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How does the Balanced Scorecard work for SMEs? An explorative study

A dissertation submitted in partial fulfilment of the requirements of a
Master in Business Administration (MBA)

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*"If you can't describe what you are doing
as a process, you don't know what you're doing"
(Edwards Deming)*

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Abstract

Despite widely appreciated by academia and practitioners as a leading strategic management and performance measurement tool as well as being highly diffused within large companies worldwide, the Balanced Scorecard is rarely used in small and medium-sized enterprises (SMEs), which represent 99% of all companies in the European Union. The study was motivated by the research question to explore the reasons for non-usage of the Balanced Scorecard in SMEs in more detail and to gain a clearer understanding regarding methodologies (on the how) this leading tool can be successfully implemented and used in SMEs. After elaborating on why SMEs should use a Balanced Scorecard, using an inductive research design including semi-structured interviews with consultants and SME managers, the study proposes three aggregate dimensions based on *Cultural Change*, *Educational Empowerment* and *Payoff* found to be of high relevance for SMEs. The findings on these three distinct dimensions have implications for practitioners and theory, as they add insights to the existing literature up to today on how to implement the Balanced Scorecard successfully in an SME, ensuring top-management commitment, employee education, organisational buy-in and on using a suited implementation methodology to obtain a positive return on investment. Finally, propositions that will guide future research are presented.

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1. Introduction

1.1 Background

The Balanced Scorecard (BSC), first presented by Kaplan and Norton back in 1992, is a strategic management tool serving as a dashboard for the management of an organisation, a holistic but yet versatile concept to build, describe, communicate and implement the strategy of a company (Biazzo and Garengo, 2012; Hoque, 2014; Kaplan and Norton, 2005). The BSC is widely recognised in academic literature and by practitioners as the tool that balances financial and non-financial KPIs. Besides this, it functions as a performance measurement tool, forcing managers to test the causal relationships of activities of their organisations' business model (Andersen et al., 2011; Niven, 2014; Kaplan and Norton, 2005).

Researchers and practitioners agree that the BSC is strongly embraced by companies worldwide since any organisation[1] requires a profound understanding and continuous improvement of its business model, the BSC being designed to achieve this in different ways. Firstly, forcing management to focus on what is "really" important (Niven, 2014) and ensuring sustained management commitment (Andersen et al., 2001; Rigby and Bilodeau, 2016). Secondly, it strengthens the alignment of business activities with the overall strategic vision (Niven, 2014). Thirdly, it secures a consistent, ongoing and detailed strategy communication to the employees of a company and fourthly, because the BSC encourages "strategizing", stimulating to test and update the business model (Kaplan and Norton, 1996a).

A research performed by Bain & Company, studying the use of strategic management tools within organisations, ranks the BSC among the most widely used and influential management tools of our time. In EMEA, the BSC is the third most utilised tool reaching up to 60%-70% diffusion within the FTSE 1.000 companies (Rigby and Bilodeau, 2016; Silk, 1998), sharing this top position with management tools and concepts such as Customer Relationship Management (CRM), Benchmarking, Customer Segmentation and Outsourcing.

However, scholars (Giannopouolos et al., 2013; Hoque, 2014; Hoque and James, 2000; Rompho, 2011; Vohl, 2014) highlight that, while diffusion of the BSC is widely accepted in large companies,

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[1] Throughout this research project, the terms "company", "organisation", "business" and "enterprise" are used interchangeably.

there is little empirical evidence and research regarding the use and adoption success of the BSC in Small and Medium-Sized Enterprises (SMEs). In fact, studies suggest that the awareness and diffusion level of BSC within smaller companies is significantly lower than in large organisations, with adoption rates of "BSC like" tools[2] being around 5% to 20%, depending on the study and sample (Giannopoulos et al., 2013; Horváth and Partners, 2007; Mackay and CIMA, 2005; Vohl, 2014; Wieselhuber & Partner, 2002).

1.2 Statement of the Problem

The BSC is widely adopted by organisations and the advantages of using the tool are confirmed by many studies. For example, three out of four companies using the BSC as their central strategy execution system report to outperform their competition by a significant amount (Biazzo and Garengo, 2012; Hoque and James, 2000) and other studies report that top executives agree to be highly satisfied with the usage of a BSC and its results in their company[3] (Rigby and Bilodeau, 2016).

Due its flexibility and adaptability, the BSC has originally been developed for companies of all types and sizes, from large organisations to SMEs, which is why literature and practitioners advocate BSC adoption also by small companies (Andersen et al. 2001; Gumbus and Lussier, 2006; Rompho, 2011). However, the question that arises from literature is whether, due to its low adoption level within SMEs, the BSC actually "works" for this type of company and, if it does, why it is not widespread as it should be.

Scholars such as Biazzo and Garengo (2012), Cook & Wolverton (1997), Craig and Moores (2010), Gumbus and Lussier (2006), Hudson et al. (2001), Manville (2007), Rickards (2007) and Rompho (2011) have studied the usage of the BSC in SMEs. The main findings can be grouped into either proving its successful usage or on the other hand citing a multitude of reasons for failure, stressing that SMEs have different needs in regards to BSC implementation in comparison to larger enterprises. In general, scholars argue that BSC adoption by SMEs often fails due to missing flexibility of the BSC as SMEs need more frequent changes in comparison to larger organisations, but also missing management capabilities, resource limitations and overall observe that the BSC is too strategically oriented (Hudson et al., 2001; Rompho, 2011; Vohl, 2014).

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[2] A definition on BSC types will be provided in later sections.
[3] Satisfaction score of 3.93 from a scale of 1 to 5 (1= not satisfied, 5 = highly satisfied).

In contrast to these findings, other researchers (Biazzo and Garengo, 2012; Craig and Moores, 2010; Gumbus and Lussier, 2006) advocate in favour of BSC usage by SMEs and propose some learnings and methodologies tailored to the needs of these companies. For example, Craig and Moores (2010) propose a framework aimed at assisting family businesses, often being SMEs, in the implementation of a BSC, observing that it is a successful tool to link and align the family with the business, also showing benefits in terms of communication within the organisation and education of employees. Gumbus and Lussier (2006) use a case study approach and illustrate learnings from the successful BSC usage in three SMEs, aligning operations and achieving breakthrough results, and Biazzo and Garengo (2012) propose an SME development and adoption methodology tailored to the necessities of SMEs.

Overall, scholars and practitioners agree on the importance of the BSC for strategic management of a company, its success when being implemented correctly and therefore advocate the usage in all types and sizes of organisations. However, there is also consent that, besides pointing out reasons for the BSC not being as diffused in SMEs as it should be, the characteristics and requirements of small companies clearly differ from larger organisations. Building on this, scholars argue that the low BSC adoption rates in small companies rather lie in the specific implementation methodologies that are used, highlighting a discontinuity between theory and the requirements of practitioners in SMEs (Hudson et al., 2001).

However, up to today, little is known and there is very few comprehensive literature as well as empirical evidence on *how* to combine the BSC with the characteristics of an SME being a "simpler" and highly responsive organisation.

1.3 Objectives of the dissertation

This dissertation provides a contribution to fill the mentioned knowledge gap in three ways. Firstly, it will provide a theoretical overview on the reasons for BSC usage in SMEs. Secondly, it will analyse the existing reasons for non-usage of the BSC in SMEs but also the BSC implementation methodologies for SMEs present in the literature. Thirdly, the research project should make an important contribution by elaborating new insights on usage barriers and implementation methodologies of the BSC in SMEs via interviews with consultants and SME managers. Finally, this dissertation will conclude by proposing areas for further research.

1.4 Structure of the dissertation

The remaining of this dissertation has been divided in four parts. Chapter 2 will provide the theoretical background on the Balanced Scorecard and its application benefits to SMEs and furthermore elaborate on implementation barriers and methodologies for SMEs proposed in literature. Chapter 3 is concerned with the methodology used for this study, explains the research philosophy, the chosen research approach, the way primary data is collected and how the interview questions are structured. The method used to analyse the data as well as methodological limitations are at the end of this section. Chapter 4 analyses the findings of the undertaken interviews and serves as a basis for chapter 5 with the aim to discuss the implications of the research, highlight the implications for practice, the limitations of this dissertation as well as discuss the implications for further research.

