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## "Theoretical and Practical Implementation Problems of the Balanced Scorecard"

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## IV Table of Abbreviations

BSC	Balanced Scorecard
CA	Competitive Advantage
CC	Corporate Citizenship
DBSC	Distributor Balanced Scorecard
НС	Investments in Human Capital
ROCE	Return on Capital Employed
SBU	Strategic Business Unit
TDB	Tableau de Bord
OTD	On-Time Delivery
PG	Profitability and Growth

## 1. Abstract

#### 1.1 English

This thesis deals with the theoretical and practical implementation of the BSC. Three main problems will be shown theoretically and practically in relation to the BSC implementation.

This thesis first shows the accounting change problem and how "barriers" can hinder or delay the change of a performance measurement system.<sup>1</sup> It will be shown how these problems can be solved with the help of the "revised accounting change model" of Cobb et *al.* (1995).

Further the communication problem will be investigated. On the basis of the study of Malina and Selto (2001) analyzed if the BSC is an effective communication device. Results will show that on the one hand effective communication does not influence strategic alignment, effective motivation and positive outcomes. But on the other hand ineffective communication influences these factors.<sup>2</sup>

The third problem is the control problem of the BSC. On the basis of the study of Malina and Selto (2001) investigated if the BSC is an effective control device. Results will show that prima facie effective management control is responsible for positive outcomes, but there is no evidence that a direct link exist between effective management control and positive outcomes. When taking a closer look, it appears that strategic alignment and effective motivation brought about by effective management control leads to positive outcomes.<sup>3</sup> Further it will be shown that ineffective control does not impact strategic alignment, but influences the motivation of employees.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172

<sup>&</sup>lt;sup>2</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>3</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 17

<sup>&</sup>lt;sup>4</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 21

#### 1.2 German

Diese Magisterarbeit beschäftigt sich mit der praktischen und theoretischen Implementation der BSC. Es werden drei Kernprobleme im Zusammenhang mit der Implementation der BSC theoretisch und praktisch aufgezeigt.

Als erstes wird gezeigt, dass beim Wechsel des Kennzahlensystems so genannte "Barrieren" eine entscheidende Rolle spielen können.<sup>5</sup> Es wird gezeigt, wie man diese Probleme mit dem "revised accounting change model" von Cobb et *al.* (1995) beheben kann.

Weiters wird das Kommunikationsproblem untersucht. Es wird anhand einer Studie von Malina und Selto (2001) gezeigt, ob die BSC ein effektives Kommunikationsinstrument darstellt. Die Ergebnisse zeigen, dass eine effektive Kommunikation weder strategische Ausrichtung, noch effektive Motivation, oder positiven Erfolg beeinflussen kann. Inneffektive Kommunikation wirkt jedoch auf diese Faktoren sehr wohl beeinflussend.<sup>6</sup>

Als drittes Kernproblem wird das Kontrollproblem der BSC aufgezeigt. Anhand der Studie von Malina und Selto (2001) wird untersucht, ob die BSC ein effektives Kontrollinstrument darstellt. Die Ergebnisse zeigen, dass eine effektive Management Kontrolle zu positivem Erfolg führt. Jedoch wird auch gezeigt, dass keine direkte Verbindung zwischen effektiver Managementkontrolle und positiven Erfolg besteht.<sup>7</sup> Weiters wird gezeigt, dass ineffektive Kontrolle zwar keine Auswirkungen auf die strategische Ausrichtung des Unternehmens hat, sehr wohl jedoch die Motivation der Mitarbeiter beeinflusst.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172

<sup>&</sup>lt;sup>6</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>7</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 17

<sup>&</sup>lt;sup>8</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 21

### 2. Introduction

The first step to write this work was to find important articles about the BSC out of the most important economic magazines over the last ten years including the basic articles about the BSC from Kaplan and Norton (1992, 1993, 1996a, 1996b) and their book "The Balanced Scorecard – Translating Action into Strategy".

The second step was to read and catalogue the articles according to their main topics. The author found the following main topics about the BSC: Development of the BSC, Implementation of the BSC, Compensation of the BSC, Critique, Judgmental effects of the BSC, Surveys in different Countries and Several Surveys about the BSC (see Appendix).

After I had completed the second step, I was able to cover one topic in detail and I decided to show important problems of the "implementation process" within the BSC.

This paper is build as follows: Section 3 shows some facts of and around the BSC, including advantages and disadvantages of financial and non-financial measures. It further shows a historical background, the structure including the four perspectives of the BSC, vision and strategy and the typical cause and effect relationships of the BSC with some critique on it.

In section 4 I will show the ten building steps of the BSC from Kaplan and Norton (1996c) and I will briefly explain a possible holistic implementation process. Further I will show the following theoretical background of important problems within the implementation process of the BSC: (1) Accounting change, (2) Communication and (3) Management Control Strategy. The state of implementation and a relation of the theoretical explanations of the implementation process with the praxis will follow in section 5. That means I will show some case studies fitting to the above described theoretical chapters and I will also show some practical examples in relation to the theoretical explanations in section 4.

Section 6 presents a conclusion of the thesis and a summary of the results and a critical acclaim of the author. Acknowledgements and my curriculum vitae will be presented in sections 7 and 8.

## 3. Balanced Scorecard

Section 3 shows some facts about the BSC, including advantages and disadvantages of only financial and only non - financial measures and advantages of an integrated measurement system. Further I will illustrate the historical background and the structure of the BSC, including the four perspectives of Kaplan and Norton and some other perspectives which were found in several studies. After that I will present the upgraded BSC Model including the Managing Strategy Model with its four processes. I will also explain Kaplan's and Norton's typical cause and effect relationships and put some critique coming from Nørreklit on it. At the end of this section I will briefly explain the French Tableau de Bord, which is very similar to the BSC.

## 3.1 Only Financial and Only Non – Financial Measurementsystems

"The traditional financial performance measures worked well for the industrial era, but they are out of step with the skills and competencies companies are trying to master today."<sup>9</sup>

That is what Kaplan and Norton said about the BSC in their first article in 1992. It means that traditional performance measures alone like Return on Investment, Return on Sales, Earnings per Share, Cashflows or Residual Income are ineffective for a company. But also only non-financial measurement systems, including measures like customer satisfaction, cycle time, defect rates or market share are ineffective. Both, financial and non-financial measurement systems have advantages and disadvantages.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Kaplan, R., S., Norton, D., P. (1992), page 172

<sup>&</sup>lt;sup>10</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 172

## 3.1.1 Advantages of Only Financial Measurement Systems

- "Financial performance measures indicate whether the company's strategy, implementation, and execution are contributing to bottom-line improvement."<sup>11</sup>
- Financial performance measures help the management to monitor the basic financial values to get straight about financial power and fitness within the company.

## 3.1.2 Disadvantages of Only Financial Measurement Systems

- "Not all long-term strategies are profitable strategies"<sup>12</sup> That means that even a set of perfect financial measures can not guarantee a successful strategy.<sup>13</sup>
- "Many have criticized financial measures because of their well-documented inadequacies, their backward-looking focus, and their inability to reflect contemporary value-creating actions."<sup>14</sup>
- Other critics say that financial measures do not meet requirements in nowadays business, including measuring and/or improving customer satisfaction, market share, quality, cycle time, and employee motivation.<sup>15</sup>

## 3.1.3 Advantages of Only Non – Financial measures

While traditional financial measures show what happened in the past, non-financial measures have the possibility to show current and future processes, too.<sup>16</sup>

<sup>&</sup>lt;sup>11</sup> Kaplan, R., S., Norton, D., P. (1992), page 178

<sup>&</sup>lt;sup>12</sup> Kaplan, R., S., Norton, D., P. (1992), page 179

<sup>&</sup>lt;sup>13</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 179

<sup>&</sup>lt;sup>14</sup> Kaplan, R., S., Norton, D., P. (1992), page 178

<sup>&</sup>lt;sup>15</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 178

<sup>&</sup>lt;sup>16</sup> Cf. Kaplan, R., S., Norton, D., P. (1993), page 134

#### 3.1.4 Disadvantages of Only Non – Financial measures

There are no existing logical cause-and-effect relationships at non-financial measures. Between non financial factors we just know empirical cause and relationships. For example, there do not exist any cause-and-effect relationships between customer satisfaction and loyalty (see also section 3.3.3.1).<sup>17</sup>

#### 3.2 Multiple Performance Measurement Systems

"Managers want a balanced presentation of both financial and operational measures."<sup>18</sup>

This citation of Kaplan and Norton brings together the above sections about only financial and only non-financial performance measures. It says that not only one, but both systems together lead to an optimal performance measurement system. Advantages are bundled and help to solve the problems of both the only financial and only non-financial performance measures.

#### 3.3 The BSC

The BSC is exactly what we know as a multiple performance measurement system. "And it complements the financial measures with operational measures ... that are the drivers of future financial performance."<sup>19</sup>

The BSC for the manager is the same as a dashboard or instrument board for a car driver or a pilot. As a car driver or pilot you need much information for driving the car or flying the plane. In today's business, managers also need to have a holistic overview of their company. They need to see and handle with much information at the same time. That means they have to be able to manage performances in many areas of their company and therefore managers need the BSC as a multiple performance measurement system. The BSC allows managers to monitor their company from the four most important perspectives (financial perspective, customer

<sup>&</sup>lt;sup>17</sup> Cf. Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>18</sup> Kaplan, R., S., Norton, D., P. (1992), page 172

<sup>&</sup>lt;sup>19</sup> Kaplan, R., S., Norton, D., P. (1992), page 174

perspective, internal business perspective and learning and growth perspective).<sup>20</sup> See more to this in the following sections.

## 3.3.1 Structure of the BSC

In 1992 Kaplan and Norton showed their first BSC model. Its target was to link nonfinancial and financial measures to one integrated performance measurement system as already mentioned in section 3.3.

As we already heard, the BSC offers the manager the possibility to monitor the company from several perspectives. In the following section the four perspectives of Kaplan's and Norton's BSC version of 1992 will be explained.

## 3.3.1.1 BSC and Perspectives of 1992

As mentioned above we know four main perspectives used within the BSC:

- Customer Perspective
- Internal Business Perspective
- Innovation and Learning Perspective
- Financial Perspective

### Customer Perspective

In today's business one of the most stated targets is to have satisfied customers. Therefore Kaplan's and Norton's "Customer Perspective" has become a very important variable in the calculation of becoming a successful company.<sup>21</sup>

According to the customer perspective it is very important for managers to keep the following four subcategories in mind: (1) Lead Time, (2) Quality, (3) Performance and Service and (4) Costs.<sup>22</sup>

<sup>&</sup>lt;sup>20</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 174

<sup>&</sup>lt;sup>21</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 174

<sup>&</sup>lt;sup>22</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 175-176

(1) Lead Time stands for: <sup>23</sup>

- The time the company needs to meet the customers' wants.
- The time the company needs from the order to the delivery of an existing good to the customer.
- The time the company needs from a new product invention to bring it to the market.

(2) Quality means: <sup>24</sup>

- The condition of the products, which is measured by the customer.
- Freedom of defects.

(3) Performance and Service:

This stands for the possibility of the company's products to create value for the customers, which is measured by the company.<sup>25</sup>

(4) Costs of the Products:

Customers only see the price they have to pay. They do not see any costs the supplier may have. There are a lot of costs the supplier has to consider when he calculates the price for the customer, for example: costs for production, raw materials, shipping or storing. A profitable and efficient supplier should charge a higher product price but create value for the customer (Performance and Service) through offering a better quality and a better lead time than its competitors.<sup>26</sup>

<sup>&</sup>lt;sup>23</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 175-176

<sup>&</sup>lt;sup>24</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 175-176

<sup>&</sup>lt;sup>25</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 175-176

<sup>&</sup>lt;sup>26</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 175-176

#### Internal Business Perspective

The customer perspective helps the company to learn something about their customers' needs. But knowledge alone does not create a successful company. The company needs an instrument that brings the customers needs into the company.

