivers for their tasks. This undertaking can be supported by internal newsletters or videos (Egger 2012; Hoffleith 2012; Hofmann 2012; Köchelhuber 2012; Matje 2012; Rodt 2012).

Independent of its addressees, it will be necessary to carry out specific follow-up training session to deepen the staff's understanding and consolidate the acquired knowledge (Fleischer 2012).

Especially if there are EVA specialists in a SME, it is strongly recommended to hold training sessions by these in-house experts. They are cheaper than external trainers and are better aware of the company's characteristics (Pürrer 2012).

**Hypothesis 32:** *Managers who bear responsibility for EVA results as well as employees of the controlling and accounting department are supposed to be trained on EVA's components, its calculation and how it can be influenced.*

**Hypothesis 33:** *Managers have to communicate clear objectives on how employees at lower levels can influence certain value drivers and thus contribute to the increase of a SME's value.*

## 6.6 Today's importance of Economic Value Added

After having discussed the recommended approach for each implementation step, this last subchapter deals with EVA's current importance for SMEs.

The questioned experts claim that the basic idea behind EVA of earning an appropriate, risk-weighted return on the invested capital is becoming more and more important for the following three reasons:

- Lower availability of debt financing: Basel III's rules with regard to capital requirements of banks will lead to a decreased volume of debt financing. SMEs, which largely depend on this type of financing, will have to get their performance under control in order to ensure their disposal of sufficient financial resources (Köchelhuber 2012).
- Increased international competition: The business world is greatly affected by globalization and many SMEs increasingly face additional competition in their local markets. In order to survive and be able to expand into new areas, companies will have to professionalize their performance measurement processes (Rödt 2012).
- Increased market uncertainty: Currently, many markets can be characterized by high uncertainty and volatility. SMEs have to be careful about their investments. Therefore, they will have to optimize their approach in terms of assessing and tracking capital expenditures (Matje 2012).

These arguments suggest that each SME should be concerned about professionalizing their PMMSs in order to create value. However, it is not certain whether EVA will and should be the concept of choice for this purpose. EVA has not gained in importance over the last ten years. While it certainly has several advantages to offer, it may not be the only and best solution for SMEs (Fleischer 2012; Köchelhuber 2012; Pürerer 2012).

**Hypothesis 34:** *The importance of EVA's underlying idea of earning an appropriate return will gain in importance in the future due to the lower availability of debt financing, increased international competition and high market uncertainty.*

**Hypothesis 35:** *EVA as a financial KPI is only one of numerous approaches to optimize a SME's PMMS and may thus not get more important in upcoming years.*

## 7. CONCLUSION

### 7.1 Main findings

#### 7.1.1. Use of Economic Value Added in small and medium-sized enterprises

EVA's underlying idea of establishing a value-driven culture in a company is a worthwhile concept for both large corporations and SMEs. Due to the lower availability of debt financing, strong international competition and increased market uncertainty, the notion of gaining an appropriate return on invested money will gain in importance among SMEs.

EVA has the potential to serve as the KPI to measure value creation efforts of SMEs. It can provide them with a more realistic performance figure as well as a clear focus on the business' key value drivers. Moreover, it is usually easier to implement due to a SME's less complex and rigid organisational structure.

However, EVA is only one of several possible PMMSs for SMEs. It may be suited for some companies, but it is not the best financial figure to measure and manage performance for all SMEs. Managerial expertise and sufficiently developed accounting and controlling standards are indispensable prerequisites for EVA's functioning and may represent a major obstacle for its introduction in SMEs.

While focusing on value creation is principally meaningful for all type of companies, each SME must verify and decide whether EVA is the right KPI to use considering its unique characteristics.

#### 7.1.2. Implementing Economic Value Added in small and medium-sized enterprises

After having taken the decision to establish EVA as the PMMS of choice, it is the owner-manager's commitment which determines the long-term success of such a project. It is his/her duty to convince employees of the accounting and controlling department as well as the remaining workforce. Therefore, he/she has to continuously communicate EVA's benefits and convey the reasons for its implementation. This is particularly important because each employee will be involved in creating value.

In most SMEs, EVA will be only calculated at the top-management level. Employees at lower ranks will be concerned with financial and operational value drivers under their control. The business' key drivers should be thereby derived by the top management in cooperation with employees at lower levels in order to benefit from both top-level conceptual understanding and operational knowledge.

The use of an EVA bonus plan is supposed to incentivize the workforce to achieve the value creation objectives. The targets must be independent of internal plans and can be based on external benchmarks or the owner's desired rate of return. Regardless of its actual design, the compensation scheme should be adjusted to different company levels in terms of objectives and the pay-out policy.

The use of a bonus bank system will be limited to the top management and serve as a compromise between a SME's value creation goals and motivational considerations of keeping and attracting good managers. In general, an EVA bonus plan is a delicate instrument and requires an appropriate monitoring and reviewing phase before being implemented.

In order to ensure transparency and understanding among the workforce, the EVA calculation should be as simple as possible. Therefore, SMEs are advised to refrain from using adjustments. The computation of the cost of capital can be achieved by using comparable listed companies or the owner's return expectations as a proxy for the cost of equity.

EVA's actual implementation will be a top-down approach. The duration of establishing EVA at the top management level and pushing value-drivers down throughout the entire company depends on the availability of a proper value-driven culture and the reporting systems' quality and flexibility, respectively. The implementation should be primarily driven by an internal project team, dedicating a part of their time to this endeavour. External support from consultants should be only used occasionally.

Continuous communication during and after EVA's establishment are required to overcome resistance and convince the workforce of this new PMMS's necessity. Furthermore, a training program must be set up for managers and concerned employees of the accounting and controlling department. For employees at lower levels, it is sufficient to communicate how they can influence certain value drivers and thus contribute to a SME's value creation.

### **7.1.3. Effects of Economic Value Added's implementation in small and medium-sized enterprises**

Once the value-driven culture and an appropriate PMMS, potentially EVA, are established, value creation is facilitated. SMEs are able to continuously track and optimize their performance and improve their competitive position in today's volatile, dynamic and globalized market environment. In this sense, Economic Value Added can become the hot financial idea it was claimed to be in the Fortune Magazine article of 1993 (Tully 1993).

## 7.2 Established hypotheses

Based on the above mentioned findings, all hypotheses, which have been developed throughout the course of this paper, are displayed in the following:

**Hypothesis 1:** *EVA as a holistic management approach is a worthwhile concept to be implemented in SMEs. In this sense, it is more important to establish a value-driven culture than to only introduce a financial indicator.*

**Hypothesis 2:** *Once a value-driven culture has been implemented in a SME, there are several possible options in terms of the right PMMS, one of them being EVA.*

**Hypothesis 3:** *In order to be able to use EVA in a SME, proper controlling and accounting systems and procedures have to exist.*

**Hypothesis 4:** *SMEs with a headcount of less than 50 employees often outsource their finance-related tasks. These companies may not possess sufficiently accurate and regular financial reports to implement an EVA system.*

**Hypothesis 5:** *As many SMEs are managed by people coming from the operational business, there may be a lack of managerial expertise impeding the use of a theoretically complex concept like EVA.*

**Hypothesis 6:** *If the right culture and proper controlling standards are in place, the financial needs to implement EVA will not be high for SMEs.*

**Hypothesis 7:** *As EVA does not provide any obvious return, SME's managers may be reluctant to invest money in it.*

**Hypothesis 8:** *Using EVA provides SMEs with the benefits of having a more realistic and accurate PMMS as well as indicating a company's value drivers by breaking EVA down into its component parts.*

**Hypothesis 9:** *It is easier to implement EVA in SMEs than in large corporations, because smaller companies have less rigid organizational structures and an owner-manager's thinking better corresponds to the concept's underlying idea.*

**Hypothesis 10:** *The necessity to implement EVA is lower for SMEs than for large corporations, because EVA cannot be used to allocate funds to different business units if only one such unit exists. Moreover, it is possible to steer and control the workforce in person and without such a comprehensive financial system.*

**Hypothesis 11:** *While being more holistic than many other KPIs, EVA does not permit to refrain from looking at other financial KPIs such as a cash-flow figure in managing SMEs.*

**Hypothesis 12:** *The commitment of the owner-manager and of employees of the accounting and controlling department is required to ensure EVA's successful implementation in SMEs.*

**Hypothesis 13:** *The SME's owner-manager must constantly convey EVA's benefits and characteristics to win the entire workforce over to this concept.*

**Hypothesis 14:** *EVA should embrace all dimensions of a SME's business, including: objectives and strategy, target setting, performance measurement and compensation.*

**Hypothesis 15:** *The depth of implementation of EVA as a financial KPI is subject to a SME's number of available business units. Due to their size, many SMEs will calculate only one EVA figure for the entire company.*

**Hypothesis 16:** *Both financial and operational value drivers should be pushed down throughout the entire company in order to get the entire workforce involved in the value creation approach.*

**Hypothesis 17:** *The definition of a business' relevant drivers is of crucial importance and should thus combine the top-level view of managers with operational know-how of shop-floor workers.*

**Hypothesis 18:** *The use of EVA bonus plans is argued to motivate the workforce to pursue a SME's value creation objectives.*

**Hypothesis 19:** *Employees at different levels should be compensated based on different figures, including EVA for the top management and value drivers for shop-floor workers.*

**Hypothesis 20:** *The characteristics of a bonus bank system must be a compromise between the SME's long-term value perspective and appropriate rules to keep and attract good managers.*

**Hypothesis 21:** *The bonus bank concept is of less importance for SMEs in which the manager is simultaneously the owner.*

**Hypothesis 22:** *As an EVA bonus plan determines the personnel's remuneration, it should only be implemented after an appropriate review and adjustment phase.*

**Hypothesis 23:** *The EVA bonus plan's targets must be independent of a SME's planning and budgeting efforts. They can be based on external benchmarks or the owner's desired rate of return.*

**Hypothesis 24:** *In determining the cost of equity as input factor for the cost of capital, SMEs can use comparable listed companies as a proxy or refer to the owner's return expectations.*

**Hypothesis 25:** *As EVA's computation should be as simple as possible for SMEs, this type of companies should refrain from using adjustments.*

**Hypothesis 26:** *EVA's actual implementation in SMEs is supposed to be a top-down process of establishing EVA at the top management level and continuously pushing down value drivers from one company level to the next.*

**Hypothesis 27:** *The duration of EVA's implementation is subject to the availability of a proper value-driven culture and the reporting systems' quality. The process is supposed to take less for SMEs than for large corporations.*

**Hypothesis 28:** *While it is beneficial to utilize own know-how to implement EVA, some SMEs are required to deploy external consultants due to management's lack of expertise and experience.*

**Hypothesis 29:** *EVA's implementation should be driven by an internal project team dedicating a part of its time to this endeavour.*

**Hypothesis 30:** *The top management has to communicate the reasons for EVA's implementation and its benefits in order to reduce fear and resistance to its introduction.*

**Hypothesis 31:** *Communication should be an important tool for SMEs to explain EVA on a conceptual level.*

**Hypothesis 32:** *Managers who bear responsibility for EVA results as well as employees of the controlling and accounting department are supposed to be trained on EVA's components, its calculation and how it can be influenced.*

**Hypothesis 33:** *Managers have to communicate clear objectives on how employees at lower levels can influence certain value drivers and thus contribute to the increase of a SME's value.*

**Hypothesis 34:** *The importance of EVA's underlying idea of earning an appropriate return will gain in importance in the future due to the lower availability of debt financing, increased international competition and high market uncertainty.*

**Hypothesis 35:** *EVA as a financial KPI is only one of numerous approaches to optimize a SME's PMMS and may thus not get more important in upcoming years.*

### 7.3 Reply to the research questions

Based on the above discussed empirical findings, the following hypotheses with regard to the two research questions have been established.

#### **Does EVA represent an appropriate PMMS for SMEs?**

**Hypothesis I:** *EVA as a holistic management approach represents an appropriate concept for SMEs.*

**Hypothesis II:** *EVA as a financial KPI represents an appropriate PMMS for SMEs which have enough managerial expertise and sufficiently developed reporting standards at hand.*

#### **How should EVA be implemented in SMEs?**

**Hypothesis III:** *For EVA's implementation in SMEs, three rules should be considered:*

1. *A value-driven culture is more important than the EVA figure itself.*
2. *Make the EVA system as simple and as transparent as possible.*
3. *Implement EVA as top-management KPI and push it down throughout the entire company by using value drivers.*

*The detailed implementation suggestions are portrayed in Chapter 7.2.*

## VIII. Literature

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## IX. Annex

### IX.i. Annex 1: Average industry business risk indexes

Table 3: Average industry business risk indexes (Stewart III 1991, 451–452)

#	Industry	Business risk index (BRI)
1	Services, R&D	1.69
2	Distribution, apparel	1.54
3	Semiconductors	1.52
4	Office equipment	1.34
5	Home building and rec. vehicles	1.31
6	Services, pollution	1.23
7	Services, software	1.22
8	Instruments	1.17
9	Electronics, elec. mach.	1.15
10	Drugs	1.14
11	Toys, school, and sporting goods	1.10
12	Medical supply	1.10
13	Consumer durables	1.08
14	Distribution, other	1.08
15	Textile and apparel	1.05
16	Machinery and tools	1.05
17	Producers of trans. equip.	1.03
18	Services, other	1.02
19	Restaurants	1.01
20	Forest products and paper	1.01
21	Iron and steel	0.99
22	Distribution, hardware	0.99
23	Chemicals	0.98
24	Department stores	0.98
25	Printing and publishing	0.98
26	Transportation	0.96

#	Industry	Business risk index (BRI)
27	Misc. manufacturing	0.96
28	Hospitals	0.95
29	Aerospace and defines	0.94
30	Personal care	0.92
31	Mining and metals	0.92
32	Media	0.89
33	Construction materials	0.88
34	Air transport	0.87
35	Hotels and casinos	0.87
36	Food and drug distribution	0.86
37	Fabricated metals	0.81
38	Energy	0.81
39	Construction	0.73
40	Food, beverage, tobacco	0.72
41	Telephones	0.67
42	Precious metals	0.59

## IX.ii. Annex 2: Interview transcripts

### IX.ii.i. Expert interview with Mag. Manfred EGGER, MBA

Function	Company	Category	Date	Duration	Type
Head of Corporate Planning	Telekom Austria Group	Industry	24/02/2012	~ 75 min.	In person

At the request of the interviewee due to a corporate guideline, the transcript is not published.

### IX.ii.ii. Expert interview with Mag. Werner FLEISCHER

Function	Company	Category	Date	Duration	Type
Board member	Verbund Trading AG	Industry	06/03/2012	~ 40 min.	In person

Jacek GÖRAL: I would like to start to talk about your experience in implementing EVA. How did you implement EVA in your company and how was your experience in this process?

Werner FLEISCHER: We started the implementation at the beginning of the 2000s. Basically, it was implemented to improve our controlling systems as well as the way of handling and steering the whole group. We discussed several different value management systems, which range from DCF to EVA and chose EVA because it was the best fit in terms of an annual reporting and controlling system.

Jacek GÖRAL: I see. How deep was it implemented in the company?

Werner FLEISCHER: It was implemented down throughout all the companies of the group.

Jacek GÖRAL: So each company is calculating its own EVA?

Werner FLEISCHER: Yes, each unit is calculating its own EVA.

Jacek GÖRAL: Okay. As you know, my thesis is about the implementation of EVA in small and medium-sized enterprises. Based on your experience in this large corporation, what would you recommend when implementing the measure in SMEs?

Werner FLEISCHER: My simple answer to this complex question is to keep it simple. Don't overdo it. In terms of adjustments, my general recommendation, not just for SMEs but also for larger companies, would be to have a close relationship to the figures of your accounting system. Otherwise, if you have a lot of adjustments, you lose your addressees as they don't understand it any more.

Jacek GÖRAL: Do you have any adjustments in mind, that should be used or does it depend on the industry and the company?

Werner FLEISCHER: It depends on the industry but, in contrast to the Stern Stewart concept, I would do it without any adjustments. On the one hand, in order to increase the understanding, and on the other hand, in order to prevent manipulation of the figures.

Jacek GÖRAL: It probably makes also sense, because SMEs don't have that many financial and human resources to administer such a system?

Werner FLEISCHER: Sure, there are probably one or two persons who deal with it. Therefore you cannot set up a system that is too complicated. It should be interlinked with the existing accounting and controlling system.

Jacek GÖRAL: I see. So this is one issue of the calculation. Another issue concerns the cost of capital. Do you have an approach in mind how to calculate the cost of capital and, in particular, the cost of equity?

Werner FLEISCHER: One approach could be to look at comparable, listed companies. If you are in the same line of business, then you may find out what the overall risk for the equity may be. This is one possible approach. Another, even simpler, approach is to orient oneself towards the return expectation of the owner. This is a rather subjective approach that is not based on the capital asset pricing model or any other theoretic frameworks. It is an approach that was used in the early days of cost accounting.

Jacek GÖRAL: The second approach would be consistent with the idea of not making the calculation too complicated.

Werner FLEISCHER: Yes. I am not sure if you have dealt with SMEs in detail in your past, but if you try to introduce beta factors and so on, you might lose the people who operate in your project.

Jacek GÖRAL: I see. Would you implement EVA throughout the whole company or would you deal with it only at the top level.

Werner FLEISCHER: I'd rather start with the top level, as it was equally done at Verbund. So it was a top-down approach. Over time, you can then elaborate value drivers for lower levels.

Jacek GÖRAL: At lower levels, would you even explain the concept or would you just derive the value drivers from the top management level?

Werner FLEISCHER: I think that you have to explain it.

Jacek GÖRAL: You have to explain how it is calculated?

Werner FLEISCHER: I would explain the basic concept in terms of what the influence of the individual is on value creation in the company. So the basic influencing factors to the EVA figure should be explained, such as the capital employed or the interest for higher risk. I think that this approach worked well when we implemented it here at Verbund.

Jacek GÖRAL: How did you explain it? Did you have trainings?

Werner FLEISCHER: We had trainings. In particular, the people from the accounting and the controlling department were trained, but also employees with a non-financial background.

Jacek GÖRAL: So you would claim that everybody in the company should have an idea of it?

Werner FLEISCHER: Everybody is a very broad concept, but, at least, the people who have some kind of responsibility for the results should be trained.

Jacek GÖRAL: I see. Do you think that there will be several EVA numbers in a SME or just one calculated for the entire company?

Werner FLEISCHER: I am not sure. I have never implemented it in a smaller company but I don't think so. I think that it will rather be a top-level concept. Then you can start to push it down by value drivers which are more operational and can be communicated at lower levels.

Jacek GÖRAL: So the detailed understanding would be at the top level and in financial departments. At lower levels, people should have a basic understanding and know which value drivers to focus on.

Werner FLEISCHER: For example, they should know how to deal with working capital or cycle times to increase value.

Jacek GÖRAL: Would it be enough if it is communicated by the CEO or is training needed to get such an understanding?

Werner FLEISCHER: If the top management level is sufficiently familiar with the concept, then they should do it and not just delegate it to an outside consultant. They should stand for it. If the top management level doesn't sell it internally, it will not work.

Jacek GÖRAL: I see. So the first step of my heuristic model, namely getting managers' commitment, is a very important one?

Werner FLEISCHER: Yes. If you don't have the management's commitment, especially of the CEO, then you are lost.

Jacek GÖRAL: Is it necessary to have external support if the management knows the concept well enough?

Werner FLEISCHER: I would say no, but I am not sure to which extent EVA has already reached SMEs. I don't know if they have the awareness and the understanding.

Jacek GÖRAL: Would you say that it will be a positive development if it reaches SMEs? Do you think that this concept makes sense for SMEs?