2. Literature Review

2.1 The Balanced Scorecard – Definition and theoretical background

In 1992, Robert S. Kaplan, Emeritus professor at the Harvard Business School and David P. Norton, business executive and management consultant, published the Harvard Business Review article "The Balanced Scorecard - Measures that Drive Performance", and hereby first presented the Balanced Scorecard concept, a strategic management tool that serves as a "dashboard" for the management of an organisation - a holistic but yet versatile concept to build, describe, communicate and implement a company's strategy (Biazzo and Garengo, 2012; Hoque, 2014; Kaplan and Norton, 1996a; Kaplan and Norton, 1996b; Kaplan and Norton, 2005).

The above mentioned article bases its proposition on research conducted on performance measurement systems in companies whose value creation was dependent on intangible assets. What Kaplan and Norton had found is that most companies fail to link the measures of their performance measurement system together in a coherent pattern, missing to link a company's long-term strategy with its short-term actions (Kaplan and Norton, 1996a, p. 75). Clearly, Kaplan and Norton were influenced by scholars of the eighties and nineties bringing forward concerns about traditional performance measures being too reliant on financial metrics, thereby incentivising managers to focus too much on short-term financial results and at the same time sacrificing long-term prospects (Hoque, 2014, p. 34). As the authors argued, this "short-term orientation" would pose major limits by leading companies to capture only limited benefit from their measurement systems (Kaplan and Norton, 1996b; Niven, 2014, p. 2). For example, such a management behaviour poses limits to the identification of growth opportunities and the attention to product and service innovation, constrains investments in human resources and in the continuous improvement of operational processes, making the company overall "weaker" in terms of being more susceptible to the pressures of the competitive environment. Therefore, if organisations were to drive the maximum value from their investments in intangible assets, these non-financial metrics need to be integrated into their management systems (Niven, 2014, p. 1-2).

Having identified this gap about how performance measurement systems were ignoring the above mentioned crucial business success antecedents, Kaplan and Norton addressed this by proposing the Balanced Scorecard concept with the aim to provide a holistic view of how a specific organisation works, identify and drive the critical organisational success factors (CSFs) and go beyond the financial realm. Going beyond the financial realm would, for example, mean to include the

relationships with customers and suppliers as well as features that tell how a company's innovation processes function. The BSC tool, if implemented correctly, would thereby help to track financial results while simultaneously monitor progress in building and acquiring the capabilities and intangible assets companies need for future growth (Kaplan and Norton, 1996b, p. 150).

In literature, the BSC has often been attributed as being a *system*, the word system being defined by the Merriam-Webster Dictionary as "A regularly interacting or interdependent group of items forming a unified whole" (Webster Dictionary, 2018). The subsequent sections will elaborate on this concept further. Moreover, the BSC can be furthermore be broken down in the definition aspects of *Strategic, Balanced* and *Scorecard*, which, as a first step, need to be defined. The BSC is *Strategic* since the model[4] aims to execute strategy (Niven, 2014, p. 3), to improve focus and more effectively allocate scarce resources thanks to an accurate identification and selection of critical business success factors (CSFs), the elements that characterise, in a qualitative fashion, a company's strategic choices (Waal, 2013). Hereby, it enables the management to make well-grounded decisions through the acquisition, integration, analysis and interpretation of appropriate data (Marr and Neely, 2003). As included in its name, the tool is also *Balanced* since the set of measures encompass the financial, customer, internal processes as well as learning and growth area, always also considering the short and long-term perspective. It is a *Scorecard* as it works as the ultimate management dashboard, with specific KPIs and according activities aimed at reaching the established organisational goals. Figure 2.1 puts the Balanced Scorecard in its relative context as a performance measurement system, showing how the tool is the result of a company's strategic management process of elaborating a vision and mission of the company by taking into account the assessment of the internal and external environment.
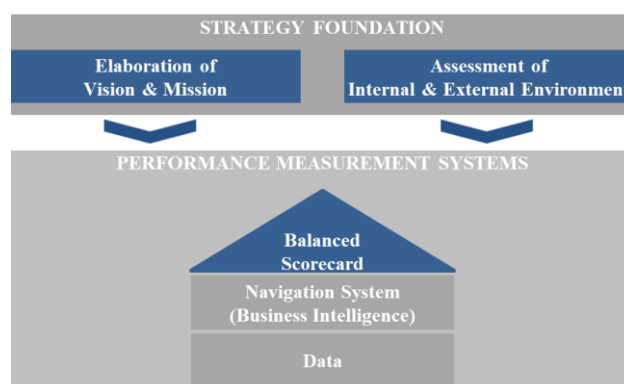

Figure 2.1: The Balanced Scorecard in the context of Strategic Management;
own depiction adapted from Biazzo and Garengo (2012, p. 20) and Mackay and CIMA (2005, p. 11)

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[4] Throughout this research, the BSC is referred to as a "model", "tool" and "concept" interchangeably.

The next section outlines the general methodology of the BSC and elaborates on its specific application benefits mentioned in literature in detail.

2.2 The Balanced Scorecard – Methodology and application benefits for a company

As suggested by Hudson et al., 2001, a Performance Measurement System (PMS) development process and its measures should enable strategic objective identification and performance measurement development, have clear and explicit objectives, be derived from strategic goals, stimulate continuous improvement and measure quality dimensions, flexibility, time, finance, customer satisfaction and human resources in an organisation (Hudson et al., 2001, p. 1103). As this chapter will show, these crucial components are all encompassed by the Balanced Scorecard concept.

As illustrated in figure 2.2, the Balanced Scorecard uses a structured collection of measures in a four-perspective framework of the financial, customer, internal processes as well as learning and growth area (Kaplan and Norton, 1996b; Niven, 2014, p. 2). The four perspectives, as stated by Kaplan and Norton, were found to be relevant for any organisational success and strongly interdependent with each other. This is the case since any organisation's strategy needs to be translated down into financial aspirations (financial), markets served (customers), processes to be conquered (internal processes) and people who need to skilfully guide the organisation to success (learning and growth) (Biazzo and Garengo, 2012; Kaplan and Norton, 1996b; Niven, 2014, p. 4).
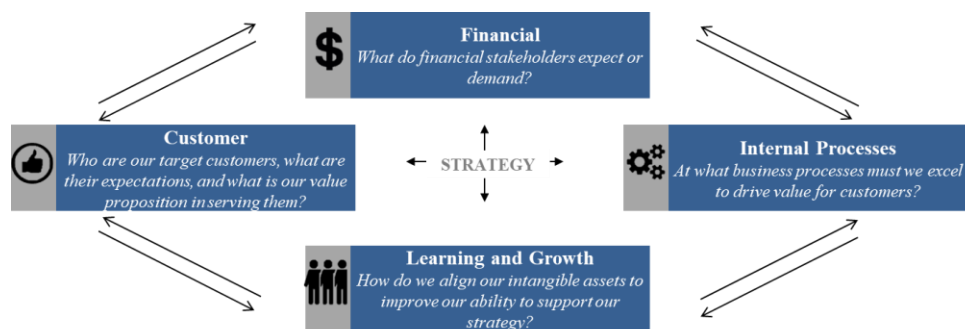
Figure 2.2: The Balanced Scorecard Perspectives; own depiction adapted from Niven (2014, p. 8)

In order to make a Balanced Scorecard work according to its purpose, in a first step, each of the four perspectives needs to contain customised objectives of the organisation. These goals need to be interdependent from one perspective to the other and are further broken down into related measures (KPIs), representative for the achievement of the goal as well as targets set in order to measure

achievement. To reach the elaborated targets, the organisation needs to commit to specific activities aimed at feeding into the identified targets.