Several certain internal processes are necessary to meet the customers' needs. Therefore the BSC offers as a second perspective the "Internal Business Perspective". This perspective helps managers to monitor the most important internal measures like productivity, quality, cycle time and so on. Another important thing companies have to do, is to specialize in their core competencies and therefore try to meet best their customers' needs.<sup>27</sup>

#### Innovation and Learning Perspective

After having successfully measured customers' needs and internal ability to meet the needs, the company has a good basis to have satisfied customers and become a successful company.

The next step for doing a business well is to follow Kaplan's and Norton's third perspective: The innovation and learning perspective. Environment and market requirements do not stand still. Therefore factors for success are dynamic. To meet the requirements of such a dynamic environment, the company has to permanently improve and develop their products and processes further and to bring new and innovative products onto the market.

It is a simple calculation: New and innovative products create value for customers and therefore create value for the company. Value for the company means increasing shareholder value.<sup>28</sup>

#### Financial Perspective

The fourth perspective Kaplan and Norton offer within their BSC is the financial perspective. The financial perspective is an indicator if all the other perspectives

<sup>&</sup>lt;sup>27</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 176-177

<sup>&</sup>lt;sup>28</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 177-178

have served their purpose. It shows if the company did its business profitable, created economical growth and satisfied its shareholders. Typical financial performance measures like cash flows, operating income or sales growth are used. Although financial measures are a fundamental part of the BSC and a business, there are many negative voices of critics. They argue that financial measures are backward oriented and do not fulfill customers' needs and that financial measures should not be used to manage a company. This criticism is anchorless because, according to Kaplan and Norton a good planned financial system is still better for the company than no financial system. Secondly, financial measures are very important when looking to the linkage between operating performance and creating sustainable economical value growth. The following example should clarify this problem. Management of an NYSE electronics company ordered improvements in quality and delivery between 1987 and 1990. During this three year period the drop out amount decreases from 500 to 50 per one million, delivery time improved from 70% to 96% and yield raised from 26% up to 51%. Customer satisfaction, productivity and quality increased, but financial measures showed just a little financial improvement and stock price has been decreasing since 1987. Financial measures often tell what comes out at the end of the day. The best measures of the BSC in all perspectives can not guarantee sustainable success. The BSC can only try to convert a long term strategy into measurable short term actions. The point is, that management has to recognize which long term strategies are also profitable (short term) strategies.<sup>29</sup> See more to this in section 3.3.1.2.

<sup>&</sup>lt;sup>29</sup> Cf. Kaplan, R., S., Norton, D., P. (1992), page 178-180

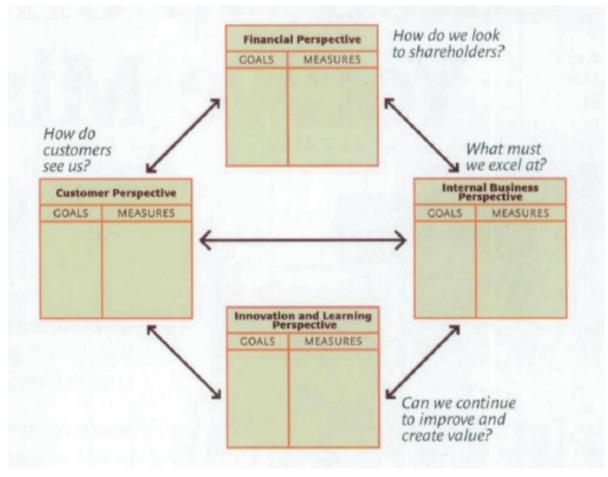


Figure 1 shows Kaplan's and Norton's first model of the BSC:

Figure 1: The Balance Scorecard Links Performance Measures<sup>30</sup>

## 3.3.1.2 Upgraded BSC and the Managing Strategy Model of 1996

"Recently, we have seen some companies move beyond our early vision for the scorecard to discover its value as the cornerstone of a new strategic management system. Used this way, the scorecard addresses a serious deficiency in traditional management systems: their inability to link a company's long-term strategy with its short-term actions."<sup>31</sup>

<sup>&</sup>lt;sup>30</sup> Kaplan, R., S., Norton, D., P. (1992), page 174

<sup>&</sup>lt;sup>31</sup> Kaplan, R., S., Norton, D., P. (1996a), page 152

There was the need to expand the BSC by the terms Strategy and Vision as the quotation above and the example in the Financial Perspective chapter of section 3.1.1.1 shows.

In 1996 Kaplan and Norton upgraded their first BSC model by the terms Strategy and Vision (figure 2):

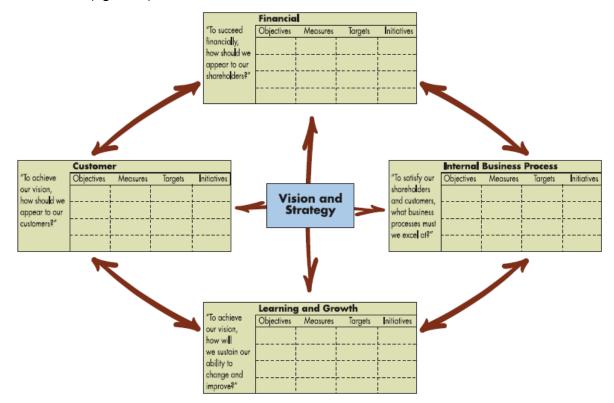


Figure 2: Translating Vision and Strategy: Four Perspectives<sup>32</sup>

The upgraded BSC model, including vision and strategy, allows managers to fully trust the BSC as an indicator for the company's long-term financial success. Therefore they are not only dependent on short term financial measures.<sup>33</sup> This is possible with "four new management processes that, separately and in combination, contribute to link long-term strategic objectives with short-term actions."<sup>34</sup> (1) Translating the Vision, (2) Communicating and Linking, (3) Business Planning and (4) Feedback and Learning.<sup>35</sup>

<sup>&</sup>lt;sup>32</sup> Kaplan, R., S., Norton, D., P. (1996a), page 153

<sup>&</sup>lt;sup>33</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>34</sup> Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>35</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

#### Translating the Vision

"Despite the best intentions of those at the top, lofty statements about becoming "best in class," "the number one supplier," or an "empowered organization" don't translate easily into operational terms that provide useful guides to action at the local level."<sup>36</sup>

Therefore, vision and the strategy statements have to be clear within the organization and should be also expressible as measures and objectives.<sup>37</sup>

#### Communicating and Linking

After defining the vision and the strategy management has to communicate it through the whole company and link it to responsible departments.

The BSC ensures that all individuals in the department including department chief and employees that are normally linked to short term financial rewards understand and follow the communicated long term strategy.<sup>38</sup>

#### **Business Planning**

This process helps companies bring together their business and financial plans. Within this process managers often choose new consultants, gurus etc. To know what initiatives are necessary to reach the company's long term strategic goals, BSC measures are helpful.<sup>39</sup>

#### Feedback and Learning

This process is a kind of strategic learning – a target achievement control process. Have the company and its employees reached their budgeted financial goals?<sup>40</sup>

<sup>&</sup>lt;sup>36</sup> Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>37</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>38</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>39</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

<sup>&</sup>lt;sup>40</sup> Cf. Kaplan, R., S., Norton, D., P. (1996a), page 152

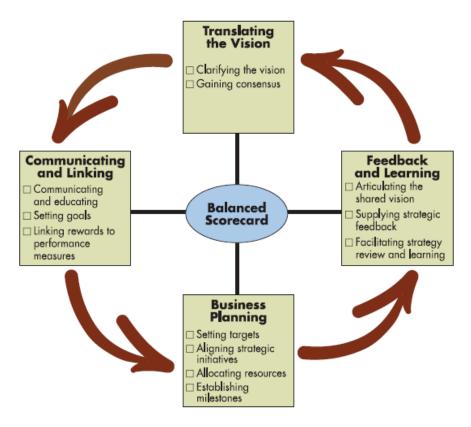


Figure 3 shows the Managing Strategy Model with its four processes:

Figure 3: Managing Strategy: Four Processes<sup>41</sup>

### 3.3.1.3 Further Perspectives

In this section some additional perspectives beside the four basic perspectives (customer, internal business, learning and growth and financial) will briefly be shown.

The following perspectives were found in a study of Bedford *et al.* (2006) including 92 Australian companies. The study examined how BSC is used in practice and shows the differences found.<sup>42</sup>

In a special section of the study respondents were asked which perspectives they use in their BSC beside the four basic perspectives. The following perspectives are

<sup>&</sup>lt;sup>41</sup> Kaplan, R., S., Norton, D., P. (1996a), page 155

<sup>&</sup>lt;sup>42</sup> Cf. Bedford, D., S., Brown, D., A., Malmi, T., Sivabalan, P. (2006), page 1

used from a significant number of companies beside the traditional four perspectives:<sup>43</sup>

Non – Traditional Perspectives	Percentage
Community	53%
Environment	50%
Government	49%
Supplier	47%

 Table 1: Additional Perspectives<sup>44</sup>

#### 3.3.3 Cause and Effect Relationships

One main core of the BSC is the cause-and-effect chain and its cause-and-effect relationships.

"A strategy is a set of hypotheses about cause and effect. The measurement system should make the relationship (hypotheses) among objectives (and measures) in the various perspectives explicit so that they can be managed and validated."<sup>45</sup>

The cause-and-effect chain should contain all four perspectives. The financial measure in the following example is ROCE. Kaplan and Norton (1996c) argue that ROCE is dependent on customer loyalty– it is the driver of the financial measure. They further say that a good OTD (which means satisfied customers) leads to higher customer loyalty. In order to improve OTD, cycle times should be short and quality should be high. To improve these internal process measures the company should also improve its learning and growth measures by supporting employee skills (learning and growth perspective).<sup>46</sup>

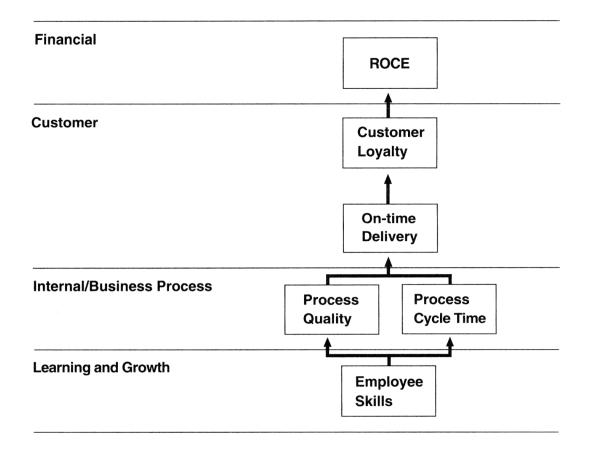
<sup>43</sup> Cf. Bedford, D., S., Brown, D., A., Malmi, T., Sivabalan, P. (2006), page 10

<sup>&</sup>lt;sup>44</sup> Cf. Bedford, D., S., Brown, D., A., Malmi, T., Sivabalan, P. (2006), page 10

<sup>&</sup>lt;sup>45</sup> Kaplan, R., S., Norton, D., P. (1996c), page 30

<sup>&</sup>lt;sup>46</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 30

The following figure shows a typical cause-and-effect chain of the BSC and should clarify the above example:



## Figure 4: Entire chain of cause-and-effect relationships as a vertical vector through the four BSC perspectives <sup>47</sup>

"Every measure selected for a Balanced Scorecard should be an element in a chain of cause-and-effect relationships that communicates the meaning of the business unit's strategy to the organization."<sup>48</sup>

## 3.3.3.1 Critique on Cause-and-Effect Relationships

As mentioned in section 3.3.3 the BSC is based on outcome measures and their performance drivers. One main core of the BSC is that these outcome measures and drivers are linked together in cause-and-effect relationships.<sup>49</sup>

<sup>47</sup> Kaplan, R., S., Norton, D., P. (1996c), page 31

<sup>&</sup>lt;sup>48</sup> Kaplan, R., S., Norton, D., P. (1996c), page 31

<sup>&</sup>lt;sup>49</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 30 - 31