Werner FLEISCHER: I think that every concept, which improves the controlling of SMEs, is welcome. The question is, whether it is the right starting point or whether you have to undertake other steps in advance. I worked for SMEs a long time ago. The question is whether the basic systems, on which you build EVA, are already implemented. You have to have proper accounting and controlling systems and then you can build upon them.

Jacek GÖRAL: So based on your experience, do SMEs have proper accounting systems?

Werner FLEISCHER: No. At that time, they didn't have them. I haven't followed the development very closely since then, but they are still pretty much at the beginning in implementing controlling systems.

Jacek GÖRAL: Okay. So this could be a major obstacle.

Werner FLEISCHER: Yes, you could create a major gap of understanding. So rather start from the scratch.

Jacek GÖRAL: So if there is such a long way to go, is it feasible for SMEs to start such a process? Do they have enough resources and enough persistence to implement such a system?

Werner FLEISCHER: It is top management that you have to convince. This may be the owner in many cases. Secondly you have to win the accounting and controlling people over as they will work with it. Those two groups have to be convinced.

Jacek GÖRAL: Aren't all other employees also important as they will be the drivers of value creation?

Werner FLEISCHER: Yes, but if there is no system in place that reflects what happens, then you operate in a way that is unrelated to accounting. In principle, it is enough to go to the shop floor and tell the people to reduce the working capital but it does not work without measurement.

Jacek GÖRAL: So if you get it right, you believe that it is feasible but in single cases some preliminary steps have to be undertaken before EVA can be actually implemented.

Werner FLEISCHER: Absolutely. Keep your actuals proper. You might have the opinion that every book-keeping system is well organized but that's not the case. So keep your actuals in order, implement a sound planning system and have your figures available in time. There is much to be done before you start flying higher.

Jacek GÖRAL: Okay. If you manage to achieve this final stage, would an EVA number provide a manager with superior information than for example benchmarking figures of the industry?

Werner FLEISCHER: Well, the added value of EVA is that you deliberately incorporate risk into your system of managing the company. So the risk of capital is incorporated. From my point of view, this is the differentiating factor. As soon as you start looking at your company risk, then you have to deal with such measures.

Jacek GÖRAL: And this would add another layer of important information.

Werner FLEISCHER: Yes.

Jacek GÖRAL: How important do you consider the bonus system to be when implementing EVA?

Werner FLEISCHER: If you just have key figures which are not the basis for compensation, then they are just meaningless.

Jacek GÖRAL: Okay, so would you implement the bonus plan that is suggested by Stern Stewart?

Werner FLEISCHER: I would start very carefully to implement a bonus plan. If you deal with people's personal money, you have to be sure of your system and its outcome. So the bonus plan would not be necessarily the first step. I would rather have a phase of reviewing and monitoring it. Only when I feel comfortable about the set-up, I go the next step.

Jacek GÖRAL: But as you say, it is meaningless to implement EVA without an incentive system?

Werner FLEISCHER: Meaningless is a strong word. I would say that only a few people can operate with EVA and it cannot be brought down the company. It still can be a meaningful top management information figure but you don't change anything with it. You just monitor the status but you do not manage it.

Jacek GÖRAL: So what is your suggestion?

Werner FLEISCHER: My suggestion is to implement it, to monitor it for a period of two to three years in order to understand it and then to get into the idea of an incentive system. Then you can have a fine-tuning phase to see what influence individual actuals really have and you can consider changing them. And you shouldn't change an incentive system every year. Only if you feel comfortable about the incentive system, you should implement it and keep it constant over a longer period.

Jacek GÖRAL: Alright. Do you see any other problems in the implementation process except the ones mentioned?

Werner FLEISCHER: I would say that the most important issue to make it work is to understand it at different levels in an appropriate profundness.

Jacek GÖRAL: In order to establish such an understanding, would you have a comprehensive training program?

Werner FLEISCHER: You need to have training. This may take several weeks and would need to include follow-up training when people actually work with it.

Jacek GÖRAL: Would you have a certain training schedule?

Werner FLEISCHER: I would give an overview at the beginning and then have specific training sessions for specific functions. It shouldn't be the same for everybody. The training must be differentiated based on what is important and significant for different functions.

Jacek GÖRAL: Alright. So it would be specific for certain levels and specific for certain functions?

Werner FLEISCHER: Yes, yes.

Jacek GÖRAL: In my heuristic model, I have identified several characteristics of SMEs. Are there some factors that make it difficult or even prohibit implementing such a system in SMEs?

Werner FLEISCHER: All of them are important. I have a hard time to rank them. It is certainly the lack of managerial expertise. It is certainly the lack of formalization. This concerns the issue of before, whether companies have proper

accounting systems or whether they manage the company out of the pocket. Then it is the lack of human capital and finally the lack of financial capital. This would be my order in terms of addressing the EVA issue here. So: managerial expertise, formalization, human capital and financial capital.

Jacek GÖRAL: When you talk about managerial expertise, do you mean that the management does not know how to work with such a financial system?

Werner FLEISCHER: Yes. SMEs are very often set up by people coming out of the operational business. They are craftsmen, people who have ideas, people able to sell things, but they are not necessarily people with an accounting or controlling background. As you certainly know, most of these start-ups fail because of not having detailed and elaborated business plans which are based on financial figures. So therefore, I would see this issue as the lack of managerial expertise in terms of how to run a company from a controlling point of view. They know how to run a company from their business experience. They know how to produce things and how to sell things but they do often not know how to do it in an economic way.

Jacek GÖRAL: Does this rather mean that it won't be possible for them to implement it and they shouldn't even try it or does it mean that they should seek external help?

Werner FLEISCHER: They should seek help. And what I have already mentioned and what I want to reemphasize again is that managers have to look at their company from an accounting point of view in the first place.

Jacek GÖRAL: Okay.

Werner FLEISCHER: In a subsequent step, they can establish a more elaborated accounting figure or system on top of that. If you do not have your accounting figures and your business plan in order, how does EVA help you? It would be like you or me competing with Marcel Hirscher on a slalom.

Jacek GÖRAL: I get it. Another question: Do you think that such a performance measurement system gets more and more important for SMEs or is it a personal decision of the management whether they want to have it or not?

Werner FLEISCHER: I think that it is still early for SMEs because of the gap of where they stand and where they need to get to. Another thing is that there are always several cycles of different approaches of running a business. Maybe you are not old enough, but I have seen many of them. I have experienced a marketing approach, a systemic approach or an EVA approach. All of them are useful and make sense for businesses, but you have to be careful and not just follow fads of consulting companies. And EVA has become some kind of a fad in the last ten years.

Jacek GÖRAL: Fad sounds quite negative.

Werner FLEISCHER: I tried to phrase it negatively. In all of these approaches of running a business, there are positive elements, but these are not the only ones.

Jacek GÖRAL: But then my question is whether you would recommend a SME to implement it or rather not?

Werner FLEISCHER: Yes, I would recommend it. What I wanted to also mention is that value-based concepts are not new. You have probably read the literature that concepts which focus on residual income are known for 100 years.

Jacek GÖRAL: But once again, I would like to talk about EVA being a fad. On the one hand, you say that it is a fad, but on the other hand, you claim that it still should be implemented. Isn't this a contradiction?

Werner FLEISCHER: The positive thing about it is that it points out what influences the value of a company. This is maybe the more important task than just calculating the figure. It is essential to analyse my company and to find out what drives its value. These are probably five to ten influencing factors.

Jacek GÖRAL: I heard from other interviewees that they would focus, to a large extent, on a value-driven culture and even forgo implementing EVA because it may be too complicated. Would you also support the statement that a value-driven culture is more important than the measure itself?

Werner FLEISCHER: I agree with that because financial measures are always the outcome of actions. And therefore the action is more important than the measure. So, if you want to change things, change them and do not just look at them. On the other hand, if you don't have a management system, you cannot track whether you have changed the world.

Jacek GÖRAL: So it goes hand in hand?

Werner FLEISCHER: It goes hand in hand. A standard sentence is that you cannot manage what you cannot measure. On the other hand, you can say that if you do not manage, you do not need a measure.

Jacek GÖRAL: I see. That makes sense.

Werner FLEISCHER: The cultural aspect is certainly the more important one. The success of the understanding of what each and every person can contribute may be then measured with EVA.

Jacek GÖRAL: When it comes to the implementation, should there be an implementation team that only concentrates on this task or would it rather be implemented parallel to the daily business.

Werner FLEISCHER: I think that it would be better to have a separate implementation team that drives the project.

Jacek GÖRAL: What do you think of the EVA concept as such?

Werner FLEISCHER: From a value creation perspective, it leaves out the change of the future market value added. If you only look at EVA, then you have only one side of the coin.

Jacek GÖRAL: Is it possible to achieve this long-term focus with an EVA bonus bank?

Werner FLEISCHER: Although a bonus bank is certainly useful, it is not very popular. As SMEs have longer or lifetime periods of management, this issue is not as important for them, but in larger companies you usually have five-year terms of the board members. In that case, you should have a system that even lasts longer than this five-year period of a board member. The possible negative aspects of his/her management only arrive after his/her withdrawal. You would have to get money back from him/her but this is not easy from a contractual point of view. In principle, the long-term view is necessary, because otherwise it leads to short-term behaviour.

Jacek GÖRAL: I would assume that this problem is less severe for SMEs because the owner is often the manager of the company.

Werner FLEISCHER: The agency problem is less important in SMEs.

Jacek GÖRAL: So maybe it is not necessarily required to have an incentive system with a bonus bank because the owner will rather not sacrifice the company for better short-term results.

Werner FLEISCHER: Normally he/she should focus on the company in total and not only on his/her salary. Long-term view is kind of a natural thing in SMEs.

Jacek GÖRAL: I see. I heard from several other interviewees that the EVA concept is too complicated for SMEs. But you seem to have more confidence in the employees and managers of SMEs.

Werner FLEISCHER: I have more confidence, but you have to explain it in a language that people actually understand. If you walk in with your standard EVA literature and talk about capital asset pricing model and risk premiums, then you are lost. You have to get it down to a level where people actually understand how they could contribute to the EVA figure. This is often not easy for managers and outside consultants who fly high and are not down to the language of the shop floor.

Jacek GÖRAL: I see.

Werner FLEISCHER: Another thing I wanted to add is that the most important thing in running a business is to have a consistent measure. Do not change it every year or every three years. It is better to have a simpler set of key figures and follow them consistently than change them from time to time. So consistency is very important.

Jacek GÖRAL: Alright. So, an EVA system makes sense, but it should be as simple as possible in order to achieve an understanding among all employees. Moreover, the managers' commitment is very important and it should be implemented in conjunction with a value-driven culture. If the available accounting systems are not accurate enough, several preliminary steps may be necessary before being able to implement EVA. But whatever measure is actually used, it should be used consistently over a longer period of time.

Werner FLEISCHER: Yes.

Jacek GÖRAL: Okay. We have talked about all important issues. I want to thank you very much for this insightful interview.

Werner FLEISCHER: It was a pleasure.

### IX.ii.iii. Expert interview with Dr. Marco HOFFLEITH

Function	Company	Category	Date	Duration	Type
Consultant	Stern Stewart & Co.	Consulting	30/03/2012	~ 40 min.	Via telephone

At the request of the interviewee due to a corporate guideline, the transcript is not published.

## IX.ii.iv. Expert interview with Dipl. oec. Niko HOFMANN

Function	Company	Category	Date	Duration	Type
Principal, Competence Centre Control & Finance	Horváth & Partners	Consulting	07/03/2012	~ 40 min.	Via telephone

Jacek GÖRAL: Okay, let's start.

Niko HOFMANN: First of all, could you please give me your definition of small and medium-sized companies. Do you only refer to the very small companies?

Jacek GÖRAL: Okay, my definition is based on a recommendation of the European Commission. It suggests that the staff headcount of SMEs is less 250, so the company has fewer than 250 employees. There are also several other dimensions. One more would be the turnover, which is supposed to be less than 50 million.

Niko HOFMANN: That's good to know as the term medium-sized companies can also refer to bigger and internationally organized companies. It is a very good question if you need value based management in such small companies. In my opinion, there are one or two really important aspects. First, what would be the impact or the advantage for small companies to implement value based management. One idea of value based management is to not only show result measures to manage the company but to also implement a figure that considers the asset side. This is one important insight. You can show what is on your balance sheet, the capital employed. Another very important discussion with regard to value based management and EVA is whether this measure is understandable for the management and all other employees. I am not sure whether the idea and impact of an EVA concept will be understood in smaller companies. You have two possibilities in such a case. One idea is to implement value based management with a top KPI like EVA. Then you need to have a focus not only on result and cost figures but also on the needed CAPEX measure in order to ensure that sales and results are safe for the future. The second possibility is to have single KPIs which do the same. You can also implement working capital management principles with KPIs such as Days Sales Outstanding, Days Payables Outstanding. So you can equally have single KPIs that also focus on the balance sheet. You don't need EVA if there are other good, but simpler KPIs that can do the same. It's not exactly the same because the focus is not as clear as in value based management. It is a very important decision which is actually your top KPIs. It influences aspects like training or reporting content. There is a difference, between a value based management KPI as top KPI and a bundle of single KPIs which equally allow managing the balance sheet but don't have such a clear focus. That's the main question smaller companies have to decide on. You have to decide whether there is enough management knowledge to handle and understand the value based management KPI. You don't need it for external reporting. It is only used internally and so you don't have the same advantage big, listed companies have. By using value based management they can harmonize their internal management approach with external reports and figures shown to your shareholders. In a small, maybe family owned company you don't have this advantage. So you have to take this decision with this shortfall in mind.

Jacek GÖRAL: So, in short it makes sense for managers of SMEs to consider the single components of EVA but it depends on the managerial expertise if they should use EVA itself or split it up into its single components which consider all the aspects of EVA but are simpler. So, for example they would use one measure for the profitability and another for the asset efficiency. Did I get it right?

Niko HOFMANN: Yes, that's fine. I think that you can have the same quality in decision making, either by using EVA or a set of four or five KPIs that achieve the same.

Jacek GÖRAL: Which KPIs would you use then instead of EVA?

Niko HOFMANN: You can show the EVA-figure in a value-driver tree. There you can see the KPIs. One would represent the sales aspect. Then you normally have a result measure like the NOPAT. Moreover you need some KPIs to manage the working capital, both in total and its different aspects. So you need one KPI for the stock, one for payables, and one for sales. Finally, you need a KPI to measure your capital expenditure in order to see capital base for your daily business. So, in such a value-driver tree, you see the single figures that jointly result in the EVA figure.

Jacek GÖRAL: I see. What you calculate this measures only at the top level or would push them down throughout the entire company?

Niko HOFMANN: In a bigger company, you have to push it down into business units and segments. In a globally organized company, you also have to calculate it on the level of single companies. However, in smaller companies you have to consider whether you even have a second or third level in your management hierarchy. I am not sure if this is true for all small companies which have only five or ten little entities. Maybe they don't have a clear business unit concept. If there is a second management level, you also have to consider whether these managers have enough responsibilities. In such a case, you can break EVA or the single KPIs down according to the responsibilities. In some companies, there might not be a structure based on business units or divisions, but a breakdown based on functional responsibilities.

Jacek GÖRAL: But even if there are no business units and the calculation is only carried out at the top-management level, I would suppose that you should nevertheless try to involve all employees in value creation.

Niko HOFMANN: Some smaller companies are organized based on functions. So, there is one manager for all sales activities, for operations, for logistics, etc. In this case, there is also the possibility to break down some of the EVA ideas and figures. However, this is more complicated because you have no clear EVA figure at the second level. You have only a total figure at the company level, which you then have to split into single value drivers based on responsibilities. The sales managers will probably be rather responsible for the sales side of the EVA figure and other managers will be more concerned with the cost side. You only have to attribute the responsibilities for the payables and the assets in the company. So you have to break down the aspect of EVA according to the responsibilities. This is much more complex when you have a functional organization than when you have a business unit concept. In the latter case, you can treat a business unit like a company itself and therefore you can push EVA down much more easily.

Jacek GÖRAL: I see.

Niko HOFMANN: I think that this is a really important aspect for small companies because they rather have functional organizations and no business units. In such functional organizations, it is a lot of work to divide the EVA concept into value drivers. The advantage of value drivers is also to train employees to push these drivers in order to optimize the EVA figure. So it is a lot of work, even before you can start the implementation. Each responsible manager needs to understand what action is required to actually optimize the EVA figure.

Jacek GÖRAL: So in order to get this understanding, would you suggest carrying out a comprehensive training program? And is such a training program feasible in SMEs in terms of financial resources?

Niko HOFMANN: At least you need some kind of training for the most important managers of the company if you want to implement a really clear EVA or value-based management system. The idea is not to have totally new value drivers in the company. The idea is rather to train the people and convey the basic idea of value-based management. Sometimes, some aspects of EVA are not managed in a company and there is no clear understanding what each employee has to do. So if you don't just want to implement a theoretical concept but to establish it throughout the company, I think that training is required in small companies. This training should then not only show what EVA is about as a concept, but also how it can be influenced in a positive way. That should be the idea of the training.

Jacek GÖRAL: So this training would apply to every employee in the company even if it would be more detailed for the key decision makers and the accounting department.

Niko HOFMANN: I don't know if you should train everybody in a company. It is definitely also a question of training costs. Probably you will need a different training concept for the management level and for the remainder of the workforce. For the latter, you can use short training concepts, like videos on the internet or information in the newsletter, in order to convey the idea of value-based management. You can also just inform the employees that you want to manage the company with an EVA system. So, maybe you don't really need too much training for each employee because at lower levels there are fewer opportunities to influence EVA in a positive way.

Jacek GÖRAL: So when training is not always possible or necessary in smaller companies, does communication get more and more important? And does the commitment of the top management play a significant role?

Niko HOFMANN: Sure. I think it is also very important to influence the company culture. One really important aspect of communication is that you show your employees why the company needs a value-based management system. Some employees may fear to lose their job because they think that such a system is only implemented to increase profits. So the management needs to communicate their intentions and address such issues. There are obviously clear advantages of an EVA system. However, if not communicated properly, motivation could be also decreased in the company.

Jacek GÖRAL: I see.

Niko HOFMANN: So you really need to have a clear idea what you want to reach with a value-based management system. If you only want to maximize shareholder value, it might be difficult to convince the employees of a small company, which has no shareholders, but, for example, a family who owns it. Therefore you also need to think about the advantages and changes for all employees and other parts of the company. So this would correspond to a stakeholder-approach instead of a shareholder-approach.

Jacek GÖRAL: I see. When coming back to a point discussed at the beginning of our conversation: EVA has advantages that can help SMEs to improve their performance measurement and management.

Niko HOFMANN: For sure, but it is not a small change. One question before implementing such a system is to ask what the status of your controlling processes and methods is today. Is it a company with smooth processes and good reports about the most important figures or do you have problems with these issues? So, you have to ask yourself whether your company has the right conditions to implement an EVA concept on top of the existing reports. For example, if you want to include value drivers in your reports, but there is only a small reporting landscape, you'll have problems for both the EVA concept and all other controlling aspects. Therefore, in small companies there is often a lot of work to do before you even have a normal controlling standard. So the question is whether there is enough qualification in order to establish EVA on top of the

controlling system or if you have to undertake several prior steps in order to reach a satisfactory level of the controlling system.

Jacek GÖRAL: So there may be some preliminary steps that have to be carried out before.