Financial objectives might contain profitability and other financial goals, dependent on the stage and life cycle of the company (e.g. rapid growth, sustain, harvest). Typical company financial goals might focus on the areas of returns on their invested capital, sales and market share growth, cash flow maximisation, spending levels for product and process development, operating income and gross margin. Kaplan and Norton found that most companies select objectives that fall under three major themes: Revenue Growth & Mix, Cost Reduction & Production Investment and Asset Utilisation & Investment Strategy.

Customer objectives highlight the customer and market segments the organisation wants to compete in and the selected measures to monitor the performance in these targeted segments (Kaplan and Norton, 1996a, p. 58). This perspective will typically include goals such as customer satisfaction, customer retention, new customer acquisition, customer profitability, customised to the target customers from whom the business expects the greatest growth and profitability. Within this perspective, Kaplan and Norton note that most goals can be classified into three major themes: Product & Service Attributes, Customer Relationship and Image & Reputation.

Internal business processes highlight the objectives that need to be achieved in order for the organisation to excel in delivering the value proposition and to satisfy shareholder expectations (Kaplan and Norton, 1996a, p. 62). It must be noted that these processes shall all have an impact on customer satisfaction and financial objectives. These critical objectives might also include innovation processes for current as well as future customers and will typically fall under the Process Quality or Process Efficiency in the Innovation, Operation and Postsale Service area.

As internal processes and technologies are not enough to ensure to meet long-term customer targets, the fourth and last perspective proposed by Kaplan and Norton is *Learning and Growth* that considers the infrastructure needed in an organisation to create long-term growth and improvement. The objectives in this perspective typically come from people, system and organisational procedures with measures covering aspects such as the skills of employees, employee satisfaction and quality of information technology.

The first output of a BSC development is the *Strategy Map*[5], displaying the strategic objectives within the four perspectives and their linkage to each other via cause and effect relationships (see figure 2.3 column "Strategy Map"). Hereby, attention needs to be paid to the balance of the objectives themselves, with the final BSC needing both *leading and lagging* objectives.
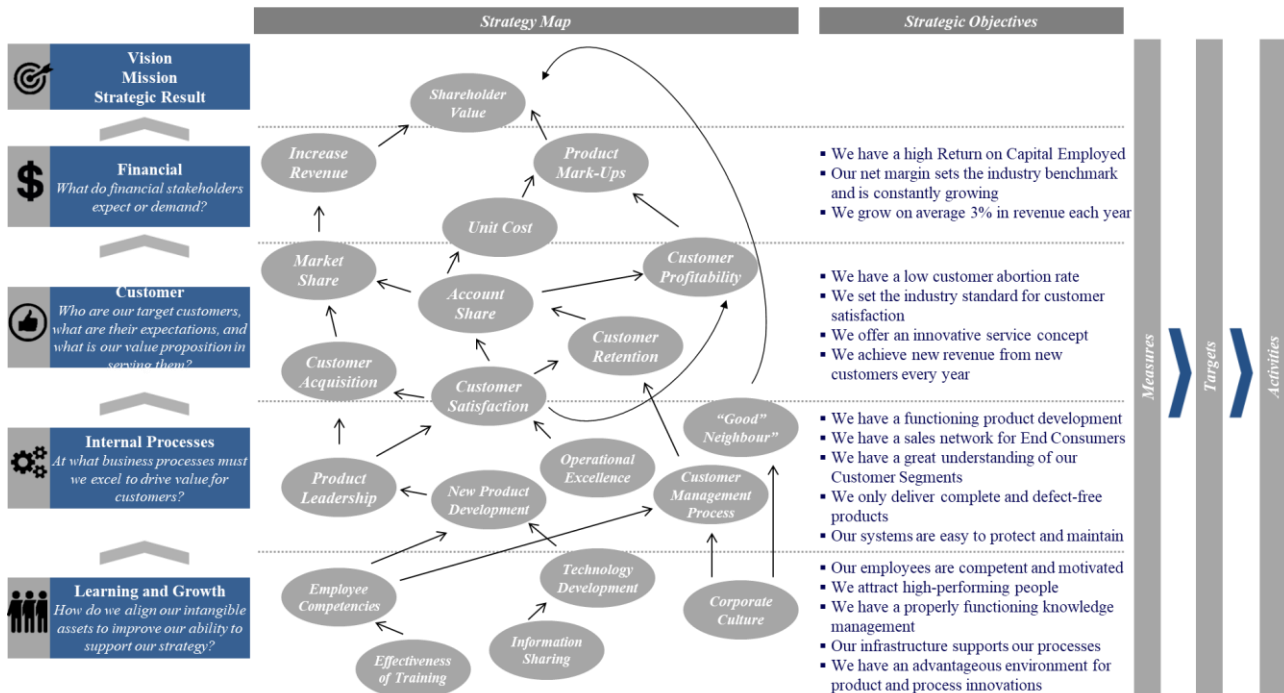
Figure 2.3: Example of a Strategy Map; own depiction adapted from Kaplan and Norton (2001) and Tonchia and Quagini (2010, p. 51) (for illustrative purpose only); for each individuated strategic objective, one or more performance measures are selected, defined, measured and compared to the target and activities are discussed in order to reach the target

Leading objectives are those that are in-process, predictive and are more difficult to determine than lagging indicators. Being predictive, leading objectives do not provide a guarantee of success, requiring an investment to implement an activity before a result is seen by a lagging indicator. *Lagging* objectives are essential for monitoring progress but less useful for the prediction of future performance. Examples of the two different types of indicators are illustrated in table 2.1 below.

Table 2.1: Example of leading and lagging indicators; own depiction adapted from Kaplan and Norton (1996a)

	Strategic Objectives	Lagging Indicators	Leading Indicators
Customer	• Customer satisfaction	• Customer retention • Depth of relation	• Customer satisfaction survey
Learning and Growth	• Employee effectiveness • Focus resources	• Employee satisfaction • Revenue per employee	• Strategic job coverage • Personal goals alignment

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[5] An example of a Strategy Map is also to be found in appendix 1.

While the multiplicity of measures in a Balanced Scorecard might seem confusing, properly constructed scorecards have a unity of purpose, since all measures are directed towards achieving an integrated strategy (Kaplan and Norton, 2006, p. 56), with each strategic objective[6] having cause-effect relationship with other strategic objectives, with the need to be tested and refined over time. This is often praised as a unique contribution, as, through the cause-effect relationships, the BSC becomes a managerial tool going beyond the aggregation of holistic data but forcing management to continually rethink and test their assumptions, creating an environment that is conducive to learning through the testing of hypotheses. It has been found that companies do find difficulties in correctly identifying these crucial cause-effect relationships into their Strategy Maps and some scholars mention that this added complexity may outweigh improvements in organisational performance (Norreklit, 2000; Papalexandris et al., 2004).

There exists a large number of published studies postulating that the correct usage of a Balanced Scorecard leads to a plethora of advantages for an organisation. While scholars generally conclude that the usage of a BSC overall benefits the general performance of a company (Braam and Nijssen, 2004; Davis and Albright, 2004; De Geuser et al., 2009; Horváth and Partners, 2007; Kaplan and Norton, 1996a; Kaplan and Norton, 2006; Niven, 2014), a limited number of scholars point out more specific benefits supporting the rationale for the application of a BSC in an organisation. These advantages mentioned in literature have been structured in more detail in table 2.2 and have been grouped in "Execute strategy", "Drive corporate goals awareness and alignment", "Prioritising initiatives", "Creating accountability", "Communication and education" as well as "Testing and refining the business model".

Besides the many application benefits mentioned by academic literature, the usefulness of the BSC is highly supported in practice as well. Here, it is important to notice that, besides the argumentation in favour of the BSC given above, practice also confirms the advantage of using a BSC in terms of overall business performance. For example, three out of four companies using the BSC as their central strategy execution system report to outperform their competition by a significant amount (Biazzo and Garengo, 2012; Hoque and James, 2000). This is confirmed by studies reporting that top executives agree to be highly satisfied with the usage of a BSC and its results in their company[7] (Rigby and Bilodeau, 2016) and by executives as well as senior management users reporting that

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[6] An example of Strategic Objectives for all four BSC Perspectives is given in appendix 2.
[7] Satisfaction score of 3.93 from a scale of 1 to 5 (5 = highly satisfied).

the BSC is extremely to very useful in their decision making (Horváth and Partners, 2007; Intrafocus, 2017[8]; Vohl, 2014).