Nørreklit (2003) suggests that "there is no such cause-and-effect relationship between some of the suggested areas of measurements."<sup>50</sup>

Nørreklit (2003) further says, referring to Kaplan's and Norton's suggestions in their book "The Balanced Scorecard – Translating Action into Strategy" that there are no cause and effect relationships between customer satisfaction and customer loyalty and that there are no relationships between customer loyalty and financial results.<sup>51</sup>

"... it is not generic that a "high level of satisfaction will lead to greatly increased customer loyalty and that increased customer loyalty is the single most important driver of long term financial performance." (Jones & Sasser, 1995, p. 90)"<sup>52</sup>

The following quotation should explain a cause and effect relationship in reality: "X precedes Y in time; the observation of an event X necessarily, or highly probably, implies the subsequent observation of another event Y; and the two events can be observed close to each other in time and space. In a cause-and-effect relationship, events X and Y are logically independent (Edwards, 1972, vol. 2, p. 63; Føllesdal *et al.*, 1997, p. 155)."<sup>53</sup>

Y cannot be rationally inferred from X. Just an empirical inference is possible. Logical relationships are used for example for a language and empirical relationships in this sense are applied for for cause-and-effect relationships. That means there are not existing any logical cause-and-effect relationships as already mentioned in section 3.1.4, A change in cycle time for example can cause cost reductions. These cost reductions can be measured by a logical accounting model. But only trough empirical analysis it is possible to see that cycle time was improved (and therefore costs were reduced) by better trained employees.<sup>54</sup>

Let us now look back once again to causal relationships between customer loyalty and customer satisfaction. As mentioned above Kaplan and Norton (1996a) suggest that customer satisfaction is highly linked with customer loyalty.<sup>55</sup>

This is based on the assumption that a loyal customer is more satisfied than a less loyal customer and therefore is more profitable. Furthermore it is based on the

<sup>&</sup>lt;sup>50</sup> Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>51</sup> Cf. Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>52</sup> Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>53</sup> Nørreklit, H. (2000), page 70

<sup>54</sup> Cf. Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>55</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 30 - 31

supposition that less loyal customers are expensive because the company has to attract new customers. The problem which is coming up here is that there are also existing customers that are loyal but placing small orders at low prices and therefore are not profitable.<sup>56</sup>

Nørreklit (2003) argues that: "Profitability depends on the revenues and costs attributable to having satisfied or loyal customers. This has to be based on financial calculus, i.e. on a logical relationship and not a causal one." <sup>57</sup>

"What we may claim is that customers which are not loyal are expensive, but it does not follow that loyal customers are inexpensive. Such a conclusion would be a logical fallacy: Similarly, although we know that, if it is raining, then the streets will be wet, we cannot conversely conclude that, if the streets are wet, then it is raining. Statistics cannot show that something is a logical fallacy. For example, financially successful firms only sell to loyal customers which are profitable; otherwise, the firms would not be successful."<sup>58</sup>

## 3.4 Similar System in France: The Tableau de Bord

"As the tableau de bord and the balanced scorecard translate visions and strategies into objectives and measures, they may both be categorised as strategic management tools."<sup>59</sup>

Both use financial and non financial performance measures, try to link top management long term (strategic) decisions with employees' short term actions and are top down communication systems, but the TDB is about 60 years older than the BSC.<sup>60</sup> The study of Bourguignon *et al.* (2006) shows that the main difference between the BSC and the TDB can be found in their ideological background, which is strongly affected by their countries.<sup>61</sup>

<sup>&</sup>lt;sup>56</sup> Cf. Nørreklit, H. (2003), page 616

<sup>&</sup>lt;sup>57</sup> Nørreklit, H. (2003), page 617

<sup>&</sup>lt;sup>58</sup> Nørreklit, H. (2003), page 617

<sup>&</sup>lt;sup>59</sup> Bourguignon, A., Malleret, V., Nørreklit, H. (2004), page 116, 118

<sup>&</sup>lt;sup>60</sup> Cf. Bourguignon, A., Malleret, V., Nørreklit, H. (2004), page 118

<sup>&</sup>lt;sup>61</sup> Cf. Bourguignon, A., Malleret, V., Nørreklit, H. (2004), page 109

Ideologies of France and the U.S. are very different. In the U.S. companies, managers and employees are acting under the slogan "fair contract" and French individuals are working under the principle of "honor rules". That means that in the U.S. everybody can work freely under contracts and management devices are very important for relationships between entrepreneurs and employees. In France individuals are attributed to certain social groups with different privileges and obligations and therefore management devices are less important in France.<sup>62</sup>

Beside the ideological differences Bourguignon *et al.* (2006) additionally found five major technical differences: different strategic concepts, different performance models, different delegation of duties and responsibilities, different performance measure and reward systems and another historical background.<sup>63</sup>

## 4. Theoretical Implementation

## 4.1 Implementation in General

In this section the 10 steps for building a BSC offered by Kaplan and Norton (1996a) and a possible holistic implementation process are explained.

## 4.1.1 Building a BSC: The Process

Each organization is different and unique and the following 10 steps are just a general proposal for the implementation of a BSC system. Kaplan and Norton used this plan in many organizations and it should give companies an idea of how to implement the BSC.<sup>64</sup>

## 4.1.1.1 Select the Appropriate Organizational Unit

The first step in building a BSC is to select an appropriate unit within the organization. The best unit for the first step would be a strategic business unit. The

<sup>&</sup>lt;sup>62</sup> Cf. Bourguignon, A., Malleret, V., Nørreklit, H. (2004), page 129

<sup>&</sup>lt;sup>63</sup> Cf. Bourguignon, A., Malleret, V., Nørreklit, H. (2004), page 119-120

<sup>&</sup>lt;sup>64</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 300

SBU should have its own customers, products, marketing, financial measures and so on. In simple terms it should be an autonomous unit within the company.<sup>65</sup>

The following figure shows the structure of a hierarchically organized company and the location of the BSC:

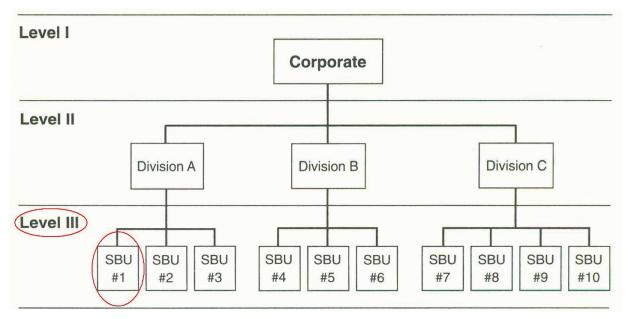


Figure 5: Define and Clarify the Business Unit<sup>66</sup>

## 4.1.1.2 Identify SBU/Corporate Linkages

After an appropriate SBU has been selected the linkages and relationships to the other SBUs, the divisions and at the company should be managed. The following topics should be checked: Financial objectives (e.g. profitability, growth), corporate themes (e.g. quality, price, environment, employees) and linkages to other SBUs (e.g. internal supplier relationships, internal customer relationships, core competencies). This is important in order to make sure that there is a win-win situation for all SBUs.<sup>67</sup>

<sup>&</sup>lt;sup>65</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 300 - 301

<sup>66</sup> Kaplan, R., S., Norton, D., P. (1996c), page 301

<sup>&</sup>lt;sup>67</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 302

#### 4.1.1.3 Conduct First Round of Interviews

At step 3 information gets supplied to 6 -12 executives of the SBU. On the one hand background material about the BSC and on the other hand internal documents about the vision and strategy of the SBU and the company are distributed. Also other information like environment, market trends, growth and so on should be offered to the executives. The reason for that is to show managers the BSC in detail, give answers on their questions and take away possible uncertainties. Information will be supplied and questions collected within interviews conducted by the BSC architect of the company.<sup>68</sup>

#### 4.1.1.4 Synthesis Session

In this step the architect and the design team of the BSC evaluate the questions and the general response of the interviews of step 3. The result should be the basis for step 4 – the first round of the executive workshop. It is important to summarize the output of the interviews and to allocate the collected objectives to the four perspectives of the BSC. It has to be proofed if the allocated objectives are fitting to the company's strategy and vision and if a cause-and-effect relationship is possible.<sup>69</sup>

#### 4.1.1.5 Executive Workshop: First Round

At this step the architect of the BSC makes a workshop with the top management. The first step is to find a consensus about the BSC. The second step is to find a mission and a strategy.<sup>70</sup>

Then the following question has to be answered: "If I succeed with my vision and strategy, how will my performance differ for shareholders, for customers, for internal business processes, and for my ability to grow and improve?"<sup>71</sup>

<sup>&</sup>lt;sup>68</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 302 - 303

<sup>&</sup>lt;sup>69</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 303 - 304

<sup>&</sup>lt;sup>70</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 304

<sup>&</sup>lt;sup>71</sup> Kaplan, R., S., Norton, D., P. (1996c), page 304

Objectives have to be discussed and several measures have to be found on each perspective. It is important to discuss each objective independent of other objectives. At the fourth step three to four objectives have to be selected and measures for those objectives have to be found. In the next step four subgroups have to be built – each for every perspective. After this workshop three to four strategic objectives and some potential measures have to be found for each perspective. Now, the architect prepares a meeting for the subgroups to discuss the results found in the workshop.<sup>72</sup>

## 4.1.1.6 Subgroup Meetings

At this step the architect and the subgroups try to complete the four principal objectives.<sup>73</sup>

- "1. Refine the wording of the strategic objectives in line with the intentions expressed in the first executive workshop.
- 2. For each objective, identify the measure or the measures that best capture and communicate the intention of the objective.
- 3. For each proposed measure, identify the sources of the necessary information and the actions that may be required to make this information accessible.
- 4. For each perspective, identify the key linkages among the measures within the perspective, as well as between this perspective and the other scorecard perspectives. Attempt to identify how each measure influences the other."<sup>74</sup>

After holding the subgroup meetings for each perspective the following final output should be presented:<sup>75</sup>

- A list of objectives including a detailed description.
- A list of measures for each objective.
- A detailed description of the measures (quantification and report).
- A figure with the linkages between the measures and the perspectives.

<sup>&</sup>lt;sup>72</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 304 - 305

<sup>&</sup>lt;sup>73</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 305

<sup>&</sup>lt;sup>74</sup> Kaplan, R., S., Norton, D., P. (1996c), page 305

<sup>&</sup>lt;sup>75</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 307

### 4.1.1.7 Executive Workshop: Second Round

In this workshop the senior management team including subordinates and middle managers will discuss the vision, the strategy and the objectives and measures for the BSC. The aim of this workshop is to be able to inform all the employees and the business units of the scorecard's content and targets. Targets should be specified for the next three to five years.<sup>76</sup>

## 4.1.1.8 Develop the Implementation Plan

At this step a team consisting of the leaders of each subgroup should expand targets and formulate an implementation plan. The plan should answer the following questions:<sup>77</sup>

- How will the measures be linked to the information system?
- How will the BSC be communicated in the company?
- How will second-level measures be built in decentralized units?
- How will the BSC be integrated in the company's philosophy?

## 4.1.1.9 Executive Workshop: Third Round

At this workshop the senior executives will finalize the vision, objectives and measurements. Target achievement plans will also be worked out. Further, a consensus on the implementation should be reached.

## 4.1.1.10 Finalizing the Implementation Plan

"For a Balanced Scorecard to create value, it must be integrated into the organization's management system."<sup>78</sup> Therefore Kaplan and Norton (1996c) suggest using the BSC within 60 days after the first task (section 4.1.1.1).<sup>79</sup>

<sup>&</sup>lt;sup>76</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 307

<sup>&</sup>lt;sup>77</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 308

<sup>&</sup>lt;sup>78</sup> Kaplan, R., S., Norton, D., P. (1996c), page 308

<sup>&</sup>lt;sup>79</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 308

## 4.1.2 Holistic Implementation Process

Key Elements of a holistic implementation process:<sup>80</sup>

- 1) Task
  - Architecture and resources (design of the BSC, start, roll out, costs, time, etc.)
  - Management Tasks (possible accounting change, etc)
- 2) People
  - Leadership and Culture (kind of leadership, behaviors, values, beliefs, etc.)
  - Communication and Awareness (understandable and trustworthy processes<sup>81</sup>, etc.)