Niko HOFMANN: It's not only about training. It's also a question of systems and information availability. If you want to implement something like value-driver trees, which do not only consist of financial data but also of quality figures and other information about logistics, production and sales, you have to consider that small companies may sometimes have big problems to generate and gather all these information and to report them in a regular way. So I think it depends whether you just want to implement an EVA figure, which consists mainly of financial data, or if you equally want to introduce a value-driver tree, which usually requires much more information in addition to the financial aspect. Sometimes the qualifications and systems of small companies are less developed than in bigger firms.

Jacek GÖRAL: Do you think that if this is the case, SMEs should refrain from implementing such a comprehensive system due to the lack of resources?

Niko HOFMANN: SMEs have to decide whether they want to do a big step or a small step. If you only want to implement the EVA figure, it is not a big deal and not very cost intensive. But if you want to push down this idea throughout your company and if you want to influence the decision making processes in your company by using a value-based management system, you need more figures and decision-supporting instruments for all levels in your company. Then I think it is a really important question if you have the resources and also the qualifications to carry out this project. This is not only a small calculation task, but a management approach. You need a lot of management resources and resources in your accounting department to implement it. You need training, you need to adapt your systems, you have to define your reports, and you have to modify your planning system. So, there is a lot of work if you want to change your management approach in the entire company.

Jacek GÖRAL: I see. It can't be said generally but it largely depends on the quality of the management and on the availability of resources, if such a comprehensive approach is feasible.

Niko HOFMANN: Yes, and additionally you have to define your objectives for the implementation of this concept. Is it only a top management approach where I only want to calculate one additional measure and thus only need little resources? Or is it the concept about changing the management mind-set throughout the entire company? Depending on these decisions, you'll have totally different approaches and totally different roadmaps of implementing this idea in your company.

Jacek GÖRAL: But do you think that implementing only the EVA measure without changing the culture or the mind-set makes sense? I've already had several talks and often my interviewees stated that the value-driven culture is more important than the measure itself. So it is most important to make the employees understand what drives the value of a company. Only the next step is about having the EVA measure itself.

Niko HOFMANN: This is also my opinion. What would otherwise be the idea of a small company to implement EVA only as a KPI? There wouldn't be any real impact on the behaviour of people and thus it would be pointless for small companies. It only makes sense to implement a value-driven culture that changes the employees' behaviour and their decision-making processes. So if a small company wants to change something by using value-based management, it must intend to change the behaviour of all employees. At least there must be a change at the management level, because managers have the power to influence the value creation process. A figure alone does not have any advantages for small companies.

Jacek GÖRAL: Okay. How would you establish such a value-driven culture? Would you employ an external consultant? Would you ask employees to work on it on a full-time basis? And how long will such a process take?

Niko HOFMANN: You have different phases in the implementation process. The first step is to work out the concept. You need an idea on which level you want to manage the value creation process. Usually two to three months should be enough to work out such a concept for value-based management. Then you have an implementation phase, in which you change your processes and reports in order to be able to show some of the KPIs for value-based management. The duration of this phase obviously depends on the current capabilities of your reporting and the changes you have to carry out. This may take between several months to half a year to change your processes and reporting in a substantial way to show the EVA figure and some of the value-drivers you have defined in your concept. Moreover, you have to start really early with your communication efforts. It should be parallel to your concept work. This training and communication phase can take much longer and last up to one year. Altogether, it is difficult to generalize about the exact duration. It depends on the current processes and the qualifications in the company how fast it can be implemented.

Jacek GÖRAL: It probably also depends on this factors whether you need some additional external help?

Niko HOFMANN: This is also a question of the qualification of the staff. Sometimes external help is appropriate for small companies. Especially if they have little resources with little experience in such projects, external support may be needed due to the lack of knowledge and experience in terms of value-based management. Moreover, consultants can attribute more time to such projects. Therefore, these projects can be carried out faster with external help than when relying only on internal resources.

Jacek GÖRAL: Alright. I think we have covered many important issues. Thank you very much for your time and your support.

Niko HOFMANN: You're welcome. Good luck with your thesis.

## IX.ii.v. Expert interview with Mag. Nikolaus KÖCHELHUBER

Function	Company	Category	Date	Duration	Type
Partner	Contrast Management Consulting	Consulting	27/02/2012	~ 35 min.	In person

Jacek GÖRAL: EVA spielt momentan keine große Rolle in KMUs in Österreich. Unter welchen Voraussetzungen könnte EVA in KMUs in Zukunft eine Rolle spielen?

Nikolaus KÖCHELHUBER: Der Grundgedanke, der hinter dem EVA-Konzept steht, spielt sehr wohl eine Rolle und der wird in Zukunft wieder eine größere Rolle spielen. Was ist der Grundgedanke: Verdienende einen adequaten, risikogewichteten Return auf dein eingesetztes Kapital. Das ist ja ein zutiefst betriebswirtschaftlich nachvollziehbarer und logischer Grundsatz, egal ob ich jetzt EVA darüberschreibe oder nicht. Der Grundsatz ist ja durchaus stimmig. Dieser Grundgedanke wird in Zukunft noch mehr Bedeutung haben. Die Finanzierungsstruktur, insbesondere in Österreich wo eine große Kreditabhängigkeit besteht, wird eine engere werden. Basel III wird dafür sorgen, dass es schwieriger ist an Kapital heranzukommen. Wenn man sich Aussagen von Herrn Treichl von der Ersten Bank anhört, der sagt, dass wenn sie es hart leben, sie 40 Prozent der bestehenden Kunden nicht weiterfinanzieren können, dann merkt man in welche Richtung es geht, auch wenn es nicht ganz so hart kommen wird. Unternehmen, die auch nachhaltig wachsen wollen, die sich weiterentwickeln wollen, die auch immer wieder darauf angewiesen sind auf Fremdfinanzierung zurückzugreifen, in Österreich fast jedes, werden nicht drum herumkommen die Performance in den Griff zu bekommen. Da geht es nicht nur darum, dass man die Finanzierung nicht mehr bekommt, sondern auch darum, dass die Finanzierungskosten für das bestehende Volumen immer größer werden, wenn die entsprechenden Kennzahlen nicht passen. Daher ja, vom Grundgedanken ist EVA relevant für viele Unternehmen. Ob es als Instrument bzw. technische Ausprägung relevant ist, Fragezeichen.

Jacek GÖRAL: Gibt es einen Grund dafür?

Nikolaus KÖCHELHUBER: Das beginnt schon bei ganz banalen Sachen. EVA verstehen Financer. Viele Unternehmenspersönlichkeiten oder Gründer kommen nicht zwangsläufig aus der Finanzschiene heraus. Die wollen sich nicht mit Details auseinandersetzen wie was alles im zinspflichtigen Kapital enthalten ist, wie dieses und jenes bewertet wird, usw. Diese technischen Diskussionen, die teilweise in größeren Organisationen zur Genüge geführt werden, sind ja für viele Mittelständler eine furchtbare Vorstellung. Dort wo EVA eine gewisse Stärke hat, wenn ich mir Großkonzerne anschau, dieses Runterbrechen auf einzelne Sparten und Bereiche, dieser Grundgedanke, dass ich dort Mittel zuordne wo die Performance auch passt, nämlich die risikogewichtete Performance, dort möchte ich im Prinzip auch stärker investieren. Das ist ja auch ein nachvollziehbares Thema und eine Herausforderung für Konzerne. Für viele mittelständische Unternehmen stellt sich die Frage ja so nicht. Ein Unternehmen mit 100 Millionen Umsatz, sechs unterschiedliche Sparten, wo ich Kapitalpositionen oder zumindest Aktivpositionen auch schon risikogewichtet zuordnen kann, das kann ich nach diesen Kriterien steuern. Dafür sind KMUs schlichtweg zu klein. Dann kann ich EVA meistens nur auf Gesamtunternehmensebene machen. Nehmen Sie eine Brauerei her, auch wenn die größer her, zum Beispiel Ottakringer, dann haben Sie im Prinzip zwei Geschäftsfelder: Gastronomie und Lebensmittelhandel. Da können Sie jetzt nicht beginnen die Assets dem einen oder anderen zuzuordnen. Da haben Sie einen Kessel, der Bier produziert. Da kommt man vom technischen Ansatz sehr schnell an die Grenzen des Möglichen. Ich sage nicht, dass es unmöglich ist, aber ob dieser Gedanke, dass EVA uns helfen soll, das Geld in die richtigen, großen Sparten hineinzustecken, diese Frage stellt sich oft für mittelständische Unternehmen nicht, oder zumindest deutlich weniger.

Jacek GÖRAL: Das stimmt. Ist es aber auch nicht so, dass KMUs oft Probleme haben ihre Performance richtig zu beurteilen und das EVA Konzept ihnen dabei helfen könnte?

Nikolaus KÖCHELHUBER: Das EVA Konzept kann dabei helfen mehr Realismus hineinzubekommen und einen Mindestanspruch zu definieren. Wobei auch da, ist es sicher auch eine Kombination aus eher kapitalmarktorientierter Bewertung, aber insbesondere auch über Benchmarks, d.h. was verdienen eigentlich andere in der Branche. Man könnte sagen, dass das in der Eigenkapitalverzinsung bereits enthalten ist. Oft ist es aber auch entscheidend wo ich einen Unternehmer abhole. Es ist oft einfach zu argumentieren wenn in einer Branche von zehn Unternehmen acht mehr verdienen als er. Dann wird er schnell sagen, warum und dass er auch will. Es ist einfacher als mit risikogewichteten Kapitalkosten, der CAPM Methode, Leverage, Tax Shield, usw. zu argumentieren. Wenn das kein Financer ist, dann steigt er oft in der Diskussion aus. Es ist dann oft ein Kommunikationsproblem, allerdings nicht weil die Leute dumm sind, aber weil das einfach nicht ihr Schwerpunkt ist. Das sind ja auch oft Personen, die operativ im Geschäft stehen und jetzt nicht nur eine reine, etwas abgehobene Managementfunktion haben.

Jacek GÖRAL: Es ist dann also eher ein Problem, weil das Konzept zu kompliziert ist.

Nikolaus KÖCHELHUBER: Auf der einen Seite ist es sehr einfach. Wenn man es aber umlegen will auf Unternehmen, dann ist es durchaus mit einigen Hürden und mit einer gewissen Komplexität verbunden, inklusive Diskussion über die Kapitalkosten für nicht-börsennotierte Unternehmen.

Jacek GÖRAL: Existiert hier also auch ein Problem in Bezug auf Benchmarking. Die Berechnung von EVA mit den verschiedenen Adjustments und der Berechnung der Kapitalkosten ist ja oftmals eine Black Box. Da dadurch nur schwer Vergleiche durchgeführt werden können, verlässt man sich eher auf Branchenkennzahlen?

Nikolaus KÖCHELHUBER: Ja. Gut, die Finanzierungskosten kennt man. Aber auf der Eigenkapitalseite fängt die leidige Diskussion bereits an, was ein risikoloser, langfristiger Zinssatz ist. In Zeiten wie diesen ist dies gar nicht so einfach zu beantworten.

Jacek GÖRAL: Wenn man all die erwähnten Probleme berücksichtigt, gibt es eine Version dieses Konzepts, die praktikabel wäre in KMUs?

Nikolaus KÖCHELHUBER: Man muss es einfach pragmatisch halten. Man muss versuchen auf einen einigermaßen realistischen Finanzierungsanspruch kommen. Den muss man dann als Benchmark ausrufen. Das soll jetzt nicht der Aufruf zur Ungenauigkeit sein, aber man sollte da nicht zu viel Zeit investieren jedes Adjustment bis ins kleinste Detail durchzugehen wie es zum Teil in Textbüchern vorgeschlagen wird.

Jacek GÖRAL: Also sollte man nur die Wichtigsten berücksichtigen?

Nikolaus KÖCHELHUBER: Keep it simple. Die Wesentlichen sollten man berücksichtigen. Und die Methodik auf die man sich geeinigt hat, sollte man auch durchziehen und sie nicht ständig ändern, anpassen, etc.

Jacek GÖRAL: Ok, verstehe. Gibt es bestimmte Adjustments, die besonders wichtig sein oder ist das sehr unternehmens- und branchenspezifisch?

Nikolaus KÖCHELHUBER: Das ist unternehmens- und branchenspezifisch. Da würde ich mich nicht trauen zu sagen welche die Allerwichtigsten sind.

Jacek GÖRAL: Alles klar. Wenn wir über die Tiefe der Implementierung sprechen, dann wird es eher nicht einzelne Sparten geben, für die man EVA berechnen kann. Wenn man die besprochene Komplexität berücksichtigt, sollte man EVA nur auf der Ebene des Geschäftsführers implementieren.

Nikolaus KÖCHELHUBER: Was aus meiner Sicht Sinn macht, ist eine Kombination von EVA als Grundgedanken auf der Gesamtunternehmensebene mit den Aspekten was der Verzinsungsanspruch ist und wo das Unternehmen liegt. Von dort ist es dann runterzubrechen in die einzelnen Sparten. Dabei muss ich ja nicht zwangsweise mit dem EVA Modell operieren sondern kann man die dahinterliegenden Performancetreiber, die dahinterliegenden KPIs benützen. Wenn ich jetzt das Beispiel von Ottakringer von vorher aufgreife. Im Prinzip geht es um das eingesetzte Kapital und im Gastronomiebusiness wird eines der wesentlichen Themen sein ob man seine Forderungen im Griff hat, ob man seine Ausfälle in den Griff bekommt. Wenn man dies schafft, dann leistet man letztlich seinen Beitrag dazu. Oder im Lebensmitteleinzelhandel, wenn die Zahlungsziele passen, leistet man einen Beitrag dazu. Oder die Marge ist dann der wichtigste Beitrag, den der Außendienstmitarbeiter oder der Vertriebsverantwortliche im Griff hat. Dem muss ich jetzt nicht unbedingt das EVA Konzept draufklopfen. Das wären dann drei, vier wesentliche Werttreiber oder KPIs, die dann einen Beitrag dazu leisten und einzahlen. So kann ich es dann für mittelständische Unternehmen übersetzen.

Jacek GÖRAL: War das jetzt auf ein gesamtes Unternehmen oder einen Teilbereich bezogen?

Nikolaus KÖCHELHUBER: Das kann sowohl als auch sein. Ich habe jetzt EVA für meinen Getränkeproduzenten. Auf der obersten Ebene bilde ich es ab und dann versuche ich die Werttreiber und KPIs in die einzelnen Sparten, Wertriebslinien, etc. zu übersetzen. Was ist der Beitrag des Gastronomiegeschäftes damit auch oben ein entsprechender EVA herauskommt.

Jacek GÖRAL: Verstehe. Wie würde man zu diesen Treibern kommen? Würde das von oben vorgegeben werden?

Nikolaus KÖCHELHUBER: Ja, sicher. Das wird oben von der Strategie, von den wesentlichen Zielen abgeleitet. Ob man das anhand einer BSC-Logik macht oder nicht, ist nebensächlich. Aber auf jeden Fall ganz klassisch, Top-down getrieben.

Jacek GÖRAL: In diesem Fall stellt sich dann wohl auch nicht die Frage, ob Mitarbeiter auf unteren Ebenen das Konzept nicht verstehen bzw. an was man sich orientiert?

Nikolaus KÖCHELHUBER: Ich bin der Letzte, der Mitarbeitern Informationen vorenthalten möchte. Es ist aber die Frage, ob es unbedingt notwendig ist, dass jetzt der Außendienstmitarbeiter für die Gastronomie in den Bezirken Wien elf bis Wien 19 das EVA Konzept verstehen muss. Mein pragmatischer Zugang wäre, dass es im Prinzip egal ist. Er muss es nicht verstehen und ich werde jetzt nicht viel Zeit investieren in Kapitalmarktlogik, etc. Aber wenn ich im sag: Schau mal her, das sind eigentlich deine drei Kennzahlen. Die Marge muss passen, die Menge muss passen und der Forderungsausfall muss passen. Wenn die drei Ergebnisse passen, dann weiß ich sofort über meine Ergebnismechanik in Bezug auf EVA Bescheid. Dann hat er im Prinzip werthaltige Forderungen und keinen hohen Ausfall. Wenn die Marge passt, dann verdienen wir mehr Geld. Wenn die Menge passt, dann passt die Mengenauslastung, und, und, und. Dann haben wir eine Wachstumsphilosophie dahinter. Letztendlich zahlt das in die Wertsteigerung ein. Es ist leichter denn Mitarbeiter über die drei Komponenten abzuholen, die er versteht und beeinflussen kann, als mit einem sehr hochtrabenden Konzept. Wenn es ihn interessiert, dann kann man ihm gerne die Kapitalkosten erklären. Aber ob das jetzt fünf oder sieben Prozent sind, kann er nicht ändern. Und da kann ich letztendlich auch das Entlohnungsmodell draufsetzen. Da brauche ich keinen hochtrabenden EVA Bonus fahren. Dann definieren wir beispielsweise ein Mengenziel. Wenn er das schafft, dann bekommt

er 100 Prozent, wenn er eine Überfüllung hat, dann bekommst er 120 Prozent und wenn er darunter liegt, dann bekommt er halt nichts.

Jacek GÖRAL: Sollte sich das Entlohnungssystem an einem EVA Entlohnungssystem orientieren? Wenn ich beispielsweise daran denke, dass es nach oben und unten nicht limitiert ist, beispielsweise?

Nikolaus KÖCHELHUBER: Diese Limitierung nach oben oder nach unten und dieses Mitnehmen von negativen Entwicklungen ins nächste Jahr hat insbesondere in projektgetriebenen Geschäften Relevanz. Insbesondere wenn ich größere Projekte habe, die auch jahresübergreifend sind, habe ich durchaus erlebt, dass man in schlechten Jahren noch abgewertet hat, noch weiter investiert hat und sich schlechter gemacht hat als man tatsächlich war, weil man wusste, dass man die Prämie sowieso nicht mehr erreichen konnte. Dafür wurde alles bereinigt für das nächste Jahr und viel Luft nach oben geschaffen hat. Nächstes Jahr hat man dann wieder eine extreme Überfüllung und holt sich die gesamte Prämie ab. Ich habe bereits solche Entwicklungen gesehen und da ist schon heilsam auf eine projektabhängige Prämie abzustellen, längere Durchrechnungszeiträume zu verwenden, die Prämie nach oben zu deckeln, wie auch immer. Da macht es schon Sinn. Jetzt aber in einem normalen Geschäft, wie in der Getränkeindustrie, fängt man jedes Jahr bei null wieder an und kann sich Ergebnisse kaum mitnehmen in das nächste Jahr. Je, wenn man es zu Ende denkt, muss man sagen, dass eine Deckelung nach oben nicht sinnvoll ist. Das ist aber eher ein Luxusproblem, das wenige haben. Ich sehe eher die Herausforderung darin, wie ich es schaffe, dass die Zielsetzungen herausfordernd aber realistisch sind. Das ist meistens die größte Herausforderung.

Jacek GÖRAL: Alles klar. Wenn wir von den Zielsetzungen reden, wie definiert man am besten diese Zielgrößen? Im Rahmen des EVA Bonus Plans gibt es beispielsweise die Zielgröße EVA Improvement.

Nikolaus KÖCHELHUBER: Da gibt es grundsätzlich zwei Zugänge. Entweder es ist der Zugang "Lasst uns besser werden", d.h. dass man vom Vorjahreswert einen Zielwert ableitet. Und oder, das ist meistens eine Kombination, dass man den Zielwert nicht rein als Verbesserung zum Vorjahr versteht, sondern dass er auch sehr stark benchmarkorientiert ist nach dem Prinzip "Was verdienen andere?" bzw. "Was schaffen andere?".

Jacek GÖRAL: Wenn ich nun keine EVA Kennzahl habe, beispielsweise in einzelnen Abteilungen.