Table 2.2: Rationale supporting the usage of BSC (application benefits); own depiction
The column "support from literature" draws on purpose from scholars beyond the BSC "inventors" Kaplan and Norton

Rationale supporting the usage of the BSC	Description	Support from Literature
I Executing strategy	▪ Clarifying the vision ▪ Gaining consensus ▪ Avoiding lofty statements	▪ Atkinson et al. (2012); Braam & Nijssen (2004); Gumbus & Lussier (2011); Hudson et al. (2001); Malina & Selto (2001); Mackay & CIMA (2005); Niven (2014); Paplexandris et al. (2004);
II Drive corporate goals awareness / alignment	▪ Aligning strategic initiatives ▪ Include long-term goals ▪ Linking organisational to departmental goals	▪ Bianchi, & Montemaggiore (2008); Chenhall & Smith (2011); Gumbus & Lussier (2011); Hudson et al. (2001); Malmi (2001); Mackay & CIMA (2005); Niven (2014); Roberts et al. (2004); Tayler (2010);
III Prioritising initiatives	▪ Individuate critical success factors ▪ Setting targets and goals, establishing milestones ▪ Allocating resources	▪ Gumbus & Lussier (2011); Hudson et al. (2001); Malina & Selto (2001); Mackay & CIMA (2005); Niven (2014); Tonchia & Quagini (2010);
IV Creating accountability	▪ Commitment/employee support for achieving goals ▪ Linking rewards to performance measures ▪ Setting timescales	▪ Atkinson et al. (2012); Andersen (2001); Gumbus & Lussier (2011); Mackay & CIMA (2005); Niven (2014); Tayler (2010); Tonchia & Quagini (2010);
V Communication and education	▪ Articulating the shared vision ▪ Facilitating strategy review and feedback ▪ Way to inform outside investors	▪ Atkinson et al. (2012); Biazzo & Garengo (2012); Malina & Selto (2001); Mackay & CIMA (2005); Niven (2014); Paplexandris et al. (2004);
VI Testing and refining the business model	▪ Testing cause-effect relationships ▪ Stimulate continuous improvement	▪ Atkinson et al. (2012); Biazzo & Garengo (2012); Hudson et al. (2001); Niven (2014);

2.3 The Balanced Scorecard: Critical success factors for implementation

There is limited research to be found about best practices for a successful BSC implementation in a company. Buchanan et al. (2005) and Lueg and Vu (2015) outline and discuss a structured list of eleven critical success factors that are key for a successful BSC implementation in a company, categorising them into macro (political, external context), meso (substance, organisational, cultural, financial, processual and temporal) and micro (individual, management, leadership) factors.

Macro factors refer to the importance of conditions to enable a sustainable BSC implementation in a company, such as avoidance of barriers like political tension not enabling to agree on a selected number of "right" KPIs as well as external parties (consultancies, holdings etc.) exercising pressure to adopt the practice of the BSC in the specific company.

Meso factors include conditions such as the importance to establish causal linkages between the strategic objectives in the BSC (Lueg and Vu, 2015) in a clear and consistent manner and the importance of KPIs to be understood by the whole company. This category also includes the perception of being incapable to implement the tool with own resources, the identification of appropriate external champions (such as consultancies) to mitigate a potential implementation stall,

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[8] The survey includes 50% of respondents being part of companies with 500 or fewer employees (n= 138).

BSC-specific training as a major facilitator, the existence of a company culture with a willingness to change but also a quantitative performance-driven management culture. Also, it refers to the crucial importance of demonstration by consultancies that the application benefits outweigh the set-up costs as well as finally the importance to follow-up, review and evaluate the effectiveness of the deployed BSC over time.

Micro level success factors include the willingness to change of employees that can be driven by involvement of the mid-management and individuals during BSC creation, nurturing the awareness of the strategic intent and operational effects of the BSC in order to establish ownership within the company, the importance of managerial capability and expertise to validate and challenge the BSC content during implementation phase and the management's openness to admit problems during implementation and, last but not least, the critical role of top-management participation and support in order to grant needed resources and to ensure a smooth and efficient implementation process.

Table 2.3: Framework for successful BSC implementation as proposed by Lueg and Vu (2015), adapted from Buchanan et al. (2005)

	Description	Selected Examples
Macro factors	▪ External conditions that exert influence and promote the implementation and implementation success of a BSC within a company (social norms, external market)	▪ External parties (consultancies, holding company etc.) exercising influence to adopt the BSC ▪ Management training and school of taught
Meso factors	▪ Internal conditions that include culture, processual and financial aspects and how the BSC is designed (Cultural, financial, processual, temporal etc.)	▪ Identification of appropriate external champions ▪ Management style (performance-driven, transparent) and leadership culture
Micro factors	▪ Internal conditions that include mostly the participation and capabilities of actors within the implementation process (Individual, managerial etc.)	▪ Willingness to change of employees ▪ Top management support ▪ Managerial capability

Despite these studies not focusing on SMEs in specific, this framework can be used as a starting grid for the investigation of the how to implement a BSC in an SME context and will, therefore, serve as a first framework for the later analysis.

2.4 The Balanced Scorecard – Application benefits for SMEs

Small and medium-sized enterprises represent about 99% of all businesses in the European Union (Eurostat, 2018). To classify them, the OECD and European Commission define SMEs by considering both the staff headcount and yearly turnover (or balance sheet total) figure. To be

categorised as an SME, a company[9] needs to have less than 250 staff headcount and to achieve a total yearly turnover lower than 50 million € (European Commission, 2018; OECD, 2001).

As the previous sections have pointed out, literature and practitioners advocate the adoption of the BSC also by SMEs, as the concept is believed to be flexible and adaptable, with benefits for large organisations as well as SMEs (Kaplan and Norton, 1996a; Rompho, 2011). Literature in favour of BSC adoption by SMEs includes scholars (Andersen et al. 2001; Barnes et al., 1998; Biazzo and Garengo, 2012; Gumbus and Lussier, 2006; Kaplan and Norton, 1996a; Machado, 2013) agreeing that the BSC is generally suited for SMEs and arguing in favour of a larger adoption rate for this type of company. Their argumentation is that any organisation, whether small or large, requires a sense of direction of where an organisation is headed, sustained management commitment, alignment of behaviours with the strategic goals of the enterprise, a profound understanding of the business model, an ability to focus and prioritise long-term and short-term pressures as well as learning in order to incorporate new knowledge in the processes of a company - these all being known benefits of the BSC.

Table 2.4: Rationale supporting the usage of the BSC in SMEs (overview of literature on theory and case studies); own summary

Scholars	Study (Theoretical / Case Study, Topic, Participants)	Conclusion regarding the BSC in SMEs 👍
Andersen et al. (2001)	▪ **Theoretical derivation** and own experience of merits and feasibility of deploying the BSC in SMEs (sense of direction, focus etc.) ▪ 1 SME	▪ BSC activity has focused on large, multinational firms and little comprehensive literature exists on SMEs ▪ Most value of BSC usage in SMEs comes from building consensus
Barnes et al. (1998)	▪ **Case Study** more generally on design and process of PMS ▪ 20 SMEs in Australia (manufacturing and service sector)	▪ BSC advocates the balanced usage of non-financial and financial indicators and SMEs should use these more
Chow et al. (1997)	▪ **Interviews** and elaboration of individual BSC goals/measures ▪ 4 SMEs in Southern California (manufacturing, food ingredients, banking and biotechnology)	▪ BSC strength lies in its flexibility to fit the needs of a company and will allow companies (including SMEs) to meet the needs of the 21st century
Craig (2010)	▪ **Case study** (innovation action research) ▪ 1 SME (family owned) in Australia	▪ BSC is a useful tool to link and align the family with the business, and this has benefits in communication and education terms
Gumbus and Lussier (2006)	▪ **Case study** development and learnings from BSC implementation ▪ 3 SMEs in the US (electronics, aluminum and orange juice manufacturers)	▪ BSC suited for continuous improvement and in establishing strategy revision as a permanent process
Machado (2013)	▪ **Questionnaire** studying BSC implementation rate and hurdles in SMEs ▪ 58 industrial SMEs in Brasil	▪ BSC implementation rate of SMEs lies at around 5%, the problem is that most companies are unaware of it ▪ BSC should be considered more by SMEs
Rickards (2007)	▪ **Case study** describing the development and implementation of the BSC ▪ 1 SME in Germany of small Asian holding (e-commerce)	▪ BSC implementation is feasible for many SMEs ▪ Managers of firms regardless of size are likely to find huge benefits through considerations of BSC perspectives

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[9] The term enterprise in this context is used interchangeably with company.