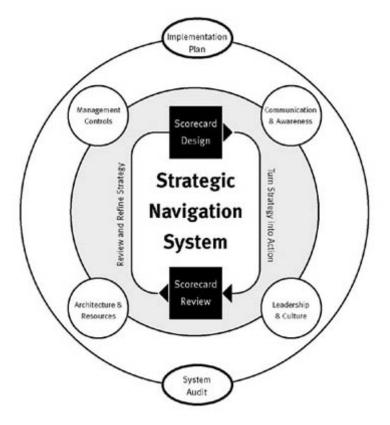


Figure 6: Model of Holistic BSC Implementation<sup>82</sup>

- <sup>81</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4
- <sup>82</sup> Balancedscorecard Homepage

<sup>&</sup>lt;sup>80</sup> Cf. Balancedscorecard Homepage

#### **4.2 Theoretical View**

In this section the theoretical background of important problems within the implementation process of the BSC will be explained.

#### 4.2.1 Accounting Change

The following statements of the accounting change problem are mainly based on the article of Kasurinen (2002) and the Accounting Change Model of Cobb *et al.* (1995). In this section the accounting change model theoretically by means of Cobb et al. (1995) are explained. Practical explanations follow in section 5.2.1.

Since the BSC has become a very popular accounting model in the late 1990s, not only the questions about if and how to use it, but also the accounting change itself has become a very important question within the BSC implementation. Theoretical and idealistically managers could follow a kind of "cooking recipe" to implement a perfect BSC system. There are for example the 10 building steps Kaplan and Norton offer (detailed explanations in section 4.1.1).<sup>83</sup>

In reality the implementation process of a new control system like the BSC is not that simple. People do not follow building steps or the like. In order to understand the implementation process in its practical use Cobb *et al.* (1995) determined the accounting change behavior of a large multinational Bank. The authors expanded the basic accounting change model of Innes and Mitchel (1990) by the factors Motivators, Catalysts and Facilitators.<sup>84</sup>

"Motivators, catalysts and facilitators, may be necessary to create a potential for change but action by individuals is needed to overcome the barriers to change. Otherwise, the change initiative will be deflected by the barriers. Sufficient momentum is then required to maintain the pact of change."<sup>85</sup>

<sup>&</sup>lt;sup>83</sup> Cf. Kaplan, R., S., Norton, D., P. (1996c), page 300-308

<sup>&</sup>lt;sup>84</sup> Cf. Kasurinen, T. (2002), page 323-324

<sup>&</sup>lt;sup>85</sup> Cobb, I., Helliar, C., Innes, J. (1995), page 173

The quotation above shows that the factors related to the accounting change process are divided into six main protagonists, which are explained below:

### (1) Motivators

Motivators are not individuals. Motivators can be situations, advantages or special conditions like increased competition, a new innovative product or a new organizational structure.<sup>86</sup>

## (2) Catalysts

Catalysts are directly responsible for the accounting change process.<sup>87</sup> Catalysts are individuals coming for example from the financial sector (Chief Financial Officers).<sup>88</sup> These individuals are bounded to financial performance situations, market share or the success of a product launch.<sup>89</sup>

## (3) Facilitators

Facilitators as the name implies have a supporting role at the accounting change process. This third main protagonist in the accounting change model is not essential but helpful.<sup>90</sup> A facilitator is for example the general IT support.<sup>91</sup>

### (4) Barriers

Barriers are factors that "hinder, delay and even prevent change."<sup>92</sup> Kasurinen (2002) studied the most important surveys according to management accounting change between 1983 and 1996 and found the following barriers:

<sup>&</sup>lt;sup>86</sup> Cf. Kasurinen, T. (2002), page 324

<sup>&</sup>lt;sup>87</sup> Cf. Kasurinen, T. (2002), page 324

<sup>&</sup>lt;sup>88</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172

<sup>&</sup>lt;sup>89</sup> Cf. Kasurinen, T. (2002), page 324

<sup>&</sup>lt;sup>90</sup> Cf. Kasurinen, T. (2002), page 324

<sup>&</sup>lt;sup>91</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172

<sup>&</sup>lt;sup>92</sup> Cobb, I., Helliar, C., Innes, J. (1995), page 172

Study	Barrier
Argyris & Kaplan (1994)	<ul> <li>Inadequate education and sponsorship process</li> <li>Inadequate internal commitment creation process</li> </ul>
Shields (1995)	<ul> <li>Behavioural and organisational implementation variables</li> </ul>
Roberts & Silvester (1996)	<ul> <li>Organisational structures</li> </ul>
Markus & Pfeffer (1983)	<ul> <li>Organisational culture</li> <li>Power distribution</li> <li>Inadequate agreement on the organisation's goals and the technology required for achieving them</li> </ul>
Brooks & Bate (1994)	Cultural infrastructure
Scapens & Roberts (1993)	<ul> <li>Failure to secure the legitimacy of a new system</li> <li>Inability to find a workable relationship between the languages of production and accounting</li> </ul>
Strebel (1996)	<ul> <li>Different views on change</li> </ul>

## Table 2: Overview of the potential barriers in literature<sup>93</sup>

<sup>&</sup>lt;sup>93</sup> Kasurinen, T. (2002), page 327

#### (5) Individuals

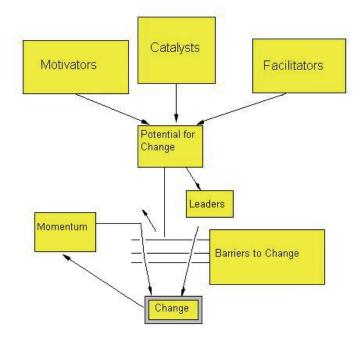
In the accounting change model of Cobb *et al.* (1995) individuals play a very important role within the organization. A Financial Controller committed:

"The process of change can only happen through people, even if the vital elements of motivators, catalysts and facilitators are in place, change will not occur without commitment through the management process."<sup>94</sup>

#### (6) Leaders

Individuals play a double role in the management accounting change process. As already explained, individuals are catalysts, but individuals also play the role of leaders.<sup>95</sup> "As catalysts they initiated the change process, but without their leadership role the change process may have faltered in the face of barriers."<sup>96</sup>

The figure below shows the accounting change model of Cobb et al. (1995):



#### Figure 7: Accounting change model<sup>97</sup>

- <sup>94</sup> Cobb, I., Helliar, C., Innes, J. (1995), page 172
- 95 Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172
- <sup>96</sup> Cobb, I., Helliar, C., Innes, J. (1995), page 172
- 97 Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 173

#### 4.2.2 Communication

The following explanations for the communication problem are mainly based on the article of Malina and Selto (2001).

The BSC is not only a multidimensional measurement system, it is also a communication device and as such it provides strategic help to divisional managers. The BSC should help managers to lead their company to financial success. It shows managers the best strategy to reach their financial aims. To do this, it is necessary to communicate the strategy effectively through the company and all its divisions. For the manager it is possible to implement the strategy successfully after that.<sup>98</sup>

"By articulating the outcomes the organization desires as well as the drivers of those outcomes, senior executives can channel the energies, the abilities, and the specific knowledge held by people throughout the organization towards achieving the business's long-term goals."<sup>99</sup>

That means that the BSC helps to create organizational strategy and help to make communication visible. In this sense it is a fact that communication failure is a common reason for bad organizational performance. That means that a good communication system in the sense of making strategy visible through the whole organization can offer the company a competitive advantage.<sup>100</sup>

There are many characteristics that affect the quality and/or effectiveness of the communication process in an organization. Overall there can be named three attributes which characterize the communication process in an organization: <sup>101</sup>

- Processes and messages
- Support of organizational culture
- Creation and exchange of knowledge

<sup>98</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 3

<sup>&</sup>lt;sup>99</sup> Kaplan, R., S., Norton, D., P. (1996a), page 56

<sup>&</sup>lt;sup>100</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4

<sup>&</sup>lt;sup>101</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4

#### 4.2.2.1 Processes and Messages

Employees need understandable and trustworthy processes and messages to participate in the communication process. That means for example clearly defined terms, a clear target to reach or exactly defined tasks.<sup>102</sup>

#### 4.2.2.2 Support of Organizational Culture

There are several perspectives for supporting culture, values and beliefs. The first is to support organizational culture and individual interest. The second is that organizations do what they promise and that individuals get rewarded according to their actions. The third one is to combine the first and the second perspective, which means effective communication occurs if organizational goals, values, and beliefs are consistent. Appropriate to this, supporters of the BSC say that the BSC can be used for cultural and strategic change.<sup>103</sup>

### 4.2.2.3 Creation and Exchange of Knowledge

Knowledge is essential for an effective strategy implementation. Therefore a valuable communication process always needs individuals which are aware of the organization's current status. Organizational knowledge is created by development and integration of individual knowledge. Because of that an effective communication system should motivate the employees to share their experiences and should then collect these. Therefore, in relation to the BSC it is said "that participation in the design of performance measurement systems is an important determinant of effective communication of strategy."<sup>104</sup>

<sup>&</sup>lt;sup>102</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4

<sup>&</sup>lt;sup>103</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4

<sup>&</sup>lt;sup>104</sup> Malina, M.,A., Selto F.,H. (2001), page 5

#### 4.2.3 Management Control of Strategy

The following explanations for the control of strategy problem are mainly based on the article of Malina and Selto (2001).

As already mentioned in section 4.2.1 the BSC as an integrated multidimensional measurement system has to communicate effectively the vision and strategy. Another main function is to adopt the BSC as a management control device. Control is a very important key factor for a successful company. It is important for executives to have well motivated managers and well motivated employees. One strategy and one vision should be followed by all company members.

The BSC, as already mentioned in section 3, works with multiple performance measures in the four most important areas of a company. Therefore the BSC can exercise direct control to managers and indirectly to lower level employees within the whole company.<sup>105</sup>

The following two quotations should show that it is very difficult to exercise control to all individuals within the company. Important is that a control device only works effectively if lower level employees and managers are motivated and follow the company's goals.<sup>106</sup>

"To be effective, BSC measures should be accurate, objective, and verifiable. Otherwise, measures will not reflect performance and may be manipulated, or managers could in good faith achieve good *measured* performance but cause the organization harm."<sup>107</sup>

"For many lower-level employees, most financial performance measures are too aggregated and too far removed from their actions to provide useful guidance or feedback on their decisions. They may need measures that more directly and accurately relate to outcomes that they can influence [McKenzie and Schilling, 1998]."<sup>108</sup>

<sup>&</sup>lt;sup>105</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 6 - 7

<sup>&</sup>lt;sup>106</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 8

<sup>&</sup>lt;sup>107</sup> Malina, M.,A., Selto F.,H. (2001), page 7

<sup>&</sup>lt;sup>108</sup> Malina, M.,A., Selto F.,H. (2001), page 6

With the BSC as an effective management control device it should be possible to achieve a common strategic alignment and to promote positive motivation within a company.<sup>109</sup>

Common strategic alignment within the company:

- "A *comprehensive* but parsimonious set of measures of critical performance variables, linked with strategy
- Critical performance measures *causally linked* to valued organizational outcomes
- Effective accurate, objective, and verifiable performance measures"<sup>110</sup>

Positive motivation within the company:

- "Performance measures that reflect managers' *controllable* actions and/or *influenceable* actions, e.g., measured by *relative* performance
- Performance targets or *appropriate benchmarks* that are challenging but attainable
- Performance measures that are related to meaningful rewards"<sup>111</sup>

The BSC as an effective management control device is a hierarchical top-down model. Therefore it is very difficult to integrate it into the very complex and dynamic environment of a company.<sup>112</sup>

The following needed attributes result from this: <sup>113</sup>

- Adjustable control methods
- An interactive control process during strategy formulation, building of the BSC and its implementation

<sup>&</sup>lt;sup>109</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 8

<sup>&</sup>lt;sup>110</sup> Malina, M.,A., Selto F.,H. (2001), page 8

<sup>&</sup>lt;sup>111</sup> Malina, M.,A., Selto F.,H. (2001), page 8

<sup>&</sup>lt;sup>112</sup> Cf. Nørreklit, H. (2000), page 81

<sup>&</sup>lt;sup>113</sup> Cf. Nørreklit, H. (2000), page 81

# 5. Practical Implementation

## 5.1 State of BSC Implementation

Bain and Company found in a study that 57% of 960 international executives used the BSC in 2005. In 2007 the percentage was 66% out of 1221 firms.<sup>114</sup>

The figure below shows that this positive trend of BSC usage was increasing until 2007. Overall satisfaction was decreasing until 2007 and then increasing.