Nikolaus KÖCHELHUBER: Wenn ich jetzt beim vorigen Beispiel bleibe, beim Außendienstmitarbeiter. Den steuere und entlohne ich über das Erreichen von gewissen Subzielen. Die Marge muss passen. Die Menge muss passen. Und es wurde ein maximaler Forderungsausfall vereinbart. Das sind dann eigentlich seine drei Ziele.

Jacek GÖRAL: Verstehe, man muss also mit Flexibilität an die Sache herangehen?

Nikolaus KÖCHELHUBER: Ja, man muss die Ziele herunterbrechen auf die jeweiligen Ebenen. Man muss ja immer bedenken, wo ich die Mitarbeiter und die Führungskraft abhole und was sie tatsächlich beeinflussen können. Wenn irgendwie möglich, sollte ich einen Mitarbeiter an jenen Kriterien messen, die er bis zu einem gewissen Grad selber beeinflussen kann. Denn sonst denkt er sich, dass er eh nur abwarten kann und es eher vom Glück abhängt, ob er die Ziele erreicht oder nicht.

Jacek GÖRAL: Und auf der Geschäftsführerebene?

Nikolaus KÖCHELHUBER: Der ist natürlich für das Gesamtunternehmen verantwortlich. Da habe ich dann Gesamtkennzahlen. Ihn kann man dann an so etwas messen. Wenn ich dann mit EVA arbeite, kann ich es machen. Wenn es andere Kennzahlen sind, die diesen EVA Gedanken in sich tragen, dann werde ich ihn an diesen Kennzahlen messen.

Jacek GÖRAL: Okay. Sollte man in diesem Fall möglichst nur eine EVA-ähnliche Kennzahl verwenden oder ist es in Ordnung, wenn man gleichzeitig auch buchhalterische Kennzahlen verwendet?

Nikolaus KÖCHELHUBER: Ich würde sagen, dass es ein entweder, oder, ist. Ich bin nicht der Freund von vielen unterschiedlichen Kenngrößen. Es sollten einige wenige sein. Wenn ich jetzt sage, dass ich EVA als wesentliche Kennzahl, warum sollte ich jetzt dann noch einmal eine Ergebnisgröße wählen, die bereits im EVA drinnen steckt. Es ist dann eher die Frage, ob ich nicht auch gewisse andere Kenngrößen honorieren, die ich auch in die langfristige Entwicklung des Unternehmens einzahlen. Letztendlich ist EVA, so wie wir ihn sehen, ist ja eine reine Ex-Post Betrachtung, der aussagt, wie viel Wert ich im vergangenen Jahr geschaffen habe und nicht wie viel Potential ich für künftigen Erfolg aufgebaut habe. Wurde das Unternehmen totgefahren in den letzten drei Jahren? Wurde das Unternehmen trotz Rekordergebnissen abgeschöpft, aber nicht mehr in die Zukunft investiert? Es ist möglich, dass zwar Ergebnisse und das EVA hinaufgehen, aber in Wirklichkeit das Unternehmen am Ende ist.

Jacek GÖRAL: Wäre das mithilfe einer EVA Bonus Bank zu lösen?

Nikolaus KÖCHELHUBER: Bis das greift, ist es dann zu spät, weil dann ist der Laden gegen die Wand gefahren oder er ist strategisch ausgehungert.

Jacek GÖRAL: Greift dieses Konzept nicht sofort, wenn man nicht den kompletten Bonus ausbezahlt?

Nikolaus KÖCHELHUBER: Ja, aber den Großteil bekommt man ja ausbezahlt. Und einem Geschäftsführer zu sagen, dass er nur ein Viertel von seiner Leistung ausbezahlt bekommt, ist problematisch. Da bekommt man keinen guten Geschäftsführer.

Jacek GÖRAL: Da könnte es also ein Akzeptanzproblem geben?

Nikolaus KÖCHELHUBER: Wären Sie bereit dazu? Nehmen Sie an, dass Sie super gearbeitet haben, aber erst in drei Jahren entscheiden wird wie viel Sie davon wirklich bekommen.

Jacek GÖRAL: Naja, schwierig.

Nikolaus KÖCHELHUBER: Wenn Sie aber sagen, dass nur ein Viertel weitergeschoben wird, dann ist auf der anderen Seite die Wirkung sehr, sehr eingeschränkt. Dann werden 75 Prozent sofort ausgeschüttet und 25 weitergeschoben. Da wird die Wirkung sehr gering sein. Also, im operativen Leben ist das nicht ganz so einfach.

Jacek GÖRAL: Glauben Sie, dass dies international anders ist? Die Bonus Bank ist ja ein Grundpfeiler des EVA Systems.

Nikolaus KÖCHELHUBER: Aber ist die Frage wie viele Unternehmen das wirklich hart leben. Vom Grundgedanken ist die Bonus Bank gut und immer noch besser als zu sagen, dass man sich an der reinen, kurzfristigen Vergangenheit orientiert. Das wird schon ein wenig durchbrochen. Die Problematik sehe ich aber, wenn ich es massiv durchbreche. Dann habe ich nämlich ein Akzeptanzproblem.

Jacek GÖRAL: Ist es in vielen KMUs nicht so, dass der Geschäftsführer gleichzeitig der Besitzer der Firma ist?

Nikolaus KÖCHELHUBER: Ja, kommt häufig vor.

Jacek GÖRAL: Dann ist die Anreizsetzung auf Geschäftsführerebene wahrscheinlich weniger problematisch.

Nikolaus KÖCHELHUBER: Weniger problematisch und da brauche ich auch keine EVA Bonus Bank. Wenn man ein Familienunternehmen hat, dann hat man meistens das Verständnis, dass man es langfristig weiterentwickeln will.

Jacek GÖRAL: Dann wäre ein derartiges Entlohnungssystem weniger sinnvoll.

Nikolaus KÖCHELHUBER: Ich möchte nicht sagen, dass es nicht sinnvoll ist, aber es ist halt schon die Herausforderung wie ich ein Entlohnungssystem machen kann, dass es eine ausgewogene Mischung zwischen Belohnung vergangener Erfolge und Potentialaufbau. Das ist losgelöst von EVA. Es ist aber einer der ganz großen Herausforderungen eines jeden Entlohnungsmodells. Und da gibt es auch nicht das richtige und das perfekte Modell.

Jacek GÖRAL: Wenn wir noch etwas über die Implementierung sprechen könnten. Glauben Sie, dass Geschäftsführer, die sich entschließen EVA einzuführen, die Kompetenz dazu haben oder sollte ein externer Berater engagiert werden.

Nikolaus KÖCHELHUBER: Es ist eine etwas unfaire Frage, wenn sie das einen Berater stellen. Außer ja, was soll ich da sonst noch sagen? Also, ja. Letztendlich sind das Aufgaben, die nicht zum Daily Business eines Unternehmens gehören. Und bei solchen Sonderstellungen ist es immer gut, dass ich mir punktuell für diese Herausforderungen einen Externen dazu, der das woanders schon ein paar Mal gemacht hat und weiß wo die Probleme liegen und wie ich diese am besten umschiffen kann.

Jacek GÖRAL: Und dieser könnte dann auch das Training übernehmen?

Nikolaus KÖCHELHUBER: Bei einem der größten Logistikunternehmen Österreichs habe ich vor zig-Jahren viele, viele Trainings bis runter auf die vierte, fünfte Ebene gemacht. Dann haben alle gewusst was das EVA, das MVA, die Kapitalkosten, etc. sind. Aber ob das wirklich zielführend ist, sei einmal dahingestellt.

Jacek GÖRAL: Besser ist es vielleicht, einige wenige Entscheidungsträger, die das Konzept im Detail verstehen und...

Nikolaus KÖCHELHUBER: ...die darunter liegenden Ebenen müssen die Ergebnismechanik verstehen, d.h. was eigentlich die wesentlichen Werthebel sind, die man selber beeinflussen kann. Die Abgrenzungsthemen sind auf dieser Ebene relativ egal. Hier muss man nur verstehen, dass wenn ich irgendwo mehr Geld brauche, ich mehr Kapital gebunden habe und das mehr Geld kostet. Die Aktivseite muss ich mit der Passivseite finanzieren. Und wenn er ein Geschäft abschließt mit einem neuen Kunden, der aber längere Zahlungsfristen hat, muss man sich bewusst sein wie viel das im Jahr kostet. So muss man das kommunizieren. Das verstehen die Leute und nicht ob ich jetzt unzählige Adjustments mache oder nicht.

Jacek GÖRAL: Mit den Details kann sich ja der Berater beschäftigen.

Nikolaus KÖCHELHUBER: Ja, da soll von der Finanzabteilung mit dem Berater ein sauberes, technisch einwandfreies Konzept aufgestellt werden. Aber was aus meiner Sicht viel wichtiger ist, ist die Ergebnislogik und die Ergebnistreiber, die hier dahinter stehen. Und da sollte man viel Hirnschmalz investieren und nicht die gesamte Energie in ein technisch perfektes Modell mit allen Abgrenzungen zu machen. Bitte das nicht als Aufruf zur schlampiger Arbeit verstehen, aber lieber hier den einen oder anderen Kompromiss eingehen, aber dafür viel mehr Zeit investieren um herauszufinden, wo im Geschäft und im Markt die wesentlichen Ergebnishebel liegen: Was muss ich angreifen? Wo muss ich andrücken? Das ist die viel spannendere Frage.

Jacek GÖRAL: Und das ist auch, was Sie zu Beginn des Gesprächs angesprochen haben, dass der Grundgedanke von EVA und nicht die technische Umsetzbarkeit zählen?

Nikolaus KÖCHELHUBER: Genau.

Jacek GÖRAL: Gibt es weitere gröbere Probleme, die Sie selber bereits erfahren haben bei der Implementierung?

Nikolaus KÖCHELHUBER: Diese Value Drivers, die Sie ansprechen, d.h. was treibt tatsächlich unseren Wert.

Jacek GÖRAL: Bei der Implementierung von EVA, was waren die zentralen Probleme, die zu lösen sind?

Nikolaus KÖCHELHUBER: Also einerseits die genaue Zuordnung von Kapitalpositionen. Meistens geht man da über Positionen auf der Aktivseite, nämlich überall dort wo ich buchhalterisch bereits getrennte Geschäftsfelder habe. Das ist dann meistens die Herausforderung.

Jacek GÖRAL: Dieser Aspekt wäre für KMUs allerdings nicht relevant.

Nikolaus KÖCHELHUBER: Überall wo ich es runterbrechen will, muss ich mir überlegen, welche Kapital- oder Aktivpositionen ich diesem Geschäftsfeld zuordne. Das zweite betrifft integrierte Unternehmen, wo ich unterschiedliche Elemente in der Wertschöpfungskette habe und ich mit internen Verrechnungspreisen arbeiten muss. Ein weiteres Thema ist wie ich auf die Kapitalkosten komme. Das ist natürlich vor allem für Unternehmen ein Thema, die nicht börsennotiert sind. Aber allgemein ist das eher problematisch. Wenn ich mir den österreichischen Markt anschau, ist es fraglich ob die beta-Faktoren tatsächlich aussagekräftig sind. Hier muss man, etwas überspitzt formuliert, üblicherweise sehr lange probieren bis ein Wert herauskommt, den man sich ursprünglich vorgestellt hat. Manchmal kommen da wirklich Werte heraus, die, trotz technisch einwandfreier Vorgehensweise, inhaltlich einfach nicht stimmen können. Das hängt natürlich auch damit zusammen, dass unsere Börsenlandschaft nicht vor Liquidität strotzt. Das ist wahrscheinlich anders in Amerika, wo man eine entsprechend andere Liquidität am Kapitalmarkt hat, aber bei unseren Unternehmen ist das durchaus problematisch. Für eine OMV dürfte das durch Verwendung eines spezialisierten Index passen. Aber wenn man von den Top zehn bis zwölf Unternehmen wegkommt, dann wird die Luft schon verdämmt dünn.

Jacek GÖRAL: Verstehe. Was wäre dann ein möglicher Ansatz für KMUs oder ist das ein Problem, das nicht so einfach zu lösen ist?

Nikolaus KÖCHELHUBER: Für KMUs kann man es, wie klassisch in Lehrbüchern beschrieben, mit Referenzmodellen machen. Hier kann man ein vergleichbares Unternehmen suchen oder zumindest Risikoaufschläge heranziehen, die in dieser Branche üblich sind. Das sind meistens noch die besten Modelle. Man sollte hier aber auch einen Schuss Hausverstand benutzen und hinterfragen, ob die Werte, die man bekommt auch tatsächlich stimmen. Sonst muss man eine andere Herangehensweise wählen.

Jacek GÖRAL: Alles klar. Hier sollte zwar eine halbwegs sinnvolle Größe verwendet werden, aber insgesamt gibt es andere Aspekte wie die Value Drivers, die von größerer Bedeutung sind.

Nikolaus KÖCHELHUBER: Bei den ganz großen Unternehmen wie Telekom Austria tut man sich relativ leicht wenn man sich die Analystenberichte anschaut. Dann sieht man gleich was die Ansprüche der Kapitalgeber sind. Hier tue ich mir relativ leicht und muss nicht lange raten was eigentlich die risikogewichteten Kapitalkosten sind. Die kann ich relativ gut nachlesen.

Jacek GÖRAL: Abschließende Frage: Würden Sie ein auf EVA basiertes System für KMUs als sinnvoll erachten?

Nikolaus KÖCHELHUBER: Den Grundgedanken ja, aber EVA als reines Instrument, nein.

Jacek GÖRAL: Vielleicht noch zu meinem heuristischen Modell. Es wurden hier einige Aspekte herausgefunden, die KMUs charakterisieren. Welchen Aspekt würde hier für bzw. gegen die Implementierung von EVA sprechen?

Nikolaus KÖCHELHUBER: Die Punkte, die hier stehen, stimmen alle. Auch durch die geringeren Agency Problems verringert sich die Notwendigkeit ein derart starres EVA System zu implementieren. Das würde ich alles unterschreiben. Ich tue mich schwer einzelne Aspekte zu identifizieren, die wichtiger als die anderen sind.

Jacek GÖRAL: Also, so wie es hier charakterisiert ist, könnten die roten Felder die Implementierung erschweren und die grünen Felder könnten sie vereinfachen?

Nikolaus KÖCHELHUBER: Vereinfachen bzw. auch die Notwendigkeit und damit die Bereitschaft sich damit auseinanderzusetzen, reduzieren. Wenn der Unternehmer gleichzeitig der Besitzer ist, dann braucht man jetzt nicht unbedingt ein Modell, das dieses Problem löst. Von daher passen für mich hier alle Argumente rein, die dazu führen, dass EVA vielleicht schwieriger implementierbar ist oder die Notwendigkeit nicht gesehen wird, dass man es braucht.

Jacek GÖRAL: Es bleibt aber dabei, dass ein derartiges System Sinn macht?

Nikolaus KÖCHELHUBER: Ja. Einerseits vom Grundgedanke und andererseits, was ganz entscheidend ist, ist das Herunterbrechen in die wesentlichen Werttreiber.

Jacek GÖRAL: Gut, vielen, vielen Dank für Ihre Zeit.

Nikolaus KÖCHELHUBER: Sehr gerne.

## IX.ii.vi. Expert interview with Dr. Andreas MATJE

Function	Company	Category	Date	Duration	Type
Senior Vice President Corporate Controlling & Accounting	OMV	Industry	08/03/2012	~ 35 min.	In person

Jacek GÖRAL: Do you think that EVA could be a useful measure for small and medium-sized enterprises?

Andreas MATJE: In my opinion, Economic Value Added is a very general approach which is independent from the size of the company. So, basically: yes. Why wouldn't it apply also to small and medium-sized enterprises? The question I would ask myself is whether the environment in terms of shareholders and stakeholders is the same or comparable to bigger and stock-listed companies, so that the concept itself fits to the purpose.

Jacek GÖRAL: I suppose that the environment is different. So do you think that it doesn't fit to a SME's environment?

Andreas MATJE: I would expect that most SMEs are privately owned and that owners have a strong position in managing the company, either directly or indirectly. From some of my contacts I know that these private owners have a different view on their company in some circumstances. So the personal attachment is different compared to a big, stock-listed enterprise. That makes the difference, I think. For me, Economic Value Added is a measure to financially assess the impact of implementing strategies. It's one of the options you can use to track the strategy implementation on an annual basis. Strategies in privately-owned SMEs will look different and will have different aspects. This might make a difference. Where the target is the same between small and big enterprises, Economic Value Added is a KPI you can use.

Jacek GÖRAL: So is the major benefit of EVA that you can better measure the success of your strategy?

Andreas MATJE: For us, yes. If I draw from my experience in OMV, we use Economic Value Added as a KPI to track the annual contribution of implementing a strategy.

Jacek GÖRAL: I see. In my theoretic research, I have identified that SMEs often have problems to track performance and they lack some managerial expertise. So their numbers are not that accurate. Do you think that EVA could help them to better assess their performance?

Andreas MATJE: You have really found out that the numbers in SMEs are not as accurate as in large corporations?

Jacek GÖRAL: I have identified several characteristics. One of them was that there is often a lack of managerial expertise. Due to this lack of managerial expertise, performance measurement systems are often implemented partly and imprecisely.

Andreas MATJE: So you mean that these systems are not set-up systematically or not as systematically as suggested in the literature?

Jacek GÖRAL: Exactly, and as a result the numbers may also be imprecise.

Andreas MATJE: I think that the basic thinking of Economic Value Added should be closer to the heart of owners of SMEs compared to other companies, because it is really their money they invest. And what they would like to see is a return on the invested money. Economic Value Added is nothing else. You look at the return you generate and you compare it with the expectations, which correspond to the weighted average cost of capital. That's how you steer the company. So, from the steering philosophy, there should be no difference. I would even expect that private owners of SMEs have this thinking internalized because they are either involved in the daily business or they are very close to the business.

Jacek GÖRAL: So they have the mind-set that is suggested by EVA. But do they also have the...

Andreas MATJE: ...the metric, to me, is less important. In general, there is a tendency in economics to put a lot of emphasize on defining KPIs in very scientific ways. This is fine. It's good that people investigate which potentials there are and what you have to consider in defining KPIs. But sometimes you lose yourself in the technical definition and do not look carefully enough at how to apply it, how it is understood by the people and how it can create business impact. If the mind-set is right, the definition of the KPI is less important. In particular for EVA, there is the Stern Stewart approach where you have many adjustments to numbers from accounting. At OMV we don't do that, to be honest. We want to have a KPI system, and EVA is part of this system, which can be calculated on the basis of existing data, which management knows and which can be scaled down to the organization, so that we can create business impact, not only at the top level but also at lower levels in the organization. And I think that's the important point. Of course, you shouldn't make mistakes in defining a KPI. But to do it very scientifically, down to the last detail, is sometimes not effective. One example in the German Betriebswirtschaftslehre (= business administration), is the calculatory cost concept (calculatory depreciation, calculatory interest, etc.). These concepts are fine and theoretically right, but lead to a situation in which externally reported results are completely different from management accounts. Usually it takes a lot of time and effort to explain why they are different. If this is the case, it loses relevance. That's the point.

Jacek GÖRAL: So one of your arguments is that a value-driven culture is more important than the metric itself.

Andreas MATJE: Yes.

Jacek GÖRAL: Based on this, the metric should be as simple as possible if SMEs want to implement it?

Andreas MATJE: Yes. It should not be oversimplified, but it should not be too complex either, because complexity always creates distortions. You are losing the focus on the key issues.

Jacek GÖRAL: I see. When you don't use any adjustments here, then SMEs shouldn't use any adjustments either?

Andreas MATJE: At least, we don't follow the Stern Stewart bible of EVA calculation.