For example, Andersen et al. (2001) highlight that the BSC can be an effective tool for any SME, as it supports the reconciliation of an effective strategic planning while still having a simpler structure compared to a large company. Similar findings are supported by Craig and Moores (2010) developing and implementing a BSC in a family owned SME in Australia, highlighting how the BSC is useful in linking the family with the business. Gumbus and Lussier (2006) argue that the BSC is especially suited for continuous improvement and in establishing strategy revision and translation as a permanent process, especially important for SME growth.

Moreover, as shown in table 2.4 above, Biazzo and Garengo (2012) claim that, without a tool such as the BSC, more than 90% of employees in SMEs are actually unaware of the company's strategy. This has critical effects on employee commitment, participation as well as personal feedback. Machado (2013), studying Performance Measurement Tools as well as the BSC in SMEs, found that the majority of SMEs are either unaware of the BSC but should consider using it. While most SMEs interviewed agree that a strong Performance Measurement System is important for success, most admit its limited use or its focus on the financial perspective, with only some use in the customer perspective (Sousa and Aspinwall, 2010).

The paragraphs above have summarised the strong arguments in favour of BSC usage in SMEs. However, the question arises why the diffusion rate of the BSC in smaller companies is significantly lower compared to large organisations, as adoption rates of the BSC lie at around 5% to 20%, depending on the study and sample (Giannopoulos et al., 2013; Horváth and Partners, 2007; Mackay and CIMA, 2005; Vohl, 2014; Wieselhuber & Partner, 2002). In fact, studies suggest that there is a relationship between company size, product life-cycle stage, market position and BSC usage, with larger firms making more use of it (Hoque and James, 2000; Vohl, 2014).

Scholars argue that most reasons for the comparably low diffusion level of the BSC in SMEs are to be found in a wider range of aspects of the BSC tool that are not all fully combinable with the needs and specificities of smaller companies. The critical analysis of these reasons is outlined in the next section.

2.5 The Balanced Scorecard - Reasons for non-usage in SMEs

As shown in section 2.4, academic literature, with evidence from questionnaires and case studies, argues that the BSC can be developed and implemented successfully in SMEs. However, scholars (Chenhall and Smith, 2011; Davig et al., 2004; Hoque, 2014; Hudson et al., 2001; Lueg and Vu,

2015; Rompho, 2011; Tenhunen et al., 2001; Wieselhuber & Partner, 2002) seem to put more focus on the limitations of the concept and argue that there is a missing fit of the BSC with companies that are smaller in size, often needing a more flexible approach to performance measurement with a less laborious maintenance. Most research cited below refers to the BSC, however, some of the mentioned arguments have been studied or are valid for Performance Measurement Systems in SMEs overall and are not exclusively referring to the BSC.

The reasons for non-usage of the BSC in SMEs span from being unaware of its existence to not perceiving it as a fruitful tool. Collectively, the lack of awareness has been cited as a major reason for the low diffusion of BSC in SMEs. Giannopoulos et al. (2013), having interviewed small companies in UK and Cyprus, found that, besides there being limited detailed knowledge on the BSC in small companies, there is a general lack of awareness around the existence of the BSC in these type of companies[10]. Similarly, Vohl (2014), having performed a study interviewing German SMEs[11], arrived to a similar conclusion, stating that one-third of companies surveyed did not even know what a BSC is. Depending on the sample, the "non-awareness" level within small companies hereby ranges from 30% to more than 50% of the studied samples.

In case the advantages and added value of the BSC to the strategic management are understood by the company studied, this does still not imply the tool is implemented and adopted. This is the case, as scholars comment, since there is often the belief by executives and company owners that the tool is not suited for their SME, as about 50% of German SMEs with less than 250 employees confirm (Vohl, 2014). Herewith, the most often mentioned reason concerns the belief that the BSC is too strategically oriented (Hudson et al., 2001) while SMEs often, due to the need of more flexibility and more frequent strategy changes in comparison to larger organisations (Rompho, 2011), do not require elaborated performance evaluation techniques. Even more, a limited number of companies seem to agree to scholars (Epstein and Manzoni, 1998; Liedtka et al., 2008) arguing that the causal relationships of the Learning and Growth, Internal Processes, Customer and Financial perspective postulated by the BSC are not obvious in "real" business, questioning that the BSC can link strategy to operational metrics and stating that evaluation will always be partly subjective (Norreklit, 2000)[12].

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[10] The study showing a number regarding the unawareness of the tool of up to 80% of surveyed UK and Cyprus SMEs.
[11] Most Companies surveyed had less than 100 employees.
[12] The study of Norreklit (2000) is not SME specific and more of a general BSC critique.

Hudson et al. (2001) found that, although there was a widespread acceptance of the value of strategic performance measurement amongst the SMEs that were studied, few had taken steps to redesign or update their current performance measurement systems. As scholars (Barnes et al. 1998; Biazzo and Garengo, 2012; Craig and Moores, 2010; Gumbus and Lussier, 2006; Hvolby and Thorstenson, 2000; Martins and Salerno, 1999) argue, this might be due to some further major adoption barriers of the BSC difficult to overcome for an SME, mostly being that the BSC is not seen as suited for the specific cost vs. benefit SME reality. The following section will summarise these barriers.

The major barrier relevant for BSC usage in SMEs cited in literature are in regards to required resources, mostly human but also financial (Barnes et al. 1998; Hvolby and Thorstenson, 2000). This is the case, as scholars, argue, that to develop and implement a BSC in small business realities is even more of a comparably costly and timely act for some SMEs, requiring too many resources[13] (Hudson et al., 2001), with the reasoning that SMEs cannot accomplish the BSC implementation on their own. This, overall, leads the duration of the process to design and implement a BSC to be often seen as inhibitory. Moreover, the strategy setters, usually the owners, are closer to the "action" with a comparably little need to formalise the strategy (Hoque and James, 2000) as hierarchies are flat and the owner performs both strategic and operational tasks. Another reason for the missing adoption in SMEs seems to derive from the fact that, more than any other type of company, SMEs often rely on tacit knowledge build up over the years or "stored" within some departments or even single employees of the company (Biazzo and Garengo, 2012). The implication being that this knowledge cannot be easily brought to paper in a formalised way (Martins and Salerno, 1999). Moreover, other scholars cite evidence that a full BSC as presented in theory is often not possible, since the tool often only gets implemented for operational and financial aspects, while innovation, human resources, work atmosphere, training and R&D are rarely measured (Chennell et al., 2000).

As a last reason for the decision in favour of not using the BSC, Lueg and Vu (2015) highlight that for any company type an often overseen "blind spot" is politics and power, as company owners and executives often are not eager to share sensible BSC with a large number of employees (Lueg and Vu, 2015) as this, for example, would often lead to a higher performance transparency and more

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[13] This, however, is contradicted by the fact that the type and number of indicators used by SMEs, if a BSC is implemented, is comparable to the number of indicators in bigger companies (Giannopoulos et al., 2013; Intrafocus, 2017), with an average Scorecard comprising 15-20 objectives and 20 initiatives.

likely lead to admitting problems and mistakes in the company, due to increased and more transparent performance measurement[14]. An overview of the mentioned barriers of BSC usage in SMEs is displayed in table 2.5.