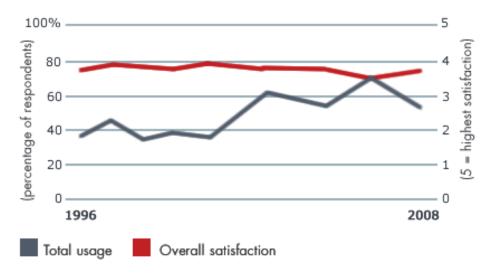


Figure 8: BSC Usage and Satisfaction<sup>115</sup>

## **5.2 Practical View**

The following chapters will link the theoretical explanations of the implementation process with the praxis. That means some case studies fitting to the above described theoretical chapters and some practical examples in relation to the theoretical explanations in chapter 4 et seq are presented.

<sup>&</sup>lt;sup>114</sup> Cf. Geuser, F., Mooraj, S., Oyon, D. (2009), page 93-94

<sup>&</sup>lt;sup>115</sup> Bain Homepage

#### 5.2.1 Accounting Change in the Practical View

In this section the accounting change problem in relation with the introduction of the BSC in a company is explained. Furthermore the reasons that hinder the accounting change process which Kasurinen (2002) found in his study and his revised accounting change model are shown. The following explanations are mainly based on the study by Kasurinen (2002).

## 5.2.1.1 Research Question

As indicated above, theoretical and practical implementation of a new performance measurement system are drifting widely apart and the accounting change model of Cobb *et al.* (1995) does not offer any instrument to solve the problem of the barriers.

For that reason Kasurinen (2002) tried to develop the model of Cobb *et al.* (1995) further and examine the different types of barriers in detail in order to build a new accounting change model.<sup>116</sup> Therefore the study used the building process of the BSC offered by Kaplan and Norton. Up to the study of Kasurinen (2002) the change of the accounting system was not examined with the BSC. The question here is, if it is possible to use the accounting change model of Cobb *et al.* (1995) for different management models. Kasurinen found that not the management model itself but the change is important. That means a change of the management system has to be fundamentally.<sup>117</sup>

#### 5.2.1.2 Research Site

Kasurinen (2002) examined a Finnish metal group with about 14000 employees and net sales of a about € 3.2 billion. He specialized on one strategic business unit, which was divided into five sectors according to the company's products. These sectors were further divided into divisions and strategic business units.<sup>118</sup>

<sup>&</sup>lt;sup>116</sup> Cf. Kasurinen, T. (2002), page 328

<sup>&</sup>lt;sup>117</sup> Cf. Kasurinen, T. (2002), page 328

<sup>&</sup>lt;sup>118</sup> Cf. Kasurinen, T. (2002), page 330

## Figure 9 shows the location of the study of Kasurinen (2002) within the company:

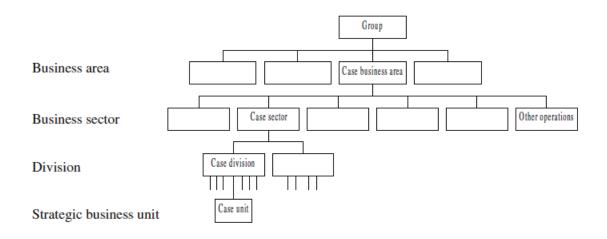
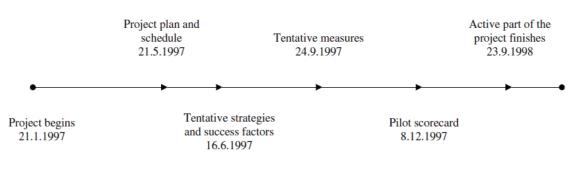


Figure 9: Location of the case unit in the group hierarchy <sup>119</sup>

The analyzed company was very strongly affected by a strategic management style because the division general manager was an advocate of strategic planning. Therefore the investigated case business area and his employees already had a lot of knowledge about strategic management accounting and this provided a good initial situation for the aspired BSC project. Another advantage was that managers in the case business area were very interested in implementing a strategic multidimensional performance tool such as the BSC.<sup>120</sup>

Figure 10 shows the milestones of the study:





<sup>&</sup>lt;sup>119</sup> Kasurinen, T. (2002), page 330

- <sup>120</sup> Cf. Kasurinen, T. (2002), page 330 331
- <sup>121</sup> Kasurinen, T. (2002), page 330

## Protagonists in the BSC Project

## **Division Management**

As already discussed the division general manager was very important in this case project. He already has been using strategic management tools in the company since 1995. He also supported the BSC project by treating it in meetings and started discussions about it.<sup>122</sup>

## Business Unit Management

The business units were also interested in the BSC project. An important reason therefore was the financial orientation of the control system before the BSC projected started. Here the manager of the business unit said that this may hinder the achievement of strategic aims. In addition the strong sustain of the division general manager for the BSC lead to a support of the business unit managers.<sup>123</sup>

## Higher-Level Managers

As division and business managers supported the BSC project, higher-level managers had to support it too, because they are responsible for the needed information and fulfillment of the requirements.<sup>124</sup>

The following five goals were set for the BSC project:

- "Clarifying and updating the business unit strategy.
- Communicating strategies to everyone in the unit.
- Following up strategic goals.
- Binding the operational goals to strategies.
- Learning strategic thinking."125

<sup>&</sup>lt;sup>122</sup> Cf. Kasurinen, T. (2002), page 331

<sup>&</sup>lt;sup>123</sup> Cf. Kasurinen, T. (2002), page 332

<sup>&</sup>lt;sup>124</sup> Cf. Kasurinen, T. (2002), page 332

<sup>&</sup>lt;sup>125</sup> Kasurinen, T. (2002), page 332

Actor	Intention
Division management	Ensure that the business unit
	management will learn strategic
	thinking and take a more strategic
	hold of their business
	<ul> <li>Ensure that the business unit</li> </ul>
	management will understand the
	business related problems (such as
	the mature stage of the products'
	life-cycle)
	<ul> <li>Signal to other units that a</li> </ul>
	strategy-based approach is valued
	in the division
Business unit management	Create a more diversified and
	systematic measurement system
	<ul> <li>Increase the role of interactive and</li> </ul>
	beliefs systems in the unit
	<ul> <li>Act in accordance with the</li> </ul>
	instructions given by the division
	management
Higher-level managers	<ul> <li>Ensure that higher-level projects</li> </ul>
	succeed and the information
	requirements are fulfilled

The following responsibilities were defined within the BSC project:

Table 3: Actors and their intentions in the case project<sup>126</sup>

<sup>&</sup>lt;sup>126</sup> Kasurinen, T. (2002), page 333

#### 5.2.1.3.1 Problems in the BSC Project

#### 5.2.1.3.1.1 Strategy and Communication

During the first steps of implementation some questions arose which were not answered and that led to the essential decision of producing normal or niche products. Business unit management was not able to provide a clear top down communication of the vision and strategy (see more to this in sections 4.2.2 and 5.2.2). The five goals (see above) were not communicated to the employees. Therefore confusion was the result. Another problem aroused because of the organization itself. Managers and employees of the company believed that the BSC is just a tool for combining financial and non-financial measurements. They did not know that the BSC was an integrated performance measurement system that combined measures and strategy.<sup>127</sup>

#### 5.2.1.3.1.2 Complex Project Environment

In the examined company many projects were simultaneously made, but there was a big problem in coordinating these many projects. The result was that new projects got afflicted with prejudices. A similar system beside the BSC was in preparation. This system was called operative indicator system and could be seen as a competitor to the BSC project. But both systems had no big chance because of failing information and unfulfilled requirements.<sup>128</sup>

#### 5.2.1.3.1.3 K.O. of the Division General Manager

The biggest problem was the resignation of the division general manager. After his return, motivation was low and employees and other managers resigned step by step too.<sup>129</sup>

<sup>&</sup>lt;sup>127</sup> Cf. Kasurinen, T. (2002), page 333 - 334

<sup>&</sup>lt;sup>128</sup> Cf. Kasurinen, T. (2002), page 334

<sup>&</sup>lt;sup>129</sup> Cf. Kasurinen, T. (2002), page 334 - 335

#### 5.2.1.3.2 End of the BSC Project

In May 1998 thinking about the BSC was not only positive anymore within the company and such an integrated measurement system was not introduced yet. The problem was that there was no information about the BSC within the company. The general manager wanted to bring this information into the company until summer, but no information was given and no BSC system was implemented until August 1998. A last chance was given until September 2<sup>nd</sup> by the management. Up to this date an implementation was very unpromising and in October 1998 the management dropped the BSC. In January the case business unit was merged with some other business units and a new only financial measurement system was implemented.<sup>130</sup>

As you can see here the BSC was not implemented, although general and business unit managers supported the project very strongly. Reasons therefore are barriers as already mentioned. The next section shows the revised accounting change model of Kasurinen (2002) that helps to avoid such barrier problems.

# 5.2.1.3.3 Revised Accounting Change Model

As already explained in section 4.2.1 the following main building blocks are essential in the accounting change model of Cobb et al. (1995): (1) Motivators, (2) Catalysts, (3) Facilitators, (4) Barriers, (5) Individuals and (6) Leaders.

In the following explanations motivators, catalysts, facilitators, individuals and leaders are together defined as so called advancing forces of change. Advancing forces of change and barriers are together defined as influencing forces of change.<sup>131</sup>

<sup>&</sup>lt;sup>130</sup> Cf. Kasurinen, T. (2002), page 335

<sup>&</sup>lt;sup>131</sup> Cf. Kasurinen, T. (2002), page 324

The following table shows the advancing forces of change in relation to the BSC project:

	Motivators	Facili	tators	Catalysts
- - -	Globalisation of markets Complex business environment Mature stage of the products' life-cycle Problems with financial measures	<ul> <li>Earlier balanced scorecard introduction</li> <li>Strategically well- structured situation</li> </ul>		<ul> <li>Business unit general manager's experience in strategy work</li> <li>Conducted strategic analyses</li> </ul>
	Momentum			Leaders
- -	Strategy analysis process Partnership project		- Division general manager	

#### Table 4: Summary of the advancing forces in the case project <sup>132</sup>

As the BSC project of Kasurinen (2002) shows, the accounting change model of Cobb *et al.* (1995) has several limitations manifested within the barriers. The most critical problem is that barriers are not categorized within Cobb's model. A categorization of the barriers could help companies to better manage and understand accounting change problems. Therefore the following three subcategories - (1) Confusers, (2) Frustrators and (3) Delayers - were found by Kasurinen and a revised accounting change model was presented. With the new subcategories of the barriers it is possible to analyze the change process in a very early stage and helps therefore to avoid the above problems.<sup>133</sup>

For the BSC project the following analysis were made:

"The analysis of the confusers, for example, revealed the complexity of the project environment and the uncertain role of the balanced scorecard project in the organization. Moreover, the examination of the frustrators uncovered the significance of engineering culture and a financially sound situation in directing the