Jacek GÖRAL: What about the scope of implementation? How deep is EVA implemented here at OMV?

Andreas MATJE: First of all, we have an Economic Value Added calculation at the group level. Some time ago, we started to break the calculation down to the business segment level. Right now, we are actually in the process of formalizing and standardizing this and bringing it also into our IT systems so that we have these calculations on a regular, quarterly basis, not only for the group but also for the business segments and even below the business segments at the profit centre level.

Jacek GÖRAL: I see. So how many EVA measures do you have?

Andreas MATJE: To be honest: I don't know. I don't count them. But it's quite a number. We have one group, three business segments, within these business segments it goes down to four management areas and it could go even down to the country level. It is quite a number.

Jacek GÖRAL: So you try to push it as deep as possible down into the company?

Andreas MATJE: We try to push it as deep down as reasonable. I think that it doesn't make sense to go down to the single-employee level. What we are doing is to break up the EVA calculation, particularly the RONA calculation. When we go to the segment level and below, we base our EVA on the return on net assets. The further down you go the more specific you have to be in terms of the management responsibility. I think that there is a natural limit for RONA and EVA calculations. It only makes sense if people can influence both the nominator and the denominator. Once this management responsibility ends and is only focused on either the nominator or the denominator, then the application of RONA and EVA ends and you have to focus on the components of the nominator and the denominator like the working capital, the inventories, the EBIT, costs, margins, etc.

Jacek GÖRAL: So for SMEs there will probably be only one or a few EVA numbers?

Andreas MATJE: It depends on the structure of the company.

Jacek GÖRAL: So it would be comparable to the second or third level at OMV. At this level, do you try to achieve the participation of lower-level employees by value drivers or is it the responsibility of the respective managers?

Andreas MATJE: No, no. The idea is to break this up and, as I said, go to the drivers, first the financial ones. You have a RONA and an EBIT. You can break this EBIT into revenues, margin costs, administration costs, and so on. At the same time, you can break the net assets up into fixed assets, working capital and so on. These measures are based on financial accounts. But there is a point where this needs to be translated into operational figures. When you look at the revenue, you look at volumes and prices. When you look at the margin, the variable cost element needs to come into play. When you look at exploration expenses, then you would have to look at which seismic programs we run and which exploration drillings we have. So this needs to be translated into operational KPIs.

Jacek GÖRAL: I suppose that this would be similar for SMEs. So you would have to translate the financial measures into operational value drivers.

Andreas MATJE: Yes, this would be the same for SMEs.

Jacek GÖRAL: After having dealt with EVA and value drivers, how would you set up an appropriate bonus plan? How does it work at OMV and how would you recommend it to be in SMEs?

Andreas MATJE: Compensation is always a delicate topic. I think that it makes sense to have a relation between value creation and financial compensation of managers and employees. At OMV, we currently have a long-term incentive plan in place, which covers a three-year period. We have targets that are formulated for three years. One of these targets is Economic Value Added. In our case, it is part of the top-management compensation.

Jacek GÖRAL: May I ask how important EVA is?

Andreas MATJE: We started this long-term incentive plan in 2009. So the first plan comes to an end. I think that it receives quite some attention. In terms of long-term incentives, it is something you need to look at.

Jacek GÖRAL: I don't know if you can talk about these numbers, but can you state how important it is in terms of the incentive system? Does the EVA number translate into ten, 30 or 80 per cent of the total bonus?

Andreas MATJE: I cannot tell you this. It is not because I don't want to, but because you have to know the plan. The plan is set-up in a specific way. In order to participate in the plan, you have to invest into OMV shares. The level of investment is not the same. So it is an individual choice between various models. Depending on the model, this would translate into five per cent, ten per cent, whatever per cent of your compensation. So there is no general rule for that.

Jacek GÖRAL: I suppose that it is quite difficult for a company like OMV to only focus on a measure like EVA...

Andreas MATJE: In this long-term incentive plan we actually have more measures. It's not only EVA. We have EVA, total shareholder return and earnings per share. These are the three key financial elements.

Jacek GÖRAL: Okay, I see. But due to the public interest in the company, it would be quite difficult to focus only on the EVA measure. But do you think that it makes sense to only focus on one measure in SMEs?

Andreas MATJE: It never makes sense to think that only one financial measure will do the whole job. You cannot run a company just with EVA. There are too many dimensions in running a business. You could not use only one KPI and run the company on it. Depending on how you define EVA and how you calculate RONA, cash flow is reflected, but only in a very indirect way. So running a company without looking at the cash flow more explicitly is a mistake. Running a company without looking at margins or at EBIT explicitly is a shortfall. Maybe you can develop this out of EVA, but just looking at EVA and not at other KPIs, will not be enough. You have to look at several measures.

Jacek GÖRAL: I see. Sometimes SMEs may lack managerial expertise. EVA could make it simpler for managers to just follow this one metric. Don't you think that it may be difficult sometimes if you have several measures which might even contradict each other?

Andreas MATJE: I see this point, but that's life. You have contradicting targets. You cannot maximize cash flow and grow the company at the same time. Usually this is a contradiction. You have to invest in order to stay in business. Every cubic meter of gas, every barrel of oil we get out of the ground cuts our future profit potential, because you only can produce it once. If we want to secure our long-term existence, we have to find new reserves. We only can do that by investing. So I cannot maximize cash-flow and grow the company because these are contradicting targets. You don't get rid of this.

Jacek GÖRAL: So when getting back to the bonus plan, do you have such a long-term view in your EVA bonus plan, like a bonus bank?

Andreas MATJE: We don't have a bonus bank but we have something similar. We define targets for three years. EVA is calculated annually and then it's the cumulative EVA generated over three years, which is the target measure. But in order to participate in this plan, you have to invest into shares and you have to hold these shares for at least five years. So this is kind of a retention thought which went into the design of this program.

Jacek GÖRAL: Do you think that something like a bonus bank is necessary for SMEs or isn't it that important, especially when the manager is the owner?

Andreas MATJE: When the manager is the owner at the same time, I don't think that it is necessary.

Jacek GÖRAL: You talked about the implementation at OMV. How important was or is training?

Andreas MATJE: I think that it is quite important. Whether it's training or communication, I'd rather talk about communication. When we started to develop concepts for value management in the second half of the 90s, we didn't have specific trainings. Managers didn't have to attend two-days of training on value management. Of course, there were presentations and on-going communication to build up knowledge and to make management familiar with these concepts, which were well known in the scientific world, but not in the business world.

Jacek GÖRAL: But as I see, training was only provided for the management. In a SME, would you equally only do training for managers who really deal with this measure or for everybody?

Andreas MATJE: It's good if everybody knows what it is, but it's not necessary that everybody knows all details at the operational level. It is important that people know how they can contribute to value creation in their day to day job. And then we are again at operational KPIs.

Jacek GÖRAL: So, training should be rather for the management who actually deals with the figures. Then they will translate the KPI into value drivers and the people must know how they can contribute.

Andreas MATJE: I think that EVA is not such an odd and strange concept which needs hours of explanation. You can make it strange and odd if you start talking about capital market theory and the capital asset pricing model. You can make it very complex, but then creating business impact is at risk.

Jacek GÖRAL: In terms of the training in SMEs, do you think that the knowledge is available to implement such a system or would external consultants be helpful?

Andreas MATJE: Most likely, it will depend on the company. I think that having a well-educated controller should do the job in most cases. A well-educated controller should be able to develop a concept for a small and medium-sized enterprise. Maybe, he/she needs some external help, but then, together with the management the controller should be the one who designs it, who drives it and who does all the internal training in an user-oriented way. he/she shouldn't teach capital market theory but looking at practical implementation issues and their business impact.

Jacek GÖRAL: So it should be adjusted to the work and function of the respective employees?

Andreas MATJE: Definitely.

Jacek GÖRAL: How long do you think that it would take to implement such a system in a smaller company?

Andreas MATJE: I have no idea. It certainly needs some time to grow. If I think back on how much time we spent from playing around a little and now going into the detailed definition, it may take some time. We have played around for two years so far but this was done on a high-level and by a small group of people. Now, we went into a detailed definition to prepare a roll-out for our systems. We are almost done with the concept. When we get the board's approval, we will go into the roll-out into all our systems as the next step. So the financial information you need, must be available. In very small companies this may still be an issue, but in not so small SMEs, you will usually have accounting and bookkeeping systems which you can use. So if this information is available, it shouldn't be too much of an effort. It doesn't take too long to develop a concept. It is not rocket science if you stay away from very complex adjustments. It always depends on what I want to achieve with a KPI. If I want to create business impact, it should be an easy-to-understand, readily-available KPI which I can calculate monthly or quarterly in a timely manner. It doesn't make sense to have a KPI in May for the first quarter.

Jacek GÖRAL: Okay, I see. We have already talked about possible adjustments. Do you have any suggestions how SMEs could calculate the cost of capital and especially the cost of equity?

Andreas MATJE: This is definitely a difficult exercise. Even for OMV, it is not easy to calculate the weighted average cost of capital. The concept is pretty clear but it is about the assumptions you apply. Recently we looked at analyst estimates of OMV's cost of capital. What do you think? The range was between six and almost twelve per cent. This is a 100 per cent difference between the lowest and the highest estimate. So even for stock-listed companies it is not easy to calculate the weighted average cost of capital. I think that you have to apply reasonable assumptions. Of course, we looked at the volatility, the beta, the risk-free rate, and so on. You can spend a lot of time doing that and you will never find THE true WACC because the true WACC does not exist. So what can SMEs do? They can look at peer companies which are somehow comparable and for which you find stock-listed information. It is always the question what the expected profitability of an alternative investment is. This can be answered. If the owner is active in the business, he/she can ask himself/herself. If he/she is not investing into his/her business anymore and does something else with his/her money, what does he/she expect as an appropriate return for an investment which is comparable in terms of risk? This would typically be the cost of equity. The cost of debt will be anyway available. And then you can just weight it by the respective debt and equity ratios. Even for SMEs, this should not be rocket science.

Jacek GÖRAL: Okay. Is it valuable information for owners how much they should earn in terms of the interest on both debt and equity?

Andreas MATJE: If owners of SMEs are reasonable and they don't only run the business because it is tradition to run it, they will very carefully think about what they can do with their money and what the risk of investing into their own company actually is. You cannot only assess risk in listed companies by looking at stock prices. You can also assess risk in terms of business risk. And risk management should be something that small and medium-sized enterprises equally do. If they then have an understanding of the risk of investing into their own company, they can compare it to their alternative investment and thereby determine the cost of equity.

Jacek GÖRAL: I see. So this consideration adds value for them.

Andreas MATJE: Yes, that's a consideration every owner needs to or should do. At least once a year, he/she should think about whether he/she should take money out of the business or whether he/she should leave it in the business.

Jacek GÖRAL: Okay. So let's go once again back to the first question about the usefulness of such a system. We talked about the culture which is probably more important. So in the next step, does it also make to have the EVA measure as KPI in SMEs?

Andreas MATJE: Yes, but not only a measure for the owners but also as a starting point for translating it into financial and operational value drivers at lower levels.

Jacek GÖRAL: I see. Let's discuss one last question concerning the implementation process. Have there been some major problems at OMV that are equally important for SMEs?

Andreas MATJE: No. I think that the critical thing is to get the understanding and the commitment of the top management. Once this is done, it should not be an issue any more. If the top management says that it is a useful thing that they want to incorporate into their management philosophy, where should the difficulties come from?

Jacek GÖRAL: Was it actually the top management's idea to implement EVA, here at OMV? Or did it come from the controlling department or of one of the shareholders?

Andreas MATJE: We started to look at value management in the second half of the 90s and this was driven by the controlling department. When the shareholder value topic came from the United States to Europe, we were one of the frontrunners, at least here in Austria. And it was controlling driven.

Jacek GÖRAL: So is there the full support of the top-management?

Andreas MATJE: We have used it for 15 years now. So we already have some experience. It's an up and down. It was a high focus at the beginning, then it diminished somehow and currently we are again in a phase where we focus more on it.

Jacek GÖRAL: Maybe one follow-up question on this last statement. Do you think that such a system gets more and more important for SMEs?

Andreas MATJE: I would guess so. In times of increased uncertainty and increased volatility, you have to be more careful about where to invest, how to invest and what you do. So, it should be more important to them.

Jacek GÖRAL: I see. I think that we have covered most of the important issues. Thank you very much for sharing your expertise with me.

Andreas MATJE: You are welcome.

## IX.ii.vii. Expert interview with Mag. Engelbert PÜRRER

Function	Company	Category	Date	Duration	Type
Managing director	Pankl (former employer: Sattler)	Industry	06/03/2012	~ 45 min.	In person

Jacek GÖRAL: Do you consider EVA as a useful measure for SMEs?

Engelbert PÜRRER: Yes, absolutely. For me there is no difference between a SME and a huge global company in terms of EVA. It doesn't matter at all. The size should not be the determinant whether a company can implement EVA as the KPI or not.

Jacek GÖRAL: EVA is quite useful to distribute money to certain businesses that appear to be more profitable in the future. In SMEs, there will probably not be several EVA centres or business units. In such a setting, is EVA still useful for SMEs?

Engelbert PÜRRER: I don't see this. I worked for Sattler, which is a textile company with around 600 employees worldwide. It is a small company, a family business. We had three business units which were completely different. It was not possible to compare the risk of one business unit with the risk of the other business units. So, with the help of Pricewaterhouse Coopers, which was our auditor and tax consultant, we calculated specific WACC for each of these three business units. Consequently, we calculated an EVA measure adjusted to the risk of each business segment. So it does not matter if a segment consists of 200 people and two facilities or of 100.000 people. It is always the same. You have a specific risk for a specific unit and therefore it should not be a problem to calculate a business oriented EVA.

Jacek GÖRAL: My definition of a SME is based on a recommendation of the European Union. It suggests that SMEs have a staff headcount of up to 250 employees. So it is even a little bit less than at Sattler. I suppose that in some companies, there may be only one EVA measure.

Engelbert PÜRRER: Sure, then you will have only one. If it is a very small company with only one segment, you will have only one EVA number for the whole company. It doesn't matter.

Jacek GÖRAL: So, if the allocation of money is not possible, where do you see the major benefits of EVA?

Engelbert PÜRRER: I always say that cash is effect, profit and opinion. One of not too many disadvantages of EVA is that it doesn't measure cash but profit. Profit is EBIT minus adjusted tax, so the NOPLAT in that case. But let's turn to its benefits for SMEs. I want to measure the profit of a company, whether it is a family business or not. The company has to earn at least the expected interest of the owner and the expected interest of the bank. And this is Economic Value Added. If you look at the P&L statement, I only see the interest liability to the bank, but I never see any interest which belongs to the owner. Every company has to earn both types of interest, the one to the owner and the one to the bank. Only the amount that exceeds these two interests is a real profit. That's what is shown by EVA.

Jacek GÖRAL: I see. So when talking about the interest to equity holders, let's talk about its calculation. How would you determine the cost of capital and in particular, the cost of equity for a SME?

Engelbert PÜRRER: I use the same approach as for a huge company. With 600 people, Sattler is a rather small company. We had some minor support from Price Waterhouse Coopers. We calculated it according to the capital asset pricing model. For our three very different business units, we had the WACC and could calculate the EVA. It is completely the same approach as for companies like Coca Cola.

Jacek GÖRAL: And how did you get the inputs for the CAPM, like for example the beta?

Engelbert PÜRRER: There are many statistics and I take the beta for a specific division which belongs to the company I am working for. We took a beta factor for our three divisions which had a fit of more than 50 per cent. So we had three different beta factors for our three different businesses.

Jacek GÖRAL: Did you get the beta by looking at comparable companies?

Engelbert PÜRRER: In this case, this was rather calculated by Pricewaterhouse Coopers. I don't remember exactly how it was done.

Jacek GÖRAL: You also added a size premium, didn't you?

Engelbert PÜRRER: This isn't a must, but if you rely on this model, you assume that it is very easy to sell the company or a part of the company. The problem is that Sattler and many small companies are not listed. As a consequence, the owner is not able to sell parts or the whole business like a listed company. That's why we increased the WACC with a so called premium-size mark-up of four per cent. But I cannot tell you why you should use four per cent and not two per cent, for instance.

Jacek GÖRAL: So it was rather an estimation to get a, more or less, accurate figure.

Engelbert PÜRRER: Yes.

Jacek GÖRAL: Did the WACC remain constant over time?

Engelbert PÜRRER: Every three years, we recalculated it.

Jacek GÖRAL: Concerning the possible adjustments, which of them did you use and which of them would you use for calculating EVA in SMEs?

Engelbert PÜRRER: Adjustment regarding what, for instance?

Jacek GÖRAL: For example for depreciation or for research.

Engelbert PÜRRER: At Sattler, we did not use any adjustments. We took all figures from the accounting reports and did not apply any adjustments at all.

Jacek GÖRAL: Was it because they were too complicated or because such adjustments did not significantly increase the accuracy of the EVA number?

Engelbert PÜRRER: The value from making the adjustments would not have been worth the effort. For example, the depreciation periods of accounting were similar to those of the costing department. There was no need to make any adjustments. If, for instance, the depreciation period for a machine had been four years and the costing department had calculated with 15 years, then an adjustment would have made sense. But in our case, the periods were similar. The EVA was the basis for every future bonus in our company. So we said that if we make an adjustment that will change the figure by less than one per cent, we will have to explain to everybody why we actually use this adjustment. And as we used these figures for the bonus, we didn't want to explain it. Some people from the finance department would have understood the adjustment, but 90 per cent of the staff would have thought that we wanted to decrease their bonus. At the end of the day it is a lot of work and I want that people trust in the system. Everything that you have to explain is a problem in terms of trust. That's the reason why we did it without adjustments. At the beginning, we calculate EVA with and without adjustments, but the difference was less than one per cent.

Jacek GÖRAL: But that does not mean that you would forbear from using adjustments in general?

Engelbert PÜRRER: It means that if there is a huge difference between the accounting and costing basis, then you should use adjustments and apply the costing basis for calculating EVA.

Jacek GÖRAL: I had a talk in the morning and I was told that the EVA figure is out of reach for many SMEs because their accounting figures are not accurate enough in the first place. They have to undertake several steps before even thinking of an EVA system. Can you understand this statement?

Engelbert PÜRRER: No, not at all. If a small company is a company between 100 and 200 people, I am sure that these companies have a much better accounting basis than many huge companies. For me it is known that speed kills. Huge companies have to finish their monthly reporting by the second or third working day. In a small company, you have two people who deal with it and I am sure that their data is absolutely accurate. In some really small companies with less than 50 employees, it could be the case that they have a tax consultant who is simultaneously their outsourced accountant. They meet the guy once a year and it is possible that the figures are not very accurate. But in SMEs with more than 100 people, I don't think that the figures won't be accurate.

Jacek GÖRAL: Okay, let's turn to the scope of implementation. Would you implement EVA throughout the entire company or just at the top level?

Engelbert PÜRRER: I would start at the top level. But if you implement it only at the top level, it doesn't make sense. I would always go as deep as possible.

Jacek GÖRAL: So you would try to push it down as deep as possible. Would you actually try to implement the EVA measure at all levels or would you implement it only at the top where it can be influenced and then just derive value drivers from the top level?

Engelbert PÜRRER: I would implement the EVA number as the KPI at the top level. If there are several segments, I would use it for the segments as well. It doesn't make sense to implement it even deeper. When you have your most important

value drivers, you need to explain to the people in your departments how these value drivers influence EVA. Then these people, at the third management level, should understand the concept of Economic Value Added. But you should try to measure them on the basis of the value driver. EVA as the KPI should be implemented at the top level and only deeper if you have several business segments. Even deeper does not make sense.