Table 2.5: Extract of reasons for non-usage of the BSC in SMEs (overview based on literature review), own summary

Major reasons for non-usage of the BSC in SMEs. The BSC is …		
… not known	… not seen as useful tool	… not perceived as suited for the specific company
▪ BSC is less known within smaller companies	▪ BSC is too strategically oriented (SMEs need more flexibility) ▪ BSC agreement on a limited number of strategic objectives and measures to capture the strategy of a company is not seen as realistic ▪ BSC cause-effect relationship of the strategic and operational perspectives are questioned	▪ BSC requires too high financial resources for development and maintenance ▪ BSC takes to much time to implement ▪ BSC cannot include tacit knowledge and is not needed since company owners are close to action ▪ BSC requires software and data that is not available as well as Customer and Learning perspectives that are not measured ▪ BSC requires company owners to disclose too much information to all employees

Interestingly, there is little mentioning of missing management capabilities to be found in academic literature in regards to the non-usage of the BSC. It is, however, more practitioner studies that mention that, even if the BSC is known, there is often missing management knowledge of how to implement a BSC in their own company (Vohl, 2014; Wieselhuber & Partner, 2002[15]) in the sense that the BSC is not adopted due to missing confidence of being able to implement such a tool. The barrier of not knowing the tool or fearing a wrong usage in detail might lead to a natural reaction of resistance towards the BSC or even to claim it as being of little potential benefit, while larger companies, often getting support for the BSC implementation process from consultancy companies, might display smaller resistance (Lueg and Vu, 2015).

Summing up, academic literature agrees that the low BSC adoption level in SMEs compared to large companies can partly be explained by a low tool awareness level among these companies but also by the perception of non-users that the BSC is incompatible to the necessities of their SMEs, in other words, not seeing a way of how to combine the BSC with the characteristics of an SME being a "simpler" and highly responsive organisation.

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[14] It must be stressed that this study did not focus on SMEs but on companies of various sizes in general.
[15] The study carried out by Wieselhuber & Partner included 78 interviewed SMEs, however, it must be noted that the definition of SME also included some companies with a size of more than 250 employees (about 50% of respondents).

The next section will present the existing literature on methodologies and learnings for a successful BSC adoption and usage in SMEs. This will help to approach the primary research, which aims to develop more knowledge in the area of successful methodologies for BSC in SMEs further, which, as demonstrated by this literature review, up to today, is limited.

2.6 Previous research results: Implementation methodologies for SMEs

Literature and practitioners advocate BSC adoption benefits also for small companies, since, due to its flexibility and adaptability, it is a tool originally developed for all types and sizes, from large organisations to SMEs (Andersen et al. 2001; Gumbus and Lussier, 2006; Kaplan and Norton, 1996a; Rompho, 2011). However, although Kaplan and Norton (1996a), in their original conception, suggest the applicability of their framework (BSC) to SMEs, they did not specifically provide an adoption methodology for such companies, despite many scholars (Biazzo and Garengo, 2014, p. 56; Chow et al., 1997, Craig and Moores, 2010; Davig et al., 2004; Gumbus and Lussier, 2006; Hudson et al., 2001; Rickards, 2007; Taticchi, 2010) mentioning the clearly differing needs and necessities of SMEs compared to large organisations in strategy formulation, performance measurement systems and therefore also Balanced Scorecard usage.

Overall, scholars have pointed out reasons for why a BSC is beneficial in SMEs but, however, only a few have attempted to provide empirical evidence on how the tool works for this type of company. Therefore, the literature on specific studies of how the Performance Measurement systems and more specifically how the BSC actually works in SMEs is scarce, highlighting a knowledge gap in theory and practice. The available literature dealing with the question about the specific requirements and methodologies needed to respond to the necessity of an SME in regards to the BSC implementation is little as well as empirical results are fragmented. Overall, for this type of company, researchers propose the BSC to focus on operational aspects that are traditionally key for success in SMEs as well as to fulfil the requirement to be flexible in order to respond to the needs of an SME and to involve the employees in understanding the short and long-term advantages of the tool in order to maintain their commitment. An overview of learnings and methodologies on how to overcome the cited barriers mentioned in section 2.4 is presented in the section below.

Table 2.6: Summary of learnings and proposed methodologies to overcome BSC barriers in SMEs
(overview based on literature review)

SME barriers	(L) Learning / (M) methodology to overcome barrier	Scholars	Research design
Limited management and employee buy-in	▪ **(M) Initial strategic planning retreat** involving all levels of management is crucial to seek acceptance	▪ Chow et al. (1997)	▪ **Interviews** and elaboration of individual BSC goals/measures
	▪ **(M) Emphasize BSC team-based process** through cross-functional management teams ▪ **(M) Creation of bonus scorecards** (or implement in existing) to link key measures that link bonus awards ▪ **(L) Communicate usefulness of a BSC** (emphasizing it is not to "stalk" employees)	▪ Gumbus and Lussier (2006)	▪ **Case study** development and learnings from BSC implementation
	▪ **(M) Apply first and second generation BSC**, focus on **organisational learning perspective**	▪ Andersen et al. (2001)	▪ **Theoretical** development
	▪ **(M) Arrange initial kick-off workshops** to set expectations and achieve engagement ▪ **(L) Integrate family business KPIs** (CSR., int. succession)	▪ Craig and Moores (2010)	▪ **Case study** learnings from BSC implementation in a family business
High financial resources for development & maintenance	▪ **(L) Focus on BSC breadth**, not depth and use a maximum of 15 objectives to measure	▪ Andersen et al. (2001)	▪ **Theoretical** development
	▪ **(L) Opportunity to gather information directly from the customer** for timeliness information flow	▪ Davig et al. (2004)	▪ **Interviews**
Tacit knowledge typical for SMEs that is normally not captured	▪ **(M) Circular methodology** involving four stages in which what is currently controlled by individuals and the critical success factors of the current strategy are captured, placed in the four balanced scorecard perspectives and a future strategy map is designed by adding or deleting selected critical success factors	▪ Biazzo and Garengo (2012)	▪ **Theoretical** development ▪ **Case** study validation

As summarised in table 2.6 above, the literature available[16] on how to overcome BSC adoption barriers in SMEs focuses on the barrier of limited management and employee buy-in, the perceived high financial resources for the development and maintenance and also the tacit knowledge often existing in SMEs that is not easily transferred into a performance measurement system.

A limited management and employee buy-in have been found to be especially the case for BSC adoption in SMEs. In order to overcome the *barrier of limited management and employee buy-in*, scholars (Andersen et al., 2001; Chow et al., 1997; Craig and Moores, 2010; Gumbus and Lussier, 2006) propose methodologies that focus on for example emphasizing the BSC process as well advantages at the very beginning of the process, set up meetings to discuss stakeholder expectations, arrange cross-functional kick-off workshops involving all levels of management, with the goal to achieve engagement and seek acceptance for the BSC from the very beginning. When developing the BSC, an additional focus can be put on KPIs such as organisational learning as well as family business KPIs such as internal succession, sustainability and relation to the local community (in the case for a family business).

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[16] The overview contains literature proposing learnings for the implementation of the BSC in SMEs. Pure cases studies confirming that the BSC works for SMEs with little explanations on methodology have been excluded as not seen as representative for bringing forward knowledge in regards to the research question.

To mitigate the perceived *high financial resources needed* in order to set up and run a BSC compared to the resources existing in an SME, scholars (Andersen et al., 2001; Davig et al., 2004) adapt the standard BSC adoption procedure by suggesting to focus on BSC breadth instead of depth, having in mind the scope of a BSC in an SME to work more as a strategic and communication tool and less as a controlling concept. This can be achieved for example by limiting the number of Strategy Map objectives to about 15. Another way to limit the resources required is to focus on data that can be quickly obtained thanks to the very direct and timely interaction of SMEs with its customers.