<sup>&</sup>lt;sup>132</sup> Kasurinen, T. (2002), page 336

<sup>133</sup> Cf. Kasurinen, T. (2002), page 336 - 339

goals of the business unit managers. Finally, the analysis of the delayers brought forward the difficulties in specifying the business unit strategy."<sup>134</sup>

Figure 11 shows the revised accounting change model of Kasurinen (2002) with its new barrier categories:

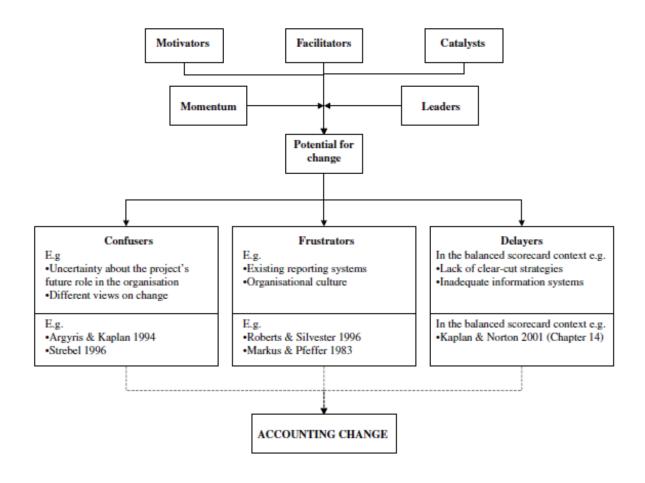


Figure 11: Revised accounting change model <sup>135</sup>

<sup>&</sup>lt;sup>134</sup> Kasurinen, T. (2002), page 341

<sup>&</sup>lt;sup>135</sup> Kasurinen, T. (2002), page 338

#### 5.2.2 Communication in the Practical View

In this chapter the research work of Malina and Selto (2001) according to the communication process within the implementation of the BSC in chapter 4.2.2. are shown and explained.

#### 5.2.2.1 Research Question

"Is the BSC an (in)effective communication device, creating strategic (non)alignment, (in)effective motivation, and (negative)positive organizational outcomes?"<sup>136</sup>

To get a better feeling of what Malina and Selto did in their research work, I some facts about the research site and the research method are briefly explained.

## 5.2.2.2 Research Site

Malina and Selto investigated a U.S. Fortune 500 company for their research work. The company has more than 25000 employees and sells durable products and post-sales services. The company is long-term managed and uses a multidimensional measurement system – the BSC. It has a very long history of effective management and communicates strategy very effectively to its distributors. The company also uses a special kind of BSC, the so called Distributer BSC, which had been introduced one and a half year before the study began and gets used in the company's 31 very sales boosting North American distributorships.<sup>137</sup>

Because of the company's top-down communication process, management did not let distributors be partners in the creation of the DBSC. Therefore the effectiveness of communication through the DBSC was weakened and one of the results of the research question was that distributors met the DBSC with a refusal.<sup>138</sup> Read more to the results in chapter 5.2.2.4.

<sup>&</sup>lt;sup>136</sup> Malina, M.,A., Selto F.,H. (2001), page 5

<sup>&</sup>lt;sup>137</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 9 - 10

<sup>&</sup>lt;sup>138</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 12

#### Overview of the DBSC

The DBSC helps the company to better manage the change from a purely financial driven measurement system to a multidimensional measurement system which contains customer driven strategies.<sup>139</sup> That means the DBSC helps the company to communicate "the company's new retail distribution strategy to its distributors".<sup>140</sup>

The DBSC of the investigated company is similar to the BSC according to Kaplan and Norton. It also measures the performance of the four perspectives explained in chapter 3 but uses 12 additional categories according to the company's requests. Table 5 shows the measures used in the DBSC. For a better understanding the company measures are linked to the four traditional measures of the BSC.<sup>141</sup>

Traditional BSC	Distributor BSC Measures	Weights	
Categories	(Company category)		
Learning and	Employee skill inventory and personal development	1%	
growth	plans (HC)		
	Industry involvement (HC)	1%	
	Training (HC)	2%	4%
Efficient internal	Customer orders, first-time fill rate (CA)	3%	
processes			
	Customer service, problems diagnosed in 1 hour (CA)	5%	
	Customer service, problems solved in 6 hours (CA)	5%	
	Management excellence awards (CA)	3%	
	Adoption of best practices (CA)	1%	
	Inventory turnover (PG)	4%	
	Days sales outstanding (PG)	2%	
	Service hours utilization (PG)	2%	
	Safety (CC)	2%	
	Warranties (Other)	8%	
	Building condition (Other)	3%	
	Miscellaneous (Other)	3%	41%

<sup>&</sup>lt;sup>139</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 9 - 10

<sup>&</sup>lt;sup>140</sup> Malina, M.,A., Selto F.,H. (2001), page 9 - 10

<sup>&</sup>lt;sup>141</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 10-11

Customer value	Customer satisfaction (CA)	4%	
	Traditional market share – 1 (easily tracked) (CA)	28%	
	New market share – 2 (no measure yet available) (CA)	6%	
	Environmental assessment and remediation (CC)	2%	
Financial	PBIT, % of sales (PG)	4%	
success			
	Cash flow from operations, % of sales (PG)	2%	
	Sales growth (PG)	9%	15%
			100%

#### Table 5: DBSC Measures and Approximate Weights<sup>142</sup>

## 5.2.2.3 Research Method

In this section how research data was collected and what and who was asked in the interviews is explained.

## Data Collection

Malina and Selto used a qualitative research method. Data was collected from people who where directly involved in the DBSC - all 31 distributors. Interviews where made via telephone and took between 45 and 75 minutes. A semi structured interview format was used.<sup>143</sup> Each distributor was asked the following questions:

"1. In your own words, what is the distributor-balanced scorecard?

- 2. What do you think the objective of the balanced scorecard is?
- 3. What are the nine measures, which distributors report, really measuring?
- 4. What are the measures that are filled out by the company really measuring?

5. How do the measures that distributors report relate to the company's measures? (Follow-up: Do changes in distributor performance cause changes in the company's

measures?)

<sup>&</sup>lt;sup>142</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 33

<sup>&</sup>lt;sup>143</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 12-13

6. Do the measures (distributors' and the company's) help you in any way? (Followup: How?)

7. Are there any benefits from the balanced scorecard itself? (Follow-up: Apart from the individual measures?)

8. Do you have any (other) recommendations for improving the balanced scorecard?"<sup>144</sup>

# 5.2.2.4 Results of the Research Question

Malina and Selto found that it is very logical that distributors are well informed about the DBSC and therefore understand it.<sup>145</sup>

# Effective Communication

In the study no evidence of links between effective communication and other DBSC factors was found.<sup>146</sup> Therefore there is no support "that Effective communication is either associated with or causes Strategic alignment, Effective motivation, or Positive outcomes."<sup>147</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

# Ineffective Communication

In the study Evidence that ineffective communication is independent to other ineffective DBSC factors was found. As seen above there was no evidence of effective communication but there were found a lot of indicators of the top down problem described in chapter 5.2.1.1. The exclusion of the distributors from designing the DBSC was a direct reason of conflict, verified by sixteen causal links. <sup>148</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

<sup>&</sup>lt;sup>144</sup> Malina, M.,A., Selto F.,H. (2001), page 14

<sup>&</sup>lt;sup>145</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 16

<sup>&</sup>lt;sup>146</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>147</sup> Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>148</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

Table 6 shows a summary of relations and associations:

First Supercode	Second Supercode	Causal Relations	Associations
Effective Mgt Control	Strategy Alignment	23	
Effective Mgt Control	Effective Motivation	8	
Strategy Alignment	Positive Outcomes	28	
Strategy Alignment	Ineffective Mgt Control		24
Strategy Alignment	Effective Motivation		14
Strategy Alignment	Ineffective Communication		11
Strategy Alignment	Ineffective Motivation		27
Effective Motivation	Positive Outcomes	14	
Ineffective Mgt Control	Conflict/Tension	8	
Ineffective Mgt Control	Ineffective Motivation	8	
Ineffective Mgt Control	Ineffective Communication		16
Ineffective Communication	Conflict/Tension	16	
Ineffective Motivation	Positive Outcomes	7	
Ineffective Motivation	Conflict/Tension	9	

Table 6: Summary of Verified Supercode Causal Relations and Associations<sup>149</sup>

<sup>&</sup>lt;sup>149</sup> Malina, M.,A., Selto F.,H. (2001), page 38

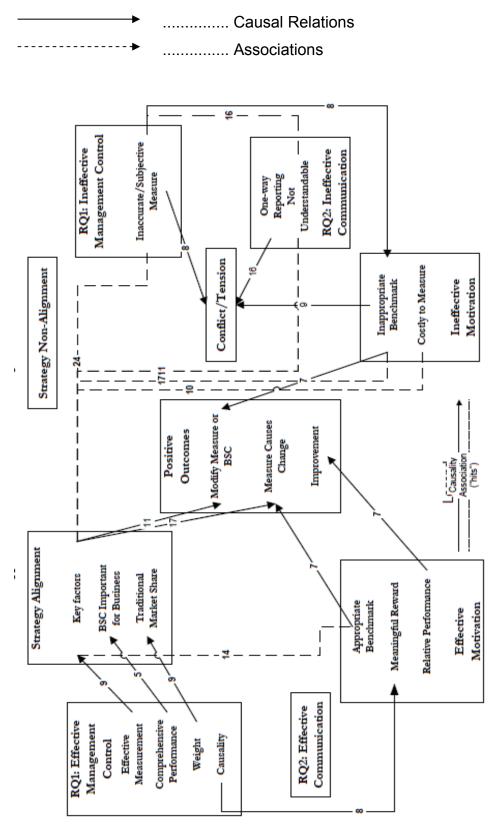


Figure 12 illustrates the different relations and associations:

Figure 12: Data-Supported Model of Distributors' BSC Perceptions<sup>150</sup>

<sup>&</sup>lt;sup>150</sup> Malina, M.,A., Selto F.,H. (2001), page 40

# 5.2.3 Management Control of Strategy in the Practical View

In this chapter the research work of Malina and Selto (2001) according to the control process within the implementation of the BSC in chapter 4.2.3. is shown and explained.

# 5.2.3.1 Research Question

"Is the BSC an (in)effective management control device, creating strategic (non)alignment, (in)effective motivation, and (negative) positive organizational outcomes?"<sup>151</sup>

# 5.2.3.2 Research Site

Please read section 5.2.2.2 for the research site and the explanation of the DBSC.

# 5.2.3.3 Research Method

For research method please read section 5.2.2.3. This section shows how research data was collected and what and who was asked in the interviews.

# 5.2.3.4 Results of the Research Question

# Effective Management Control

At first sight effective management control is responsible for positive outcomes, but there is no evidence of a direct link between effective management control and positive outcomes. Looking a bit closer it appears that strategic alignment and effective motivation brought about by effective management control leads to positive outcomes.<sup>152</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

<sup>&</sup>lt;sup>151</sup> Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>152</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 17

#### Ineffective Management Control

As figure 12 shows no causal or associated links were found between ineffective management control and strategy alignment. But several links existing between ineffective management control, ineffective motivation and conflict/tension. This fact supports that ineffective management control leads to ineffective motivation and further to conflict or tension.<sup>153</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

# 6. Conclusion

## 6.1 Summary of the Results

#### 6.1.1 Accounting Change

Theoretical and practical implementation of a new performance measurement system are drifting widely apart.