Jacek GÖRAL: So at lower levels, you should use value drivers?

Engelbert PÜRRER: Yes, value drivers. If you try to explain a machine operator that he/she should increase EVA, he/she will ask whether you are crazy. But if you tell him/her that he/she has to increase the overall equipment effectiveness, to reduce the scrap rate, to increase the running time and to increase the supply level, then people at the shop floor will understand it and you will increase EVA at the end of the day.

Jacek GÖRAL: I see. Should the value drivers be derived by the top management who understands the concept of value creation or should it be done in conjunction with lower levels?

Engelbert PÜRRER: I would say that it should be done in conjunction with lower levels. Another point is the commitment of the top management. If the top management is not sure whether EVA is the right way to measure the business, forget it. Not only in terms of EVA but in general, communication is very important. Many companies have much too many figures, but they forget that they have people. Only people can influence KPIs, but nobody else. You have to communicate and explain why EVA is very, very important. If you want to measure a company, Economic Value Added gives me a very good feeling whether the company is working good or not. Then you have to explain it to all employees. So first, the top management must be 100 per cent sure that it wants to implement EVA. Then you have the classical top-down process. They have to communicate with the next level, then the next level, and so on. At the end, everybody must know what EVA stands for. Not everybody has to understand it in detail but they should know that EVA is not the name of a girl but a KPI. They should have a rough concept and understand the single components of the calculation. That's very important.

Jacek GÖRAL: So everybody should know about the basic idea but the deeper you go, the larger the focus should be on value drivers and how value can be increased.

Engelbert PÜRRER: Very often it is helpful to define the value drivers in conjunction with the workers because the CEO may not be 100 per cent sure what the real driver actually is. This may be advantageous for the CEO, the managers and the workers.

Jacek GÖRAL: I see. Concerning the implementation, I heard from several interviewees that a value-driven culture is more important than introducing a measure like EVA. Do you think that this is the case or is it necessary to implement both, a value-driven culture with a value-measuring figure like EVA?

Engelbert PÜRRER: This was certainly a huge problem at my former company. The culture, which you are talking about, was non-existent. Unfortunately, everybody knew within the company that if he/she makes a profit, that's nice, but if not, it's also okay. In such a case, it doesn't make sense to implement any KPI. First of all, it is very, very important to have a value-driven culture. This is a must. Then, if you have the culture, people are hungry for the right KPI. If everybody is working with the goal of value creation, people should ask what value is. Then you can explain EVA as the KPI for this culture. Otherwise, if you have a theoretically-good KPI, but the people are not interested in the profit or value creation, it doesn't matter. First of all, there is the culture and then there is the KPI. But for me, both are important.

Jacek GÖRAL: So both.

Engelbert PÜRRER: If you have no culture, I would not start any EVA process. It costs you money and that money is lost if you don't have the right people and culture that aim at value creation.

Jacek GÖRAL: So when trying to establish such a culture, you already said that the management must be committed and that communication is important. But is communication enough or do you have to introduce comprehensive training programs too?

Engelbert PÜRRER: To understand Economic Value Added?

Jacek GÖRAL: Yes.

Engelbert PÜRRER: I would say that it is about the question where communication starts and ends. For me it would be enough to have some internal guys who are experts in terms of EVA. Then it should not be a problem to make some internal training. For me, that would be the best way in terms of communication. At Sattler, I took the time and tried to explain to everybody what EVA is, why it is implemented and so on. Maybe I had eight meetings which correspond to eight hours. That's nothing. And this was nothing else than in-house training.

Jacek GÖRAL: It was done for everybody?

Engelbert PÜRRER: For about 80 per cent of all people in the company.

Jacek GÖRAL: If the management decides to implement EVA, do you think that they or people from the accounting department have the knowledge to do such training. In my theoretic discussion of the topic, I have identified the lack of managerial expertise as a major characteristic of SMEs. That's often the reason why different performance measurement

systems are not implemented correctly in this type of company. That's also the reason why I ask whether it is enough to have the accounting department to do such training or whether external support is required.

Engelbert PÜRRER: You are certainly right. There are many companies, not only in Austria, where you don't have such skills internally. You can train your people, but in this case it is maybe better to hire somebody, like a young, highly-educated person with three to five years of experience. This may be the cheapest way. If you train your staff, it is like a flashlight. You have one or two trainings and one year later, nobody understands what EVA is, what value drivers are for, and so on. It is very important that the people in your finance department have the knowledge. If you don't have it, you have to do everything to get it.

Jacek GÖRAL: So your approach would be to buy or hire somebody who knows the concept instead of just buying training.

Engelbert PÜRRER: Yes. Buying training is not the right way. If you buy the training, but if you don't have the right people who are willing to receive this kind of training, you will pay the training and one year later, they will have forgotten everything. This is not sustainable.

Jacek GÖRAL: I see. This makes sense. When you implement EVA, would you use it as the most important figure in the company or would you use it parallel to the usual accounting based figures?

Engelbert PÜRRER: I am a fan of the balanced scorecard. I say that above all it is about people, then about the process, then about the client and finally about the financial KPIs. And I would use at most five KPIs. EVA should be one of them. For me it is the most important financial one, but it always starts with people. Regardless of the company, people are operating the machine. So I would always measure people, the process, the clients and finally financial figures. If you have the best people and they do everything to have optimized processes, the client is happy. And if the client is happy, your financial results should be okay. This may seem very simple but I am 100 per cent sure that this should be the way to go. If I have EVA, this should be one KPI of the finance part.

Jacek GÖRAL: But one of many?

Engelbert PÜRRER: Maybe one of four or five, but not of many. I hate to have many figures.

Jacek GÖRAL: Aren't four already too much. I know that EVA is also based on accounting reports, but couldn't four measures contradict each other or suggest different courses of action?

Engelbert PÜRRER: If you only have EVA, I would at least add a cash-flow ratio because EVA is not cash-based. For me, this is its huge disadvantage. So I would at least want to have a cash-flow figure as a second financial KPI.

Jacek GÖRAL: In order to have additional information that is not provided by EVA?

Engelbert PÜRRER: Yes, exactly.

Jacek GÖRAL: When you finally have accurate measures, how would you establish a bonus system? Is it even necessary for the EVA system to work?

Engelbert PÜRRER: I don't say that it is necessary but it is helpful when there is a link between the bonus system on the one hand and the KPI on the other hand. Some people would get a bonus based on a special KPI, but most of workers would get a bonus based on value drivers. If I want a KPI or a value driver to be maximized, I should try everything, so that people try to increase it on a daily-business. That's the one and only reason why I would connect the Economic Value Added and the bonus system.

Jacek GÖRAL: So at the top level it should rather be based on these financial measures and the lower you get, ...

Engelbert PÜRRER: ...the more important are value drivers.

Jacek GÖRAL: I see. I am not sure if I got it right from one of your presentations, but was the bonus capped at Sattler?

Engelbert PÜRRER: It was capped, but this is something I would never recommend. Otherwise you have a principle agent problem. If you know that in November you have reached the EVA that you need to get the maximum bonus, you would try to make some bookings for the next year. This doesn't make sense at all.

Jacek GÖRAL: So, an uncapped bonus plan would be better?

Engelbert PÜRRER: Yes.

Jacek GÖRAL: Do you think that the KPI always reflects the real managerial performance. Especially if you have a crisis like in recent years, it is possible that the performance of the entire industry drops. In such a scenario, the EVA will drop even though the managers do not have a lot of influence.

Engelbert PÜRRER: You are for sure right. Sometimes you have fantastic management but due to external circumstances, they have no change to reach their target. But it is what it is. That's business. If I have the best management, they do what they can and do a great job, but on the other hand, my clients are not able to buy our products, I cannot pay them extra money. How should it work? It's very easy. In that case, you are right but...

Jacek GÖRAL: ...that's life.

Engelbert PÜRRER: Yes, that's life. In other companies you have the opposite case, like for example in China for the last ten years. There are maybe people who do not do a great job, but they can sell everything and make a huge profit. Even though it might not have been outstanding managerial performance, it is the business. So why shouldn't you pay them the bonus?

Jacek GÖRAL: Alright. What do you think of the bonus bank? Do you think that it is a good concept to get a long-term view?

Engelbert PÜRRER: Absolutely. The bonus bank should not be too long. 30 years ago, you started at a company and retired from the same company. This is no longer the case. If you withhold a part of the bonus for 5 years or even longer, this might not be very motivating for young people. You can withhold it for two or three years but not longer.

Jacek GÖRAL: That's what I also heard. The acceptance could be missing when implementing such a bonus bank.

Engelbert PÜRRER: It's not helpful for the company if the bonus bank is too long. Two years should be long enough.

Jacek GÖRAL: When thinking of SMEs in which the owner is often the manager at the same time, I suppose that the bonus bank is not that important.

Engelbert PÜRRER: Absolutely correct. In a family business, the fluctuation is not as high as in an international corporation. This is completely different.

Jacek GÖRAL: Okay. During the implementation of EVA at Sattler, were there some other major problems?

Engelbert PÜRRER: One problem was the culture. The value-driven culture was not there at all, but this was, let's call it, a family cost. What are the typical don'ts? Communication is very important. You cannot communicate too much, but many communicate too little. So communication can be extremely helpful. Many people in the company don't understand the difference between sales and profits. If people don't understand the difference between sales and profits, then you have to explain a lot in order to spread the understanding of Economic Value Added. And very often, you forget the frequency. Explaining the concept is not something that you make once. You have to make it at least five, six times. Ten per cent of the people may have a financial background, but 90 per cent haven't. Very often you already have to train the ten per cent. If you have to train the ten per cent, what about the rest?

Jacek GÖRAL: So you have to communicate the same information five or six times?

Engelbert PÜRRER: The same thing or you start with some basic information and explain it in more detail the next time. Start with the basics and then go more and more into detail.

Jacek GÖRAL: It seems that a lot of effort is required for such a project? Is it feasible to carry out such a project? Do SMEs have enough resources to carry out training and to implement such a system?

Engelbert PÜRRER: I say yes. But if the owner is not the guy who wants to implement Economic Value Added, then it maybe does not make sense. Everybody in the company has only one boss, the owner. And if the owner is not 100 per cent sure that he/she or she wants to implement Economic Value Added, forget it. If people think that it is only one of 25 other KPIs, it doesn't make sense. It costs a lot of money and a lot of time, but in the end, you won't change anything. In a very small company, it is the owner who is responsible whether EVA makes sense or not.

Jacek GÖRAL: I see. The owner will not be the one who will actually implement it. Would you establish a team which works full-time on the topic?

Engelbert PÜRRER: I don't think that 100 per cent of their time is feasible. Then you have to buy it from outside. Nobody has time to work 100 per cent on such a project. There is also the daily business. I would try to build up a small team of employees who work 20 per cent of their time on that topic.

Jacek GÖRAL: In such a setting, how long would it take to establish, on the one hand, such a culture and, on the other hand, the figure.

Engelbert PÜRRER: For me, these are two different pairs of shoes. Implementing EVA should be done in six to twelve months. If you don't have a value-oriented culture, this must be done by the owner and not by a team. This is the job of the top management.

Jacek GÖRAL: So without such a culture it could take longer.

Engelbert PÜRRER: It depends on where you start. It is even possible that you have such a culture but nobody knows. Then you just have to enforce the employees to do what has been done throughout the last ten years. It is very easy in this case. You just have to give this culture a name. If it is the opposite situation, this may become a long-term project. In order to change the mind-set of everybody, it could take years.

Jacek GÖRAL: I see. Do you think that value-based management gets more important in these days or is it just something that each company has to decide for itself?

Engelbert PÜRRER: I think that it has not become more important than it was ten years ago. It is at the same level. Some companies have had it for several years. Others did not have any value-based management ten years ago and they don't have it today.

Jacek GÖRAL: Okay, I see. Do you think that there are SMEs with certain characteristics which are not suited for the implementation of EVA?

Engelbert PÜRRER: A non-profit organization, for instance. I cannot imagine how you could implement EVA in such a company. But if you ask whether there are companies that are too small, then I say no.

Jacek GÖRAL: Would you accept the excuse of not having enough resources or not having formalized processes?

Engelbert PÜRRER: No, no. If you don't have formalized processes, you have to formalize them. There is no excuse at all.

Jacek GÖRAL: From my point of view, we have dealt with all important issues. Thank you very much for this long and insightful interview.

Engelbert PÜRRER: It was a pleasure. Thank you too.

### IX.ii.viii. Expert interview with Dr. Marc RODT

Function	Company	Category	Date	Duration	Type
Principal	Boston Consulting Group	Consulting	28/02/2012	~ 30 min.	Via telephone

Jacek GÖRAL: I would like to start with a question about your experience in implementing EVA. I suppose that you have rather implemented this concept in large companies. Have you also established it in SMEs?

Marc RODT: No, usually I have not implemented EVA but similar measures. But it also depends on how you define SMEs.

Jacek GÖRAL: I define SMEs as follows: Probably the most important characteristic is the staff headcount of less than 250 employees.

Marc RODT: I have never done that.

Jacek GÖRAL: Do you consider implementing a measure like EVA in such companies as useful?

Marc RODT: Useful, yes. Realistic, I am not sure. I must admit that professionally I have never been involved in companies that have less than 250 employees. But privately, I have friends and entrepreneurs which manage such companies. Most of them don't have their financial figures in a quality that would allow them to come up with a meaningful EVA type of measure. A lot of times, they might still be able to come up with a return measure such as ROCE or something like that but it will be very difficult for the capital cost side. A lot of them, who I know privately, are purely equity funded and then it's the whole question of what justified the return on this equity. Most of such people are not finance professionals. They have a hard time to believe in concepts like the CAPM or something like that. So they have problems to come up with a meaningful representative analysis that tells them what they should earn. I think that it might be very difficult to make them use it.

Jacek GÖRAL: So they have a problem to measure the equity capital charge and calculate the cost of equity?

Marc RODT: Exactly, especially the equity portion. It is quite straightforward to calculate the cost of dept. It is easily explainable to them but I imagine the equity part to be very difficult to explain.

Jacek GÖRAL: Is it rather difficult to calculate it or difficult to understand it?

Marc RODT: It is difficult to understand and believe in it, so that the whole measure becomes meaningful. If you don't believe in it, you are not steering with EVA. It can only work if you trust it fully. I don't think that they would ever trust any of the models that we typically use to derive the capital charge for the equity portion.

Jacek GÖRAL: Okay, so the managers wouldn't understand the concept at this level?

Marc RODT: Most people that I know, in companies with less than 250 employees, are not trained and are no managers by profession. They are engineers, chemists or some kind of technical entrepreneurs. That's the sample that I have of this type of companies. So, most of these people have a hard time to understand such an abstract concept.

Jacek GÖRAL: I see. What I have identified in my theoretical elaboration is that SMEs have often a problem to correctly asses their performance, because of the aspect that you mentioned. There is a lack of managerial expertise.

Marc RODT: And there is also a different value set in a lot of these companies. In larger companies you can argue easily and justify the capital charge because the management is usually not the owner. In companies below 250, management is often identical with the owner, or at least owns a large portion of the company. They have a totally different value set. If you explained to them, that they must earn the capital charge, because you would alternatively sell the company, take the money to the capital market, invest in an alternative investment and actually earn more, they would state that this is not the way they want to steer the company. Even if it earned less than what it should earn, they would still keep it because

they enjoy it, it gives people work, they believe in the product, they believe that some time into the future it will be totally different, and so on and so forth. I think it is very tough to relate to them the concept of a purely financially driven metric at that point. My perspective might be biased to some extent, because I know a lot of companies that are in a build-up phase. So they can always say that it will be better at some point in the future.

Jacek GÖRAL: Okay. I see that the capital charge could be difficult to understand or to convince these people of but that's not all the EVA concept suggests. For example, there are all the adjustments that try to adjust accounting figures to reflect economic reality. Couldn't these adjustments help to make the performance measures more accurate?

Marc RODT: Yes. Maybe the companies that I have been exposed to in the past are not representative but most of them have a hard time coming up with a correct EBIT and a correct balance sheet which are supposed to represent economic reality. So I cannot envision them to get one level deeper when they haven't even mastered all the basics.

Jacek GÖRAL: Obviously.

Marc RODT: Many of these companies I know have actually outsourced their finance stuff to a third party like a tax-advisory firm or an accounting firm. The link between business reality and financial statements is a very weak one in these companies. That's only my private experience. I haven't dealt with them professionally. But when I have been asked to look on financial statements, a lot of times when you show them the accounts, they cannot explain them, because they were done by a third party. This is kind of representative for the interest they take and their confidence in financial figures. They are much more driven by real things like customers, production, and so on.

Jacek GÖRAL: In such a setting in wouldn't make sense to go one step further and try to implement a measure that is even more complicated than the measure they have. I have already had several talks and the interviewees often had a similar view about this measure. They also said that maybe it does not make sense to have EVA in the company but it makes sense to try to implement a value-driven culture.

Marc RODT: Very true. I fully subscribe to that statement. The methodological complications are usually too much for smaller companies. But you have to give them an understanding of the ROCE component, saying: Okay, you have a profit margin but you also have to think of the assets you have. You need to keep track of both. I think that is very valuable and also logical for SMEs. What you often find is, if at all, that they focus on the profit and not so much on the asset side. Obviously the idea of capital being tied up in the company is not something that regularly occurs to them, but there is much to be gained.

Jacek GÖRAL: Okay. If I got it right you argue that it would be meaningful to consider this capital charge without actually implementing a more difficult measure. So when thinking of such a value-driven culture, do you have recommendations how it should be implemented and what managers should focus on?

Marc RODT: Very difficult. In the end, and that's also true for bigger companies, a value-driven culture is nothing that is limited to the finance part of the organisation. That's the difficult thing. It is not enough if the CFO has a value-driven mind. It needs to go down to the very bottom of the company, to people handling machines on the shop-floor. They are the ones that are dealing with production set-ups, especially with the working capital. They can do the most to minimize asset utilization and so on. So in the end, it is about educating the whole company. Even for large companies it is always a major effort to do that. It is never a small effort. It takes a lot of time and a lot of repetitions. Otherwise it doesn't stick. Maybe it needs also a twist in incentive systems, when talking about large corporations. Now when thinking of smaller corporations, it is very difficult. It's probably the owner or the management who needs to think like that. As they still can observe everything that is happening in a company below 250 people, it is their responsibility to spread the idea. There is no way that a smaller company will do an education program and take a year to get that sunk into each employee's mind. So it has to be enough that management follows these ideas.

Jacek GÖRAL: Do you mean that the resource constraints do not allow them to carry out an extensive training program?

Marc RODT: Yes, resource constraints, financial constraints and not being willing to spend that much money on something that does not earn a single euro back, at least in their mind. It is a concept but it doesn't give them new customers right away. Most of these people are very hands-on. They would never make a large investment for something that isn't building new products or something like that.

Jacek GÖRAL: So looking at my heuristic model, the commitment of the management and particularly of the CEO would be a very important part of implementing a value-driven culture.

Marc RODT: Absolutely.

Jacek GÖRAL: Okay. Probably another important step is to communicate this culture constantly and with a lot of conviction?

Marc RODT: Yes, and probably for smaller companies I would think that less is more. Keep it easy, keep it very simple. Maybe do a ROCE instead of an EVA. Don't adjust too much, but follow the general idea. Then I think that you can do a lot. Don't get tied up in expensive investments in terms of systems or something like this. In the end, you don't want to kill yourself as a small company with something that is a management steering tool. It still needs to be proven that it gives added value compared to a good stomach-feeling based experience-driven management. You have all these methodologies, and that's even true for larger corporations, but there are some people that just have a feeling for markets and industries. They will do a better job without tools than other with many tools. Tools can help, but they can never

compensate for everything. That's why I would be very careful in the approach of taking EVA into a small company. I think that it is an excellent tool to discipline people in large corporations where the reach of managers is very limited and where you need to rely on these tools because you cannot reach every single person. In a company below 250 people, you can call anybody. This is probably always the better way than relying on a methodology. Just walking through production and asking why we have ordered so much and have all this stock on the shelf.