The most detailed adoption methodology for a BSC in SME environment is brought forward by Biazzo and Garengo (2012) and focuses on the process perspectives, taking into account a multitude of perceived BSC barriers in SMEs as well as many SME needs, such as the fact that scholarly literature give little consideration to the tendency of small enterprises to give limited importance to the formalisation of their strategic choices (McAdam, 2000). *In order to capture the tacit knowledge often prevalent in SMEs*, the proposed circular methodology developed specifically for SMEs proposes a bottom-up four-step approach that aims at individuating important critical success factors captured by individual employees, bringing these together and thereby decomposing the current organisational strategy. In the last step, critical success factors are further added and deleted for the creation of a Strategy Map as well as a dictionary of indicators is elaborated in which these are further broken down into measures and activities.

The last section will bring together and consider all the evidence from the literature review in order to focus the lens for the primary data collection in regards to the proposed research objective.

2.7 Summary of literature review results

This chapter has critically reviewed the wide importance given to the BSC in contemporary management by highlighting the diffusion level in today's organisations, its usage as well as potential benefits to any organisation. The literature review demonstrated that many of the advantages of the BSC concept are also valid for SMEs and pointed out the specific needs these type of companies might have in regards to the development and maintenance of a BSC. It has been confirmed that a large share of SMEs today are not using a BSC. The reasons can be attributed to unawareness of the existence of the tool as well as high perceived costs in regards to the resources required but also the belief of the BSC's unsuitability in regards to the necessities of an SME,

ranging from tacit knowledge to missing flexibility.

As mentioned in this chapter, the reasons for BSC adoption by SMEs in theory as well as potential barriers for SMEs are documented in academic literature. However, while there is considerable literature pointing out these potential barriers and failures, empirical evidence on successful BSC usage in SMEs, frameworks and best practice methodologies is very limited. Moreover, evidence on learnings and methodologies found in literature (section 2.6) has not been empirically validated to a satisfactory level, for example by either only theoretically deriving a model for SMEs without testing it in practice, providing unsatisfactory explanations in regards to implementation differences of SMEs in comparison to large companies or by applying the methodology to only very few case studies, if any. This situation, overall, leaves considerable questions still unanswered about how to overcome barriers and challenges for BSC adoption success in SMEs, with several aspects of this topic about which little is known.

The performed literature review helps in addressing the mentioned knowledge gap by leveraging the knowledge available today, asking the questions that have not been solved in literature yet to BSC experts for SMEs as well as informed BSC non-users currently managers in SMEs. This enables to address better questions and receive clearer answers to those found in literature up to today, with the aimed goal to obtain more reliable findings.

The questions aim to gain
- A deeper understanding of the reasons for non-usage by managers in the managerial position to implement a BSC in SMEs (informed non-users)
- A clearer argumentation in regards to the perceived non-suitability of the BSC for SMEs also by managers in the theoretical position to implement a BSC in SMEs (inf. non-users)
- An exploration of relevant limitations of BSC implementation in SMEs adding to literature by interviewing BSC implementation experts for SMEs (consultants)
- An explorative investigation of mitigation strategies/used methodologies to overcome the barriers found in literature by interviewing BSC implementation experts for SMEs (consultants)

The next chapter will explain the research philosophy, the research design, data collection as well as method of analysis and the limitations of the research method.

3. Methodology

3.1 Introduction

As outlined in section 1.2, the aim of this study is to gain a richer understanding regarding the implementation barriers and successful implementation methodologies of the Balanced Scorecard in small and medium-sized enterprises. This chapter describes the approach used to answer the research question. First, the section on research philosophy will describe the underlying research assumptions and the reasoning for how the research is performed. Secondly, the research design is presented. Thirdly, the way data is collected and analysed is specified in detail. The chapter will conclude with the potential limitations of the research method and how these are mitigated.

3.2 Research philosophy

Research philosophy is defined as a system of assumption concerning the nature of the reality being investigated, articulates the philosophical position in relation to this research and provides the justification and reasoning for how the research is performed (Saunders et al., 2012). Herewith, a well-thought-out set of assumptions is critical to constitute a credible research philosophy and lays the ground for the methodological choice including data collection techniques and analysis procedures for the next sections (Flick, 2015).

Based on Saunders et al. (2012), there exist five main research philosophies, spanning from *positivism*, that sees organisations as physical objects and aims to find law-like causal relationships most likely using quantitative methods with large samples, *realism*, in which researchers acknowledge bias by worldviews trying to minimise these with a range of methods, *interpretivism*, that appreciates multiple meanings and interpretations of realities attributing key importance to the interpretations of the researcher using qualitative methods with smaller samples, *postmodernism*, which aims to investigate anomalies, silences and absences by typically qualitative methods and *pragmatism*, being more action-oriented focused on problem solving and putting emphasis on practical outcomes (Saunders et al., 2012). The research philosophy guiding this research project and the choice of research design, data collection and method of analysis is *interpretivist*. This is due to a multitude of reasons outlined below.

Firstly, in regards to the addressed knowledge gap, the interpretivist philosophy is the approach that most accounts for differences in individual contexts and experiences as well as complex

organisational realities. Secondly, this research philosophy aims to come up with new understandings rather than predictive power, which, as outlined in the literature review, is also appropriate for the specific research gap identified. Thirdly, an interpretivist approach assumes that the theories found in literature are too simplistic, with great importance given to the knowledge, experiences and interaction with the research participants. This interaction, as postulated by the interpretivist approach, is key in generating rich perspectives of different groups of people, in the case of this research project being informed non-users of the Balanced Scorecard (Managers in SMEs) and Balanced Scorecard experts for SMEs (consultants and professors doing consulting projects for SMEs) (Curran and Blackburn, 2001; Saunders et al., 2012).

The *interpretivist* philosophy, by focusing on complexity, richness and multiple interpretations of realities, takes a *subjectivist* approach, meaning that the researcher recognises that the interpretation of the research data and the own values and beliefs play an important role in the research process. As very common for business and management research, this study has a *regulation research perspective*, meaning that it seeks to suggest how organisational affairs might be improved within the frameworks and knowledge available at present (see sections 2.4, 2.5 and 2.6) and aims to develop new theory that emerges from the data and therefore contains aspects as postulated in *grounded theory* (Mills, 2014, p. 44), in which researchers wish to be guided by concepts emerging from the data they collect. For this research project, the researcher did therefore not solely rely on the information gathered during data collection, but continuously drew back to the theory (especially in regards to methodologies and learnings on BSC implementation in SMEs) elaborated in the academic literature review.

3.3 Research design

The research goal is to gain a more in-depth understanding, engage and capture new perspectives on the researched subject, identify themes and patterns and enrich the few existing conceptual frameworks (Saunders et al., 2012) with the final aim to enhance theory generation and build on the knowledge gap identified in section 1.2. Therefore, the research design is such to serve the purpose to gain a deeper understanding and identify common themes regarding the non-usage reasons and barriers of the BSC in SMEs as well as enrich the understanding of implementation success methodologies when the BSC is used in an SME environment. To achieve this, this research project uses a qualitative research design.

As analysed in the literature review, little knowledge exists about this specific topic up to today and due to the exploratory and explanatory nature of the study, qualitative interviews are the most suited research method. The interpretivist approach is typically *inductive*, includes comparably smaller samples and carries out in-depth investigations with qualitative methods of analysis, interpreting a range of data. Qualitative researchers often use participant interviews and transcribe these to create tangible datasets (Mills, 2014, p. 44). Herewith, to investigate the research question, semi-structured qualitative interviews with mostly open and probing questions with the critical incident technique were used. This interview type is the most suited method for providing and discovering more information about the personal experience and knowledge of the study participants. In *inductive* reasoning, there is a gap in the logic argument between the conclusion and the premises observed, the conclusion being "judged" to be supported by the observations made (Ketokivi and Mantere, 2010). Therefore, it is critical to stimulate the creation of these observations, the qualitative data collection becoming the knowledge foundation leading to concept formation and theories (Curran and Blackburn, 2001).