As mentioned in section 4.2.1 the accounting change process depends on six main protagonists: Motivators, catalysts, facilitators, barriers, individuals and leaders. Motivators, catalysts, facilitators, individuals and leaders are necessary to make a change possible, but barriers can hinder or delay the change process.<sup>154</sup>

The accounting change model of Cobb *et al.* (1995) does not offer any instrument to solve the problem of the barriers. Therefore Kasurinen (2002) tried to develop the model of Cobb *et al.* (1995) further and examine the different types of barriers in detail in order to build a new accounting change model.<sup>155</sup> To do this he investigated an accounting change process in one strategic business unit of a Finnish metal group with about 14000 employees and net sales of a about  $\in$  3.2 billion. This strategic business unit should change its measurement system to the BSC.<sup>156</sup>

<sup>&</sup>lt;sup>153</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 21

<sup>&</sup>lt;sup>154</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 173

<sup>&</sup>lt;sup>155</sup> Cf. Kasurinen, T. (2002), page 328

<sup>&</sup>lt;sup>156</sup> Cf. Kasurinen, T. (2002), page 330

The analyzed company was very strongly affected by a strategic management style because the division general manager was an advocate of strategic planning. This provided a good initial situation for the aspired BSC project.<sup>157</sup> Main protagonists in the BSC project were: *Division Management, Business Unit Management and Higher-Level Managers.*<sup>158</sup> Main problem fields of the BSC project were *Strategy and Communication, Complex Project Environment and the K.O. of the Division General Manager.*<sup>159</sup>

The BSC was not implemented, although general and business unit managers supported the project very strongly. Reasons are barriers as already mentioned. The solution for this problem is the revised accounting change model of Kasurinen (2002) that helps to avoid such barrier problems. Within the revised accounting change model a categorization of the barriers was made: Confusers, Frustrators and Delayers. With the categorization it was possible to analyze the change process in a very early stage and this helps to avoid the problems listed above.<sup>160</sup>

#### 6.1.2 Communication

The BSC is not only a multidimensional measurement system, but also a communication device. As such a device it provides strategic help to divisional managers.<sup>161</sup>

The BSC helps to create organizational strategy and make communication visible. Communication failure is a common reason for bad organizational performance. That means that a good communication system can offer the company a competitive advantage.<sup>162</sup> Three main attributes characterize the communication process within an organization: Processes and messages, support of organizational culture and creation and exchange of knowledge.<sup>163</sup>

- <sup>158</sup> Cf. Kasurinen, T. (2002), page 331 332
- <sup>159</sup> Cf. Kasurinen, T. (2002), page 333 335
- <sup>160</sup> Cf. Kasurinen, T. (2002), page 336 339
- <sup>161</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 3
- <sup>162</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4
- <sup>163</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 4

<sup>&</sup>lt;sup>157</sup> Cf. Kasurinen, T. (2002), page 330 - 331

Malina and Selto (2001) investigated a U.S. Fortune 500 company for their research work. The company is long-term managed and uses a multidimensional measurement system – the BSC. The company uses a special kind of BSC, the so called Distributer BSC. <sup>164</sup> Please see section 5.2.2.2.

The following research question was investigated by Malina and Selto (2001): "Is the BSC an (in)effective communication device, creating strategic (non)alignment, (in)effective motivation, and (negative)positive organizational outcomes?"<sup>165</sup> Effective communication does not influence strategic alignment, effective motivation and positive outcomes. But ineffective communication influences these factors.<sup>166</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

#### 6.1.3 Control of Strategy

Control is a very important key factor for a successful company. The BSC can directly exercise control to managers and indirectly to lower level employees within the whole company.<sup>167</sup> The BSC as an effective management control device should make it possible to achieve a common strategic alignment and to promote positive motivation within a company.<sup>168</sup> The BSC as an effective management control device is a hierarchical top-down model. Therefore it is very difficult to integrate it into the very complex and dynamic environment of a company.<sup>169</sup>

The following research question was investigated by Malina and Selto (2001): "Is the BSC an (in)effective management control device, creating strategic (non)alignment, (in)effective motivation, and (negative) positive organizational outcomes?"<sup>170</sup>

Results show that at first sight effective management control is responsible for positive outcomes, but there is no evidence that there is a direct link between effective management control and positive outcomes. Looking a bit closer it appears

<sup>&</sup>lt;sup>164</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 9 - 10

<sup>&</sup>lt;sup>165</sup> Malina, M.,A., Selto F.,H. (2001), page 5

<sup>&</sup>lt;sup>166</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>167</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 6 - 7

<sup>&</sup>lt;sup>168</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 8

<sup>&</sup>lt;sup>169</sup> Cf. Nørreklit, H. (2000), page 81

<sup>&</sup>lt;sup>170</sup> Malina, M.,A., Selto F.,H. (2001), page 18

that strategic alignment and effective motivation brought about by effective management control leads to positive outcomes.<sup>171</sup> Further it is shown that ineffective control does not impact strategic alignment, but influences motivation of the employees.<sup>172</sup> Please look at table 6 and figure 12 for a detailed compilation of all relations and associations.

#### 6.2 Critical Acclaim of the Author

An enormous amount of articles, studies and books exist about the BSC. Many topics and problems are already developed and many questions are already answered.

Many very good articles exist which cover a large bandwith of topics around the BSC. Due to these facts I had two possibilities to write this thesis. The first possibility was to make a field study about a special topic of the BSC or about companies using the BSC in a special country. The problem was that I had to write this work alone and that a field study is very time intensive. For example it is no rarity that an author needed several years to write an article about the BSC, because many people had to be questioned and many questionnaires had to be evaluated. In addition usually two or three authors are writing such articles and get supported by many students or scientific assistants. Because of these facts and my limited capacities I had to choose the second possibility.

The second possibility was to write a literature based thesis. To write a literature based thesis, I read as already mentioned in the introduction, the most important articles about the BSC in the most important economic magazines over the last ten years including the basic articles about the BSC from Kaplan and Norton (1992, 1993, 1996a, 1996b) and their book "The Balanced Scorecard – Translating Action into Strategy". The second step was to read and catalogue the articles according to their main topics (Appendix 1). After I had completed step 2, I was able to cover one topic in detail and I decided to show important problems of the implementation process within the BSC (Accounting change, Communication and Management Control Strategy).

<sup>&</sup>lt;sup>171</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 17

<sup>&</sup>lt;sup>172</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 21

I think that the BSC is for sure a very good management instrument for planning, monitoring and control. But managers who decide to introduce the BSC or any other performance measurementsystem into their company have to be aware of several things.

Firstly, it is important that the created value with the introduction of the BSC as a multiple performance measurementsystems is always higher than the arising costs due to increasing administration effort.

Secondly, users of the BSC should consider that the BSC, does not only have advantages. Several disadvantages and problems will come along with the introduction of the BSC. If a company just uses non financial measures, just disadvantages of non financial measures will arise. If a company just uses financial measures, just disadvantages of financial measures will arise. But if a multiple performance measurementsystem like the BSC is used, managers have to expect that disadvantages of both non financial and financial measures could harm their performance.

Thirdly, measures selected for the BSC (see section 4.1.1) should fit to the perspectives. That means they should reflect the real performance of departments, groups, employees and managers. Further, managers should be measured and rewarded according to these measures. A study of Pellens, Tomaszewski and Weber (2000) including 59 companies shows that 37 companies are supporting value creation, but 6 used operating margin for controlling, 15 used traditional performance measures and 34 companies rewarded their managers according to traditional performance measures.<sup>173</sup>

And fourthly it is important, as already mentioned in section 4.1.1, that the 4 perspectives will reach the whole company. Each area should be covered by the selected measures of the BSC. Furthermore it is very important to have a well working control and communication system within the whole company.

In my opinion, if managers and users pay attention to these few points, the BSC can be a very good measurement system and help the company to become successful.

<sup>&</sup>lt;sup>173</sup> Cf. Ballwieser, W. (2009), page 96

# 7. Acknowledgements

I dedicate this thesis to my parents for financing and supporting my studies. Furthermore, I want to thank all my colleagues, friends and lecturers at the Department of Business Administration of the University of Vienna and those people who helped me in writing and finishing my work.

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## 8. References

Ballwieser, W. (2009): *Shareholder Value als Element von Corporate Governance.* In: Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung (61), Februar 2009, 93 – 101.

Bedford, D., S., Brown, D., A., Malmi, T., Sivabalan, P. (2006): *Balanced Scorecard Design and Performance Impacts: Some Australian Evidence*. Paper submitted to AFAANZ Conference, held in Wellington, NZ 2<sup>nd</sup> – 5<sup>th</sup> of July, 2006. In: Afaanz Homepage:

http://www.afaanz.org/research/AFAANZ%200611.pdf (3rd of April 2010)

Bourguignon, A., Malleret, V., Nørreklit, H. (2004): *The American balanced scorecard versus the French tableau de bord: The Ideological dimension.* In: Management Accounting Research (15), 107–134.

Cobb, I., Helliar, C., Innes, J. (1995): *Management accounting change in a bank.* In: Management Accounting Research (6), 155-175.

Geuser, F., Mooraj, S., Oyon, D. (2009): *Does the Balanced Scorecard Add Value? Empirical Evidence on its Effect on Performance.* In: European Accounting Review (18) 1, 93-122.

Kaplan, R., S., Norton, D., P. (1992): *Balanced Scorecard Measures That Drive Performance.* In: Harvard Business Review, Best of HBR, 172 -180.

Kaplan, R., S., Norton, D., P. (1993): *Putting the Balanced Scorecard to Work.* In: Harvard Business Review, September-October, 134-147.

Kaplan, R., S., Norton, D., P. (1996a): *Using the Balanced Scorecard as a Strategic Management System.* In: Harvard Business Review July–August 2007, 150 – 161.

Kaplan, R., S., Norton, D., P. (1996b): *Linking the balanced scorecard to strategy*. In: California Management Review (39) 1, Fall 1996, 53 – 79. Kaplan, R., S., Norton, D., P. (1996c): *The Balanced Scorecard – Translating Action into Strategy*. In: Harvard Business School Press, Boston, Massachusetts, 1996.

Kasurinen, T. (2002): *Exploring management accounting change: The case of BSC implementation.* In: Management Accounting Research (13), 323-343.

Malina, M., A., Selto, F., H. (2001): *Communicating and Controlling Strategy: An Empirical Study of the Effectiveness of the Balanced Scorecard*. In: SSRN Homepage:

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=278939 (4th of Dec 2009)

Nørreklit, H. (2000): *The balance on the balanced scorecard: A critical analysis of some of its assumptions*. In: Management Accounting Research (11), 65-88.

Nørreklit, H. (2003): *The Balanced Scorecard: What is the score: A rethorical analysis of the BSC.* In: Accounting Organizations *and Society* (28), 591-619.

Bain Homepage:

http://www.bain.com/management\_tools/tools\_balanced.asp?groupCode=2 (18<sup>th</sup> of March 2010)

Balancedscorecard Homepage: http://www.balancedscorecard.com.au/implement.html (25<sup>th</sup> of March 2010)

## 9. Appendix

#### A. Zusammenfassung

Diese Magisterarbeit beschäftigt sich mit der praktischen und theoretischen Implementation der BSC. Es werden drei Kernprobleme im Zusammenhang mit der Implementation der BSC theoretisch und praktisch aufgezeigt.

Als erstes wird gezeigt, dass beim Wechsel des Kennzahlensystems so genannte "Barrieren" eine entscheidende Rolle spielen können.<sup>174</sup> Es wird gezeigt, wie man diese Probleme mit dem "revised accounting change model" von Cobb et *al*. (1995) beheben kann.