Jacek GÖRAL: I have two follow-up questions on this argument. So it makes sense to have a value-driven culture. I suppose that you require a change of the mind-set and you need to tell employees what to focus on. Do you think that this type of companies needs external support from consultants to achieve such a change of the mind-set or is it enough, if the CEO is convinced of it and communicates it personally to all employees in the company?

Marc RODT: It obviously depends on the level of education and so on. In smaller companies, I would estimate that you have a little less educated people than in larger corporations. I am not sure if you can educate everybody and if this should be the goal. I think that the best would be the management driving this. For example, if people pile stock of raw materials, driving up working capital, why do they do that? Because nobody has told them. Why has nobody told them? Because obviously whoever is responsible for production doesn't know himself/herself. he/she is a production expert but he/she has no clue that it is costing money to pile stock there. I don't know if it's advisable to train people in production on EVA and these concepts. I would guess that it starts with management there. Managers have to tell them that they have too much stock in there. They must translate it into very concrete measures, so that workers can understand why they should get rid of some stock. That is something that works. I am not sure if it really works if you do an EVA type explanation training in a small company.

Jacek GÖRAL: Should these value drivers be defined, at least at the beginning of this process, by the management? Should it be a top-down approach?

Marc RODT: Yes, yes.

Jacek GÖRAL: Do you think that the management knows exactly which value drivers are important and how they should be changed. Or is the support of external consultants necessary?

Marc RODT: That very much depends on the experience and the understanding of the management. It is very difficult to say. There may be people that know these concepts and have a clear idea of them. But the situation might be completely different if you have nobody who understands these concepts, for example four medical doctors managing a small healthcare company. They could probably never do it without support.

Jacek GÖRAL: I see. It probably also depends on the management and the employees, how long it will take to establish such a new mind-set.

Marc RODT: I think that in large corporations you can achieve it with training. But you can never do it in smaller companies because reality will take over. There will be the daily business and so on. It only sticks if you make it very concrete to people. There it is probably a never ending story. After having understood the concept, management will just need to drive it constantly and continuously for ever. Once they stop driving it, people will forget because it's not their money.

Jacek GÖRAL: How important is compensation in this type of setting?

Marc RODT: That's very, very concrete. I would do that in single areas where the performance is particularly bad. At one point in time, you could seek to get the working capital down. At another point in time, you could try to cut administration costs, or whatever. I would not put a general measure in such a system in a small company. It is probably overshoot.

Jacek GÖRAL: Let's take one characteristic out of the EVA bonus plan. As you know, the EVA bonus plan is uncapped, so there is no upper or lower limit. Do you think that this is a useful concept?

Marc RODT: Frankly, I don't know.

Jacek GÖRAL: So, maybe let's discuss one more issue. Do you think that such a value-driven culture will get more important for SMEs in the future or is it something that each company has to decide for itself?

Marc RODT: In general I think that it will get more important along with professionalization, some other aspects and because of added competition. The world is becoming more global every day. Not all small companies will have the luxury of dealing in only local markets. Many of them will face additional competition from other countries. So you need to know where you have slack and where you need to optimize things to be competitive.

Jacek GÖRAL: So it will get more important. I will try to recap your thoughts. The most important thing is that it may be too complicated to really implement a measure like EVA within SMEs but it makes sense to try to establish a value-driven culture. It must start at the top management level. So the CEO has to really understand how value can be created and he/she has to communicate it constantly and endlessly, because otherwise it will not stick. From the top management level, the value drivers should be defined and given on to employees at lower levels.

Marc RODT: Yes, exactly.

Jacek GÖRAL: Thank you very much for sharing your knowledge with me and for your time.

Marc RODT: No problem, you are welcome.

## IX.ii.ix. Expert interview with Dr. Thomas SUHIATER

Function	Company	Category	Date	Duration	Type
Competence Centre Strategic Management & Innovation	Horváth & Partners	Consulting	29/02/2012	~ 30 min.	Via telephone

Jacek GÖRAL: Let us start to talk about your experience in implementing EVA. What companies have you worked with so far?

Thomas SUHIATER: I have implemented the EVA concept in both large and somewhat smaller companies. But these smaller companies had sales of about one to two billion euros, but these were mainly investor owned and not listed companies. And there have always been different business units.

Jacek GÖRAL: So there have always been different business units where EVA was calculated individually?

Thomas SUHIATER: There has not been one single company which only had one business unit.

Jacek GÖRAL: Ok, I see. Can you imagine that it also makes sense to implement it within SMEs?

Thomas SUHIATER: That depends on the employee number and the sales number. If you think of companies with sales of about 50 million euros, then I think that it may be difficult to implement the EVA concept. On the one hand, for these companies and their management it is sometimes very difficult to understand it and on the other hand, such companies don't usually have several business units. The original benefit of an EVA concept is to allocate capital to the most profitable business unit. It is of lower relevance in smaller companies or in a company which only has one business unit. What may make sense for very small companies is if you have investment decisions and you take the cost of capital to calculate these investment decisions in advance. Then you can monitor single divisions, whether they are profitable based on the original calculation. For this procedure it may make sense to have an EVA number.

Jacek GÖRAL: Okay. As SMEs will often only have one EVA centre and the EVA number will be calculated at the corporate level. In such a setting, you do not think that it makes sense to use it?

Thomas SUHIATER: The only reason I can imagine is, as I said, to monitor investment decisions. It does not make sense to implement the EVA concept when there only is one business unit.

Jacek GÖRAL: I see the point that it does not make sense because you cannot allocate funds to individual business units. SMEs are often characterized by a lack of managerial expertise. I found out, as part of my literature analysis, that SMEs have problems to assess their performance accurately. Their performance measurement systems are not of high quality. With this in mind, could EVA maybe help to get a better understanding of performance or is benchmarking of accounting based figures in the industry more important?

Thomas SUHIATER: I think that benchmarking would be more reasonable. If you have a value-driven culture, it is very important to understand the rationale of the operational business and also the drivers within these businesses. So, you would rather have a value driver perspective and look, for example, at the cost-profit margins, at some cost ratios and at operational numbers which need not always be financial but can also be non-financial. Of course, you have possibility to measure performance on a very high, aggregated EVA number. You also have the chance to see whether you have raised your cost of capital or not. And you have the chance to get rid of some distortions in the accounting number by an EVA calculation. But this will be on a very high level of performance measurement. If you want to go into detail in terms of the change and the costs for the change of the EVA number, then you will use value drivers. You can just use value drivers individually but also within the EVA concept. I think that the EVA concept is not necessarily required to implement value drivers. You can equally look at some cost ratios without having the EVA concept implemented.

Jacek GÖRAL: I see. So it is a good idea to have some kind of a value-driven culture but it is not necessary to actually calculate the EVA number.

Thomas SUHIATER: Right, right. At the moment, I am doing a project for a medium-sized company and they want to create more value but they don't have an EVA concept implemented. They look at different important drivers. So, they have value creation in mind but do not measure it explicitly by the EVA number.

Jacek GÖRAL: So how do they assess their performance? Do they use the available accounting based figures?

Thomas SUHIATER: On the one hand, they assess performance based on the usual return on sales number, they have a free cash-flow figure and they also look at the EBT number, the earnings before tax. They look at these numbers on an operational level. On the other hand, they will introduce an incentive system, which is based on a bonus bank scheme, where they try to take into account the long-term value creation.

Jacek GÖRAL: Okay, I see. Just to be clear, what would be the reason not to implement EVA? Is it because it is difficult to understand and communicate or is it because it does not add any accuracy?

Thomas SUHIATER: One factor is that it is sometimes quite complex, particularly when you want to calculate it in detail. The second reason is that there is no need to allocate funds to different business units. It makes sense to calculate an aggregated number in order to compare business units. But that's not needed in a company which only has one business unit.

Jacek GÖRAL: I see. So the company you mentioned does not have an EVA number but uses kind of an EVA bonus plan where there is no upper or lower limit?

Thomas SUHIATER: It is a bonus system but referring to the more financial targets, there is no cap and there is no floor. There is no floor but the amount of the bonus bank cannot get negative.

Jacek GÖRAL: Alright. How do you set the objectives for the subsequent years?

Thomas SUHIATER: It is not finalized right now, but this is going to be our proposal. It will be a target number. It is not based on operational plans but will arise from strategic plans.

Jacek GÖRAL: Will it be discussed and negotiated year after year or will it be set in advance for several years into the future?

Thomas SUHIATER: For the financial components it will be set for three years. It will be constant for some time but if there is a major strategic shift in the company or some major changes in the environment, then of course this numbers will be adjusted because it does not correspond to the strategy any more.

Jacek GÖRAL: I see. When considering the implementation of such a value-driven culture, what do you think are the major challenges and problems you have to resolve?

Thomas SUHIATER: That depends if you want to establish a value-driven culture based on the EVA concept or if you want to establish a value-driven culture without EVA.

Jacek GÖRAL: What I got out of your statements is that it is not necessary to have the EVA number when establishing a value-driven culture. So, let's focus on how to create such a value-driven culture. What could be the challenges and what would be important to consider?

Thomas SUHIATER: Okay. I think that there may not be so many challenges. When just trying to implement a value-driven culture without the EVA concept, the management is bound to very operational decisions. They are very near to the operating business and they also know all operations very well. They also know which businesses are value creation and which divisions are not. They are performing very profound strategic analysis and very profound financial business cases. Based on these business cases, they monitor their divisions very narrowly. So they have a very clear picture whether these divisions pay out. So in all companies I have seen, there is a very clear picture and culture of value creation.

Jacek GÖRAL: As I suppose, it is implemented there with the help of external consultants. Is this a good approach? Do SMEs need the help of external consultants?

Thomas SUHIATER: Sometimes it is very reasonable because consultants can bring in benchmarks, they have experience how other companies get along with business issues and they have a deeper conceptual understanding of these issues. From this point of view, it may make sense. But what is interesting is that sometimes these steering concepts and the attitude towards value creation are driven by the owner of the company. In the cases where the owner has a very clear view and is able to implement it, it may not be necessary to have external support. But as I said, the requisite therefore is that the owner has a very clear understanding, that he/she is strongly involved in the operational business and that he/she is very strong in terms of management topics and concepts. If the owner does not have these skills, then, of course, it makes sense to have an external consultant.

Jacek GÖRAL: So it largely depends on the owner and his/her skills?

Thomas SUHIATER: Right, right.

Jacek GÖRAL: How important is the support and communication of such a value-driven culture by the management? Or is it enough to derive important value drivers and objectives for each employee and just pass them on?

Thomas SUHIATER: I think that it is very important to have the support and commitment of the management because otherwise you won't get it implemented in the organization. So it is definitely a crucial point. Mostly, the operational units have the relevant value drivers in mind which are important for the business. But sometimes there is some lack of relevant value drivers, for example when they do not consider any capital charges there. In this case, it is very useful for the management to check whether the value drivers at the operational level are complete or whether they have to be enriched.

Jacek GÖRAL: Is such a process a big change in a company?

Thomas SUHIATER: It is a very big change, because sometimes employees at the operational level are doing their business for about 20 years and they do not want to hear from the CFO or the controlling department which the relevant drivers are for their business. They think to know them better. Therefore, there is sometimes a lack of acceptance. That may be a challenge.

Jacek GÖRAL: Is it possible to define a time frame for it or is it a very long process in which you have to communicate the value creation ideas constantly?

Thomas SUHIATER: No, for this kind of companies it goes very fast. You have to sit together and communicate that there are some aspects that should be considered in the performance system. And if you do not define anything that is completely useless for the business, then the acceptance will be very high afterwards. So it is important to not define something that does not make sense for the operational business. You shouldn't overburden the operational guys with financial details like betas. But if you can make clear that one or two additional value drivers can help them to manage their business better, then the acceptance will be very high. Such a process where you sit together and define the value drivers may take two or three months. In the next step, you will talk about deviations of these figures and it will be implemented. So it shouldn't last longer than half a year.

Jacek GÖRAL: I see. When thinking of these value drivers, how should they be derived? Should the top management derive them from the strategy and just communicate them to the business units or should it be done in conjunction with employees at lower levels?

Thomas SUHIATER: I think that the drivers should be derived together with the operational units but the management should make a proposal because they are aware of the value creation concept. Based on these proposals, they should be discussed and fixed with the operational units.

Jacek GÖRAL: Okay. Does the top management always know enough about value creation? How does such a process start? Does the company have problems and then it is initiated? Does it come from outside? Who starts such a process?

Thomas SUHIATER: This process is mostly initiated by the CFO when it is believed that the company is not able to measure performance in the correct way. For example, when the company has investment projects which promise huge amounts of returns, but after two, three, four years you see that the returns are not realized. This is the point at which the management says that something has to be done because they are not able to measure performance in a correct way. That's the point to start thinking about value creation issues.

Jacek GÖRAL: I understand but if they are not able to assess performance correctly and they do not implement the EVA number, why should they be able to assess it correctly after the implementation of just a value-driven culture without new performance measures?

Thomas SUHIATER: Because they realize that some aspects of the performance measurement are missing, for example a cash flow figure, a capital efficiency figure, a working capital figure, and so on. These are some aspects where you think about changing the performance context and they are thinking about enhancing the value drivers.

Jacek GÖRAL: So are they calculating, more or less, the components of EVA without actually implementing the EVA number? So for example they realize that they have to consider a capital charge?

Thomas SUHIATER: Right, right.

Jacek GÖRAL: So when we talk about the cost of capital, how should SMEs calculate it and should they consider the cost of equity as well?

Thomas SUHIATER: If they don't have help from outside, then they won't calculate it exactly. So they sometimes make assumptions or use the cost of capital of similar listed companies.

Jacek GÖRAL: Okay. I will try to sum everything up. So it makes sense to establish a value-driven culture and to calculate single components of EVA, but without actually implementing EVA. The most important issue is then to focus on value drivers which are able to increase a company's value.

Thomas SUHIATER: That's right.

Jacek GÖRAL: Okay, perfect. Thank you very much for sharing your expertise with me.

Thomas SUHIATER: You are very welcome.

### IX.ii.x. Expert interview with S. David YOUNG, PhD

Function	Company	Category	Date	Duration	Type
Professor of Accounting & Control, author of numerous relevant books and papers	INSEAD	Research	27/02/2012	~ 35 min.	Via telephone

Jacek GÖRAL: Mr Young, thank you very much for taking the time for this interview. I would like to start with your background. You are primarily a professor. What is your experience with EVA? Have you worked as a consultant and supported EVA implementation projects?

David YOUNG: Yes, I acted as a consultant to companies, implementing value-based management programs. I also teach and direct the executive programs on this subject at INSEAD.

Jacek GÖRAL: Have you equally implemented EVA in SMEs?

David YOUNG: Yes, but rather MEs than SMEs.

Jacek GÖRAL: So in general, what do you think is important when trying to implement EVA within SMEs?

David YOUNG: Well, first you have to make the system as simple as possible. So the implication is that the calculation of the EVA number has to be transparent and easily understood by operating managers. This means, that you have literally no adjustments.

Jacek GÖRAL: I see.

David YOUNG: I wrote my book (comment: EVA and Value-Based Management) about EVA in the late 90s. My thinking has evolved over the last ten years based on my experience working with companies and with executives coming through the programs here at INSEAD. My view is that EVA linked incentives are probably better if they are done at the corporate level. In other words, I don't think that it's generally a very good idea to have EVA bonus incentives linked to EVA results in business units and divisions. This contradicts some of what the book is saying, because it is arguing that you want EVA not only calculated at the CEO level, which I am totally in favour of, but you also want to pay people bonuses based on the EVA at the unit level, not at the corporate level. The reason, why I've come to the way of thinking is that paying people on the basis of the EVA in a business unit can actually accentuate agency problems, because managers will focus on EVA and try to improve the EVA. They focus their efforts on the indicator and not on the actual drivers of value. Another fact is that such a focus may EVA look better in the short run, but in the long run, managers may be taking steps, that actually destroy value. The book offers the solution in which you provide medium- and long-term incentives based on bonus banks and stock incentives. Most companies have tried and abandoned them because it's really hard to manage these different compensation programs. In some countries, they are not tax-friendly. It is just not tax-efficient for companies to pay these compensations. At the level of small and medium-sized enterprises, it's a non-starter. It's just going to be far too complicated. And the result is that the EVA bonus that you give to business unit managers and SMEs are going to be short-term in nature. They are going to be single-period measures. And any time you pay people on a basis of single period measures, they will be incentivized to take steps that make the measure look better in the short run but which compromise the competitiveness and value of the company in the long run. So, I think that EVA is a great indicator, for all the reasons that I discussed in the book, but I am somewhat more sceptical about tying compensation to business unit EVA numbers. If you are going to tie bonuses to EVA, it's probably better to be done at the level of the entire company in a form of profit sharing. And I am totally in favour of profit sharing. But the idea of having EVA linked incentives at the business unit level for EVA centres, I don't want to say categorically that it's always a bad idea, but it's probably a bad idea for most companies most of the time. It is perfectly fine and desirable, indeed, if EVA can be calculated in a reasonable way, without having to make too many transfer pricing assumptions and too many cost allocations. In this case, it's a pretty interesting indicator to get a picture whether the financial performance of your company is improving or deteriorating, but I don't like to tie compensation to it because then people are going to take steps that are designed to make the number look better in the short run. And that not only can harm the company but it's actually going to damage the usefulness of EVA as a reasonable indicator of performance.

Jacek GÖRAL: I see.

David YOUNG: Let me just recap. For SMEs, calculating EVA at lower levels of the company is ok but you certainly don't want to tie bonuses to these EVA numbers because it can create perverse incentives on the part of business unit managers to make EVA look better in the short run and compromise the competitiveness of the company in the long run. And so the net-effect would be value destruction. So my preference is, based on my experience over many years, that if you are going to use EVA linked bonuses, it's better to treat it as more of a general profit-sharing system as opposed to a line of self-bonus, where the incentives are linked directly to the EVA calculated at the business unit level. For SMEs, the EVA

calculation has to be transparent and has to be simple, which suggests that maybe it is not such a good idea to have adjustments. Basically, you will just take an operating-profit number, EBIT or something like that and subtract a capital charge based on the opportunity cost of capital and your estimate of average operating assets, net assets or capital employed, however you want to call it. But just make it as simple as possible.

Jacek GÖRAL: Is the EVA number correct enough without any adjustments?

David YOUNG: Well, the problem is that all of these measures come out of a company's accounting system. So, these accounting measures are always going to imperfectly capture the underlying economic reality. In making adjustments, you have a decision to make: It is whether the resulting EVA number is going to be sufficiently improved in terms of information content and in terms of capturing economic reality to justify the costs of making the adjustment. The cost would include having to explain it. This may be particularly difficult to people who have not much of an accounting or finance background. Secondly, it requires a modification or an upgrade of the IT system and that can be not trivial. So making adjustments to the EVA number is costly. It is something that might produce better EVA numbers, but the question is not, whether the EVA number is better, but whether the EVA number leads to better results and better incentives. I think that, generally speaking, the answer is no. Actually, I am against the idea of having incentives linked to business unit EVA. I want EVA to be an indicator. By paying people on the basis of it, you are going to compromise its usefulness as a truthful indicator. So, adjustments will maybe become an issue for larger companies, but for SMEs my principle recommendation is that you do not make any adjustments at all.