Weiters wird das Kommunikationsproblem untersucht. Es wird anhand einer Studie von Malina und Selto (2001) gezeigt, ob die BSC ein effektives Kommunikationsinstrument darstellt. Die Ergebnisse zeigen, dass eine effektive Kommunikation weder strategische Ausrichtung, noch effektive Motivation, oder positiven Erfolg beeinflussen kann. Inneffektive Kommunikation wirkt jedoch auf diese Faktoren sehr wohl beeinflussend.<sup>175</sup>

Als drittes Kernproblem wird das Kontrollproblem der BSC aufgezeigt. Anhand der Studie von Malina und Selto (2001) wird untersucht, ob die BSC ein effektives Kontrollinstrument darstellt. Die Ergebnisse zeigen, dass eine effektive Management Kontrolle zu positivem Erfolg führt. Jedoch wird auch gezeigt, dass keine direkte Verbindung zwischen effektiver Managementkontrolle und positiven Erfolg besteht.<sup>176</sup> Weiters wird gezeigt, dass ineffektive Kontrolle zwar keine Auswirkungen auf die strategische Ausrichtung des Unternehmens hat, sehr wohl jedoch die Motivation der Mitarbeiter beeinflusst.<sup>177</sup>

<sup>&</sup>lt;sup>174</sup> Cf. Cobb, I., Helliar, C., Innes, J. (1995), page 172

<sup>&</sup>lt;sup>175</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 18

<sup>&</sup>lt;sup>176</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 17

<sup>&</sup>lt;sup>177</sup> Cf. Malina, M.,A., Selto F.,H. (2001), page 21

#### **B.** Catalogue of the Articles

#### **Development of the BSC**

- Balanced Scorecard Measures That Drive Performance (Robert S. Kaplan and David P. Norton, 1992, Harvard Business Review, 172 -180)
- The Balanced Scorecard Translating Action into Strategy (Kaplan, R., S., Norton, D., P. (1996c):. In: Harvard Business School Press, Boston, Massachusetts, 1996.)

#### Implementation of the BSC

- Putting the Balanced Scorecard to Work (little about implementation (Robert S. Kaplan and David P. Norton, 1993, Harvard Business Review, September-October 1993, 134 – 147)
- Using the Balanced Scorecard as a Strategic Management System (Robert S. Kaplan and David P. Norton, Harvard Business Review, July–August 2007, 150 – 161)
- Linking the balanced scorecard to strategy
   (Robert S. Kaplan and David P. Norton, California Management Review (39) 1, Fall 1996, 53 79.)
- Exploring management accounting change: The case of BSC implementation

(Tommi Kasurinen, 2002, Vol. 13, Management Accounting Research, 323-343)

- Communicating and Controlling Strategy: An Empirical Study of the Effectiveness of the Balanced Scorecard (Mary A. Malina, Frank H. Selto, SSRN, 2001)
- Accounting change as relational drifting: A field study of experiments with performance measurement (Paul Andon, Jane Baxter, Wai Fong Chua, 2007, Vol. 18, Management Accounting Research, 273–308)
- A descriptive analysis on the implementation of Balanced
  - Scorecards in German-speaking countries

(Gerhard Speckbacher, Juergen Bischof, Thomas Pfeiffer, Management Accounting Research, Vol. 14, 2003, 361–387)

Management accounting change in a bank
 (Cobb, I., Helliar, C., Innes, J. Management Accounting Research, Vol. 6, 1995, 155-175)

## Compensation of the BSC

 Subjectivity and the Weighting of Performance Measures: Evidence from a Balanced Scorecard

(Christopher D. Ittner, David F. Larcker, Marshall W. Meyer, The Wharton School - The University of Pennsylvania, 2003, SSRN)

- Some Sections of Compensation in other Articles:
  - Using the Balanced Scorecard as a Strategic Management System (Robert S. Kaplan and David P. Norton, Harvard Business Review, July–August 2007, 155ff)
  - Balanced scorecards in Finnish companies
     (Teemu Malmi, Management Accounting Research, 2001, Vol. 12, 211ff)
  - An investigation of the effect of Balanced Scorecard implementation on financial performance
     (Stan Davis, Tom Albright, Management Accounting Research, Vol. 15, 2004, 142ff)

#### <u>Critique</u>

- The balance on the balanced scorecard: A critical analysis of some of its assumptions
  - (Hanne Nørreklit, Management Accounting Research, 2000, Vol. 11, 65-88)
- Balanced scorecards in Finnish companies: A research note (Teemu Malmi, Management Accounting Research, 2001, Vol. 12, 207-220)
- The Balanced Scorecard: What is the score: A rethorical analysis of the BSC

(Hanne Nørreklit, Accounting, Organizations and Society, Vol. 28, 2003, 591-619)

 The American balanced scorecard versus the French tableau de bord: The Ideological dimension
 (Appick Bourguignon, Véropique, Malleret, Happe, Nørreklit, Management, Accounting,

(Annick Bourguignon, Véronique Malleret, Hanne Nørreklit, Management Accounting Research, Vol. 15, 2004, 107–134)

## Judgmental effects of the BSC

 The Balanced Scorecard: Judgmental Effects of Information Organization and Diversity

(Marly Gascho Lipe, Steven Salterio, 1998, SSRN)

 A note on the judgmental effects of the balanced scorecards (Marlys Gascho Lipe, Steven Salterio, Accounting, Organizations and Society, Vol. 27, 2002, 531–540)

## Surveys in different Countries

- Germany, Austria, Switzerland

A descriptive analysis on the implementation of Balanced Scorecards in German-speaking countries

(Gerhard Speckbacher, Juergen Bischof, Thomas Pfeiffer, Management Accounting Research, Vol. 14, 2003, 361–387)

– <u>Australia</u>

Linking balanced scorecard measures to size and market factors: Impact on organizational performance

(Zahirul Hoque, Wendy James, Journal of Management Accounting Research, Vol. 12, 2000, 1-17)

Balancing Multiple Competing Objectives with a Balanced Scorecard (Heidi Sundin, Markus Granlund, David A. Brown, European Accounting Review, First Article, 2009, 1–44)

– <u>Finland</u>

Balanced scorecards in Finnish companies: A research note (Teemu Malmi, Management Accounting Research, 2001, Vol. 12, 207-220)

– <u>France</u>

The American balanced scorecard versus the French tableau de bord: The Ideological dimension

(Annick Bourguignon, Véronique Malleret, Hanne Nørreklit, Management Accounting Research, Vol. 15, 2004, 107–134)

– <u>India</u>

Balanced Scorecard in Indian Companies (Manoj Anand, B S Sahay, Subhashish Saha, Vikalpa, Vol. 30/2, April - June 2005, 11-25)

#### <u>Sweden</u>

Bundling and diffusion of management accounting innovations - the case of the balanced scorecard in Sweden

(Christian Ax, Trond Bjørnenak, Management Accounting Research, Vol. 16, 2005, 1–20)

<u>Holland</u>

# For which purposes do managers use Balanced Scorecards? An empirical study

(Eelke Wiersma, Management Accounting Research, Vol. 20, 2009, 239–251)

## Several Surveys about the BSC

 Using the Balanced Scorecard as a Control System for Monitoring and Revising Corporate Strategy
 (Dappin Compbell, Stikent Dater, Super Kulp, and V.C. Nersyanan, SSBN, 2002)

(Dennis Campbell, Srikant Datar, Susan Kulp, and V.G. Narayanan, SSRN, 2002)

 Managing Value Creation within the Firm: An Examination of Multiple Performance Measures

(Lisa Bryant, Denise A. Jones, Sally K. Widener, Journal of Management Accounting Research, Vol. 16, 2004, 107-131)

An investigation of the effect of Balanced Scorecard implementation on financial performance

(Stan Davis, Tom Albright, Management Accounting Research, Vol. 15, 2004, 135-153)

 Does the Balanced Scorecard Add Value\_Empirical Evidence on its Effect on Performance

(Fabien De Geuser, Stella Mooraj, Daniel Oyon, European Accounting Review, Vol. 18/ 1, 2009, 93–122)

 Common-Measures Bias in the Balanced Scorecard: Cognitive Effort and General Problem-Solving Ability

(Aleecia R. Hibbets, Michael L. Roberts, Thomas L. Albright, SSRN, 2006)

- Reducing conflict in balanced scorecard evaluations
   (Bernard Wong-On-Wing, Lan Guo, Wei Li, Dan Yang, Accounting, Organizations and Society, Vol. 32, 2007, 363-377)
- The Balanced Scorecard as a Strategy-Evaluation Tool: The Effects of Implementation Involvement and a Causal Chain Focus (William B. Tayler, SSRN, 2009)

#### C. Curriculum Vitae



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## <u>Schulbildung</u>

## WS 2009/10 - SS 2010

Absolvierung der mündlichen Magisterprüfung in der Vertiefung Controlling mit der Note Gut und Fertigstellung der schriftlichen Magisterarbeit.

## SS 2008 – SS 2009

Absolvierung sämtlicher Vorlesungen des Magisterstudiums an der Fakultät für Wirtschaftswissenschaften der Universität Wien in der Fachrichtung BWL (1210 Wien, Brünner Straße 72).

#### WS 2004/05 - WS 2007/08

Bakkalaureatsstudium der Fakultät für an Wirtschaftswissenschaften der Universität Wien der in Fachrichtung BWL (1210 Wien, 72). Brünner Straße Abgeschlossen mit dem Titel Bakkalaureus der Sozial- und Wirtschaftswissenschaften (Bakk. rer. soc. oec.).

- 2003 2004 Bundesheer
- **1998 2003** HTL in 1200 Wien, TGM, im Ausbildungsschwerpunkt Biomedizinische Technik mit ausgezeichnetem Erfolg maturiert.
- **1994 1998** Hauptschule Matzen
- 1990 1994 Volksschule Groß Schweinbarth

#### <u>Sprachen</u>

Englisch: sehr gute Kenntnisse Ausbildung seit der 4. Schulstufe

#### **EDV-Kenntnisse**

- sehr gute Microsoft Office Kenntnisse
- sehr gute Kenntnisse im Umgang mit dem Internet

#### Berufliche Erfahrungen:

seit 04/2009 Dachfenster Hermann Knie in 2212 Großengersdorf Kundenservice für Veluxprodukte, Unterstützung des ehemaligen Veluxtechnikers Hermann Knie. Unterstützung bei der Gründung seines Unternehmens. www.dachfenster-knie.at (neben dem Studium im Ausmaß von 20 bis 40 Stunden pro Woche)

# 03/2006 – 03/2009 Velux Österreich GmbH in 2120 Wolkersdorf Kundenservice, Unterstützung des Technikers Hermann Knie (neben Studium im Ausmaß von 10 bis 20 Stunden pro Woche während des Semesters und ca. 30 Stunden pro Woche in den Ferien)

- 08/2005 03/2006 Novoferm GmbH 2230 Mitarbeiter in der Buchhaltung und im Controlling (ca. 10 Stunden pro Woche neben Studium)
- 07/2005 08/2005 Velux Österreich GmbH in 2120 Wolkersdorf Kundenservice (ca. 30 Stunden pro Woche)
- 12/2004 06/2005 Bank Austria in 1090 Wien Eingabe von Privatkreditdaten (ca. 10 Stunden pro Woche neben Studium)
- 09/ 2004 10/2004 Billa AG in 2243 Matzen Feinkostverkäufer (10 Stunden pro Woche neben Studium)
- 07/2004 09/2004 Velux Österreich GmbH in 2120 Wolkersdorf Kundenservice (ca. 20 – 30 Stunden pro Woche)
- 08/2003Velux Österreich GmbH in 2120 WolkersdorfKundenservice (ca. 20 30 Stunden pro Woche)
- 07/2003Forstamt in 1220 WolkersdorfTechnischer Dienst (40 Std pro Woche als Ferialpraktikant)

07/2002	VAMED-KMB, AKH in 1090 Wien Mitarbeiter in der ZLT (Zentrale Leitstelle) (40 Std pro Woche als Ferialpraktikant)
07/2001	VAMED-KMB, AKH in 1090 Wien Elektrogeräteabteilung (40 Std pro Woche als Ferialpraktikant)
07/2000	Bürohandel GmbH in 1050 Wien Diverse Lagertätigkeiten (40 Std pro Woche als Ferialpraktikant)

# Sonstige berufliche Erfahrungen:

Übernahme einiger Aufgaben in der PR- und Eventagentur Herzer Communications in 1030 Wien (neben Studium)

- Akkreditierung bei einem Event
- Garderobe bei einem Event
- Telefonischer Kontakt mit geladenen Gästen zu einem Event

# <u>Führerschein</u>

A und B

# <u>Hobbys</u>

- Musik (Schlagzeug, Trompete, Flügelhorn)
- LEO Club
- Reisen