Jacek GÖRAL: To get the EVA number, how would you calculate the cost of capital and in particular, the cost of equity for SMEs?

David YOUNG: The standard approach, at least what we teach here at INSEAD to our MBAs, is basically to look for peer companies, i.e. for larger companies that are publicly traded and that are in an industry that is very similar to the one of the target SME. The advantage of this approach is that you have access to betas. Then you can apply the CAPM. You can find this approach in every standard corporate finance text book.

Jacek GÖRAL: Ok. Do you recommend to have several EVA centres in SMEs or should there be just one number calculated at the corporate level? And then based on this single number you could define value drivers for lower levels of the company.

David YOUNG: The answer certainly depends. A lot of smaller businesses are run, more or less, as if they have on giant centre. And if that's the case, it is even pointless to calculate the EVA at the level of individual units or departments. This doesn't make any sense because it would require so many assumptions in terms of allocating assets and in terms of transfer pricing. The resulting number is going to be meaningless as it won't capture economic reality to a reasonable extent. If it is a SME where all decisions are in the centre and the reporting system treats the company as if it's one large profit centre, you only want to calculate EVA at the corporate level. So the only way it makes sense is if you not only have multiple profit centres but if these profit centres have some degree of discretion over the level of invested capital. Otherwise, if they don't have any discretion over operating assets, over investment, you may just use operating profit measures to track profitability. Basically, what EVA does, it that it takes operating profit and subtracts a capital charge. Assigning responsibility for managing that capital charge makes sense only when the managers in question have some degree of influence over the level of invested capital in their business unit. By invested capital, I mean the fixed assets, thus property, plant, equipment, and the level of working capital. If all of this is determined at the corporate centre, there is no point in having an EVA incentive at lower levels. A much easier measure would be based on operating profits. I am just becoming sceptical about using financial indicators to determine bonuses of operating managers. The reason is because they tend to focus on the indicators outcome instead of the process that leads to good management and value creation. I want managers to focus on the drivers of value. I don't want them to focus on the outcomes of these indicators. I think that EVA is an immensely useful indicator. I am just sceptical now about using it to try to incentivize and motivate behaviour. I think it works better as a form of profit sharing, reminding everybody that this is what we need to be able to deliver in the long run to create value, and if we accomplish this, we are going to share some of it with you. That, I think, is a good idea. But the idea of directly tying incentives to an EVA number below corporate level is mostly something that you don't want to do.

Jacek GÖRAL: So does this mean that if you don't use any adjustments and if you have only one EVA centre for the entire company, that it does not make sense to implement EVA at all? You could use accounting figures instead.

David YOUNG: You can still implement it. It's just that you are not going to have the EVA centres that I've talked about in the book. Even the calculation of EVA to make sense, the business unit in question has to be a genuine investment centre. It is not even enough that it would be a profit centre. It has to be an investment centre. I mean by that, that an investment centre is a profit centre where managers have some amount of discretion over the level of investment. So they have some degree of influence over investment, property, plant and equipment and over the level of working capital. And if that's not the case, it might be a profit centre, but it's not an investment centre. The important thing to recognize is that EVA is an investment centre measure, not a profit centre measure.

Jacek GÖRAL: Yes, so in this case, the entire SME is an investment centre, isn't it?

David YOUNG: Yes, exactly. And so, EVA of the entire company can make sense. The only concern that I have, is that people are going to try to make EVA look better this year because of that EVA based incentive. As a consequence, they are going to compromise or damage the long run possibilities of the company. The bonus bank and the compensation system I talk about at length in the book are designed to address that and provide at least medium-term incentives. So managers

understand that they don't just care about EVA this year but that they have to care about it three, four, five years out. That's what you have to be careful about: about short-term acts in the face of EVA. Companies have tried it and found it to be complicated. One problem that you get is when things go badly and managers significantly underperform or when business units underperform. In this case, you have to allow the existence of a negative bonus. Companies have tried that, but if there is an economic recovery, managers realize that even if they do well, the next year they are only going to be digging themselves out of the whole, because they had a negative bonus the last year. So the bonus bank only zeros out. What companies have ended up doing is basically removing the negative balance. This tends to compromise the whole integrity of the EVA incentive system. What you find is that when companies calculate EVA these days, it is done just as an indicator, one indicator among many that senior management uses to track performance. So it is a very important and useful indicator but if you are using it for incentives, it is more likely to be used as a form of global profit sharing. So basically what I've done is to move a little bit away from the performance measurement aspect and to take a more holistic view of value based management. When thinking of EVA implementation, I think of it as implementing a value-driven culture in a business. That means letting indicators to do their job to indicate and not to incentivize. The problem that you always have with indicators, whether it's EVA or anything else, is that if you pay people based on outcomes, they are going to manage these outcomes. So instead of managing the underlying drivers of value, like customers, the supply chain, a technology, etc., they try to manage the indicated outcome. The result is that in the short run they make the indicator look better but they are not creating value. Soon, I am going to publish a book on precisely that, on how to create a stronger, truly value-driven culture in companies.

Jacek GÖRAL: So what do you think of the approach of only measuring EVA at the corporate level of SMEs and then from the corporate level defining value drivers for the lower levels of the company.

David YOUNG: Yes, for the overwhelming majority of SMEs, that is almost certainly going to be the best approach. You can have an EVA bonus for everybody, which will be based on the total company EVA and not on the EVA of single units.

Jacek GÖRAL: In this case, do you think that the mentioned lower levels should be aware of the concept?

David YOUNG: If you are not giving them EVA incentives directly, it is not essential. What you need to do if you want to use an EVA system as the basis for a global profit sharing, you have to tell people that you have this measure of profit and that it is a better indicator of the economic reality. And so anybody who is interested can attend an information session or consult the human resource department. But they don't need to know about it in detail because they are not going to get a bonus that is directly linked to the EVA in their own business unit.

Jacek GÖRAL: I see. Do you think that the financial possibilities of SMEs could be an obstacle for the implementation of such a system?

David YOUNG: Almost certainly, financial and accounting expertise tends to be somehow limited. That could be a bit of an issue. That's the reason why the EVA system should have to be as simple as possible. They won't be able to handle anything more complicated.

Jacek GÖRAL: So, even if it is this simple, do you think that the top management of SMEs is able to implement it? I read that SMEs suffer from a lack of managerial expertise to some extent and that performance measurement systems are often implemented incorrectly and in a way of little value for the company. Should there therefore be some external support, like from a consultancy firm? How should it be done?

David YOUNG: Most, or almost all, SMEs are going to need help. One exception might be start-ups from people with MBAs from great schools. They might be able to do it on their own but if that's not the case, they probably going to need help from somewhere. This might be expensive.

Jacek GÖRAL: Do you see any other problems in the implementation process?

David YOUNG: I think that those are the major ones.

Jacek GÖRAL: So what I got out from the interview is that is a good idea to focus on value-based management in a broad sense. But does it make sense to implement EVA without any adjustments and without any bonus plans? Would it not just be easier to focus on accounting based measures which they already have and try to improve these?

David YOUNG: I don't really think that they want to focus so much and try to improve those measures. What would be better is to have an EVA type of system, at least with the very basic EVA calculations at the corporate level. Principally all businesses should calculate it. But when it comes to actually try to drive performance in the business units, I would focus more on the drivers. I don't think I want people devoting a lot of attention to produce better and better accounting numbers. That will not get them anywhere. They need to understand what needs to be done in terms of technologies, in terms of training of the people, in terms of relationships with their customers, in terms of advertising. So they should focus on issues that can deliver superior financial results. That's what you want people in the business units to focus on, on the underlying drivers of value and not on the indicators themselves. Let the indicators indicate, let them do their job. They are certainly important, but you do not want people to focus on them but on the underlying drivers of performance.

Jacek GÖRAL: So it is more important to implement a value-driven culture and not just the measure itself.

David YOUNG: Exactly.

Jacek GÖRAL: But at the corporate level, you are still going to calculate it?

David YOUNG: Yes, it is certainly something you want to know. But I am somewhat more sceptical now, to link the bonus to the EVA number, especially at the business unit level. My focus now is on creating the holistic value-driven culture. You never want an indicator to be the major centre of attention, because if it is, you are going to try to manage the indicator. The usefulness of the indicator as an indicator is going to be compromised. I want the indicator to tell the truth but I want managers to focus on the underlying value drivers and not on the indicators. The less people focus on the EVA number itself, the more useful EVA is as an indicator of performance.

Jacek GÖRAL: Ok, that is a little bit difficult to understand.

David YOUNG: I know. This is the paradox of EVA. But it is based on experience with lots of companies and thousands of executives and MBA students. So in the end, EVA is an important indicator, but I don't want people to focus on the indicator, I want them managing the business. Imagine that you are a pilot and you have the instrument panel that tells you how fast and high the plane is going. The measures are all important but don't forget to fly the plane. And that's the same in business: Fly the plane, run the business and let the indicators do their job.

Jacek GÖRAL: Ok, I see. But that could be less of a problem in SMEs because the manager is often the owner of the company.

David YOUNG: I don't know a lot about Austria, but I know a lot about Germany. Many Mittelstands-companies have fewer agency problems, because the owners and managers are the same people. I don't say that there won't be any agency problems, but they will be much, much less severe.

Jacek GÖRAL: Ok, perfect. Then I want to thank you very much for your time and the insightful interview.

David YOUNG: Thank you too. Good luck with your thesis.

### IX.iii. Annex 3: Representative example of the evaluation method

For the presentation of the used evaluation method, all of its steps are portrayed using the following two interview sections:

Ex.1	<p>...</p> <p>If the top management is not sure whether EVA is the right way to measure the business, forget it. Not only in terms of EVA but in general, communication is very important. Many companies have much too many figures, but they forget that they have people. Only people can influence KPIs, but nobody else. You have to communicate and explain why EVA is very, very important. If you want to measure a company, Economic Value Added gives me a very good feeling whether the company is working good or not. Then you have to explain it to all employees. So first, the top management must be 100 per cent sure that it wants to implement EVA. Then you have the classical top-down process. They have to communicate with the next level, then the next level, and so on. At the end, everybody must know what EVA stands for. Not everybody has to understand it in detail but they should know that EVA is not the name of a girl but a KPI. They should have a rough concept and understand the single components of the calculation. That's very important.</p> <p>...</p>
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Ex.2	<p>...</p> <p>One really important aspect of communication is that you show your employees why the company needs a value-based management system. Some employees may fear to lose their job because they think that such a system is only implemented to increase profits. So the management needs to communicate their intentions and address such issues. There are obviously clear advantages of an EVA system. However, if not communicated properly, motivation could be also decreased in the company.</p> <p>...</p>
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#### IX.iii.i. Step 1: Paraphrase

Ex.1	<p>...</p> <p>It is important that the top management is certain that EVA is the right metric for a SME. Otherwise, the implementation efforts will not be successful. Besides being committed to the system, managers have to place a particular emphasis on communication. They have to convey to the entire workforce why EVA is beneficial to the company.</p> <p>...</p>
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Ex.2	<p>...</p> <p>The managers are required to communicate the reasons for EVA's introduction. Misperceptions may create fear and decrease the staff's motivation. In such a case, EVA's benefits will not be exploited.</p> <p>...</p>
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#### IX.iii.ii. Step 2: Thematic arrangement

Ex.1	<p><b>Importance of top management's commitment</b></p> <p>It is important that the top management is certain that EVA is the right metric for a SME. Otherwise, the implementation efforts will not be successful.</p> <p><b>Communicating the reasons for EVA's implementation</b></p> <p>Besides being committed to the system, managers have to place a particular emphasis on communication. They have to convey to the entire workforce why EVA is beneficial to the company.</p>
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Ex.2	<p><b>Communicate the reasons for EVA's introduction</b></p> <p>The managers are required to communicate the reasons for EVA's introduction. Misperceptions may create fear and decrease the staff's motivation. In such a case, EVA's benefits will not be exploited.</p>
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### IX.iii.iii. Step 3: Thematic comparison

Ex.1 & Ex.2	<p><b>Importance of top management's commitment (disregarded in the next step)</b></p> <p>It is important that the top management is certain that EVA is the right metric for a SME. Otherwise, the implementation efforts will not be successful.</p> <p><b>Communicating the reasons for EVA's implementation</b></p> <p>Besides being committed to the system, managers have to place a particular emphasis on communication. They have to convey to the entire workforce why EVA is beneficial to the company.</p> <p>The managers are required to communicate the reasons for the introduction of EVA. Misperceptions may create fear and decrease the staff's motivation. In such a case, EVA's benefits will not be exploited.</p>
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### IX.iii.iv. Step 4: Conceptualization

Ex.1 & Ex.2	<p><b>Communicating the reasons for EVA's implementation</b></p> <p>Managers have to place a particular emphasis on communication and convey the reasons for EVA's implementation to the entire workforce. The flow of information will thereby appear gradually from the top management level to lower levels. Misunderstanding these managers' motives for EVA's introduction may create fear and decrease the staff's motivation. In such a case, EVA's benefits will not be exploited.</p>
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### IX.iii.v. Step 5: Theoretic generalization and development of hypotheses

Ex.1 & Ex.2	<p><b>Hypothesis 1:</b> Managers have to communicate the reasons for EVA's implementation in order to avoid fear and a loss of motivation among the workforce.</p>
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#### **IX.iv. Annex 4: German abstract**

Das heutige Wirtschaftsumfeld ist durch kontinuierliche Veränderungen, viel Unsicherheit und großen Wettbewerbsdruck gekennzeichnet. Um am Markt bestehen zu können, müssen vor allem kleine und mittlere Unternehmen innovativ sein und kontinuierlich ihre Leistungsfähigkeit überprüfen sowie verbessern. Aufgrund von mangelndem Management Know-How und begrenzter Ressourcen gibt es allerdings nur wenige Kennzahlen, die sich für diesen Unternehmenstyp eignen. Da Economic Value Added (EVA) sowohl Gewinne als auch Kosten der Vermögenswerte einer Gesellschaft berücksichtigt und sich an wirtschaftlicher Realität orientiert, scheint es anderen Kennzahlen überlegen zu sein und sich als umfassendes System zur Leistungsmessung zu eignen. Die qualitative empirische Studie, die auf zehn problemzentrierten Interviews mit Unternehmensberatern und Industrieexperten fußt, untersucht die Brauchbarkeit von EVA als derartiges System für kleine und mittlere Unternehmen und liefert Leitlinien für dessen Implementierung.

## IX.v. Annex 5: Author's curriculum vitae

# Curriculum Vitae (1/2)

## Jacek GÖRAL, M.A.

### SCHOOL EDUCATION

Sep. 1997 – Jun. 2005	Grammar school Hollabrunn (AT)
Sep. 1993 – Jun. 1997	Primary school Hollabrunn (AT)

### UNIVERSITY EDUCATION

Oct. 2009 – Aug. 2012	<b>University of Vienna (AT, Master)</b>	Course of study Specialization Thesis Weighted avg. mark	International business administration Corporate Finance Implementing EVA as performance measurement system in SMEs 1.1 / 5.0
Sep. 2009 – Jun. 2011	<b>University of Applied Sciences Wr. Neustadt (AT, Master)</b>	Course of study Thesis Weighted avg. mark Graduation	Strategic management The effects of Basel III on the Private Equity financing of SMEs in Austria (ISBN: 978-3639379839) 1.4 / 5.0 with high distinction
Jan. 2010 – May 2010	<b>EDC Paris (FR)</b>	Semester abroad at this "Grande Ecole"	
Oct. 2006 – Jun. 2009	<b>University of Applied Sciences BFI Vienna (AT, Bachelor)</b>	Course of study Weighted avg. mark Graduation	Project management & IT 1.2 / 5.0 with high distinction
Feb. 2008 – Jun. 2008	<b>University of Technology, Sydney (AU)</b>	Semester abroad	

### OTHER UNIVERSITY EDUCATION

Mar. 2011	<b>"Leadership and Change Program"</b> at the NOVA Business School Lisbon (PT)
Aug. 2010	<b>"International Summer Program"</b> at the HIT Harbin (CN)
Aug. 2009	<b>"International Summer University"</b> at the Asian University (TH)
Jul. 2008	<b>"CENTROPE Summer School"</b> at the University of Applied Sciences BFI Vienna (AT)
Aug. 2007	<b>"International Week Black Sea Network"</b> at the University of Applied Sciences BFI Vienna (AT)

### SCHOLARSHIPS & AWARDS

Jun. 2011 – Jun. 2012	Students-4-Excellence scholarship
Apr. 2011 – Apr. 2012	e-fellows.net scholarship
Oct. 2006 – Dec. 2011	Academic excellence scholarships at all Austrian universities and Lower Austrian scholarships "Mobility" & "Abroad"
Nov. 2011	<b>Deloitte Award 2011</b> for outstanding scientific work



### Contact information

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### Personal information

Date of birth: 24<sup>th</sup> Sep. 1986  
Place of birth: Bielsko (PL)  
Nationality: AUSTRIA

### Online profiles

Xing  
LinkedIn: <http://lnkd.in/ETuySU>

# Curriculum Vitae (2/2)

## Jacek GÖRAL, M.A.

### COMMUNITY SERVICE

Oct. 2005 – Sep. 2006 Hospital in Hollabrunn (AT)

### PROFESSIONAL EXPERIENCE

Starting in Sep. 2012 **Deutsche Post DHL Inhouse Consulting (DE)** | Consultant

Sep. 2011 – Jul. 2012 **Horváth & Partners (AT)** | Junior Consultant (Part-time)  
 1) Collaborating on several consulting projects.  
 2) Carrying out research activities.  
 3) Preparing studies, analysis, articles and presentations.

Apr. 2010 – Aug. 2010 **GSM Consulting (VAT Systems, FR)** | Junior Consultant  
 1) Collaborating on developing tax-optimized solutions for European customers.  
 2) Working daily in cross-cultural teams.  
 3) Being in contact with customers, suppliers and authorities in 4 European languages.

Feb. 2009 – Jul. 2009 **IBM Global Business Services (AT)** | Financial controller  
 1) Developing a controlling system for an 80-men project.  
 2) Being responsible for the correctness of the financial controlling and advising the project manager on financial issues.  
 3) Creating and introducing a standardized controlling system throughout the entire division.

Jan. 2006 – Jan. 2008 **Sole proprietorship (AT)** | Entrepreneur  
 1) Setting up my own business in the field of advertising art.  
 2) Carrying out numerous customer projects.

### LANGUAGES

**German** ★ ★ ★ ★  
 Native language (bilingual)

**English** ★ ★ ★ ★  
 Business fluent in spoken and written  
 TOEIC 2010: 990 / 990  
 IELTS 2008: 8.0 / 9.0

**Spanish** ★ ★ ★ ★  
 Currently learning the language

**French** ★ ★ ★ ★  
 Fluent in spoken and written  
 DALF C1 2011

**Polish** ★ ★ ★ ★  
 Native language  
 Basic knowledge in written

### IT SKILLS

**MS Office (ECDL)** ★ ★ ★ ★ SPSS; E-Views ★ ★ ★ ★  
 - MS Excel (incl. VBA) ★ ★ ★ ★ MS Project; Cando ★ ★ ★ ★  
 - MS Word & PowerPoint ★ ★ ★ ★ Photoshop; Flash ★ ★ ★ ★

Other: Java; HTML; MS SQL; MS Access; SAP; MS Dynamics NAV; MS Visio; etc.

### PERSONAL DEVELOPMENT COURSES

In 2011 Leadership-awareness training  
 In 2010 Management in the dark; management on tour  
 In 2009 Leadership laboratory; personal development course  
 Until Dec. 2008 Team-building; learn learning; career management



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