Semi-structured personal interviews are especially suited for this research question also due to aspects such as data quality, interview focus and data depth. In fact, this interview type will enable the researcher (interviewer) to have more time, during the interviews, to focus on specific themes that the participant has most to contribute to as well as to guide the interview to new or especially relevant themes that might emerge during the interview, with the advantage to draw out responses that may not have be obtained with another research method (Sreejesh et al., 2014). In fact, some respondents, though reluctant to participate in a non-personal survey method, feel comfortable about sharing information with an interviewer present right in front (Saunders et al., 2012). An overview of the reasons for the selection of this research design is provided in table 3.1 below.

Table 3.1: Summary of advantages of the selected research design;
based on Curran and Blackburn (2001), Keats (2000), Saunders et al. (2012) and Sreejesh et al. (2014)

	Advantages
Research design: **Semi-structured interviews** *Advantages vs. structured interview and questionnaire*	▪ Most suited for explanatory and explorative questions ▪ Open and probing questions to discover more details about personal experiences of participants ▪ Investigate details about (new) emergent information in more detail vs. structured interview
Form: **Face-to-face or Voice over internet protocol (Skype)** *Advantages vs. phone interview and questionnaire*	▪ Build personal rapport (more openness) between interviewer and interviewee ▪ Likely more time given to the interviewer and comparably lower risk of false answers ▪ Capturing of non-verbal cues ▪ Possibility to rephrase questions if not clear

Also, managers and consultants are more likely to agree to be interviewed rather than complete a questionnaire, as the interview topic is relevant to their current work (Saunders et al., 2012). Moreover, in terms of data quality, the research design allows the interviewees not to respond to a specific question or to rephrase questions that are not entirely clear. This leads to an increase in the length of the interview and an improvement in the quality of response in the case of personal interviews (Sreejesh et al., 2014). Semi-structured interviews also have the advantage of providing the opportunity to probe answers, give importance to the understanding of meanings that interview participants ascribe to various phenomena and encourage the respondents to provide details for relevant responses (Saunders et al., 2012; Sreejesh et al., 2014). Overall, in fact, this is why this technique is primarily used to interact with busy executives, technical experts and thought leaders (Sreejesh et al., 2014), as it is indeed the case for this research project.

Concerning the actual interview questions, the interview guide included a logically ordered key set of questions/themes that were asked to every interviewee, based on a framework of themes and questions as a refined result of the literature review. Their use and depth varied from interview to interview depending on the flow of the conversation, also giving the chance to omit some themes in particular interviews, given the background of the interviewed participant, as suggested by Keats (2000). The questions focused on the barriers of implementation of the BSC in the reality of SMEs as well as the needs of an SME towards a BSC and, if applicable, to the methodologies and best practices used by the interview participants in their job to successfully implement a BSC in an SME. An overview of the research study participant groups and their background is given in table 3.2 below.

Table 3.2: Overview of participant groups profile and background

	Participant Group I	Participant Group II
Group name	**Experts**	**Informed non-users**
Profile	Experienced consultants with Finance and/or Strategy background	Experienced managers with Operations and/or Finance and/or Strategy background
Relation to the Balanced Scorecard and SMEs	Experienced in implementing and/or using the Balanced Scorecard and have at least implemented one or more Balanced Scorecards in an SME	Non-users of the Balanced Scorecard in their SME currently, however, know the Balanced Scorecard concept or have used it in the past
Focus of interview questions	▪ Experiences with SME clients regarding the BSC ▪ Reasons for low BSC implementation level within SMEs ▪ Best practices to implement the BSC in SMEs ▪ Other experiences relevant for building theory	▪ Reasons for not using the BSC ▪ Needs and requirements in regards to the BSC ▪ Ideas on how the BSC could work in their SME

The interviews were scheduled face-to-face whenever possible, but also, due to cost and time reasons, Skype interviews were deemed as a legitimate way to reach an international, varied and purposeful sample (Lo Iacono et al., 2016).

3.4 Data collection

The potential list of participants consisted of a longlist of overall 40 experts and informed non-users. These were contacts from the professional network of the researcher but also suited participants with BSC expertise in SMEs identified through internet research. Of these initial 40 contacts, 16 did not reply to the request of the researcher, were not willing to take part or stated, after explaining them the research study background, that they would not be a suitable interviewee. 24 experts and non-users were on the shortlist and had a first short pre-interview call with the researcher consisting of further information about the research project. Out of these phone calls, 19 participants agreed to take part in the interview in the period from the 22nd of June 2018 to the 6th of July 2018. Due to unavailability for the about 50 minutes long interview during the data collection period, 4 potential participants (experts) cancelled their participation briefly before the scheduled interview due to other commitments. Out of the initially planned 8 face-to-face interviews, 3 were changed to a voice over internet protocol (Skype) interviews due to time constraints of participants. As a result, 15 complete interviews were carried out, of which 5 face-to-face.

Before the data collection period, a pilot interview was performed to test the clarity and logical flow of questions. This resulted in minor amendments to the interview guide [17] sent out to each participant some days before the interview. This guide contained the study background as well as the interview themes that would be explored during the interview, the detailed questions being dependent on the experience of the single participant. The final interviewer guide consisted of about 15 open-ended questions with additional probing questions to be utilised depending on the experience and depth of knowledge of the interviewee. Both the interviewer guide as well as the participant guide sent to each participant some days before the actual interview are included in appendix 3 and appendix 4.

At the start of the interview, the researcher asked the interviewee for oral final confirmation to participate in the interview and that she or he had read and understood the consent form as well as

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[17] Every participant received the interview guide as well as consent form and plain language statement in advance to the interview.

plain language statement. Also, the interviewer asked for permission to electronically record the interview, in order to allow the researcher to actively concentrate on questioning and listening, provide an unbiased record and to reanalyse the data at a later date. Next, the interviewer explained the role that he would take as an active listener not including own project ideas and views, taking notes as well as summarising the responses given by the interviewee in order to give a chance to validate the understanding of the interviewer or to the interviewee to provide further information if deemed necessary. The interview schedule contained open questions to prompt and start the discussion, using a "grandtour"[18] question to begin with (Mills, 2014, p. 44) and ended with a final open question to capture any relevant information that had not been discussed in the main part of the interview. An overview of the participants' profile is presented in table 3.3 below.

Table 3.3: Overview of interview participants

#	Participant	Group	Job title	Company	Country	Interview	Working experience
1	S.O.	Expert	Senior Consultant	Consultancy for SMEs	Italy	Face-to-face	7 years
2	C.F.	Expert	Professor, ex Principal	University, ex Consultancy	Germany	Face-to-face	>15 years
3	D.B.	Expert	Manager	Consultancy for SMEs	Germany	Face-to-face	8 years
4	M.M.	Expert	Manager	Consultancy for SMEs	Germany	Face-to-face	7 years
5	N.K.	Expert	Bus. Controlling., ex Sen. Consultant	SME (Healthcare), ex Consultancy	Germany	Skype	7 years
6	H.V.	Expert	Managing Partner	Consultancy for SMEs	Germany	Skype	>20 years
7	N.W.	Expert	Principal	Consultancy for SMEs	Germany	Skype	8 years
8	G.L.	Expert	Principal, ex Finance Director	Consultancy for SMEs	Germany	Face-to-face	>20 years
9	R.M.	Expert	Professor, ex Senior Manager	University, ex Consultancy	United Kingdom	Skype	>20 years
10	J.D.	Expert	Managing Partner	Consultancy for SMEs	United Kingdom	Skype	>20 years
11	M.K.	Non-user	Head of Controlling SBU	SME (Transportation, Real Estate)	Switzerland	Skype	15 years
12	J.C.	Non-user	Owner, Head of Operations	SME (Food & Beverage, Community Service)	China	Skype	8 years
13	I.A.	Non-user	Head of Operations	SME (Retail, Hospitality)	United Kingdom	Skype	12 years
14	F.D.	Non-user	Corporate Develop., Assist. to MD	SME (Healthcare)	Germany	Skype	8 years
15	J.M.	Non-user	Sales Manager., Assist. to MD	SME (Paper Industry)	Finland	Skype	7 years

In order to get more understanding on the professional background of the interviewee and to build initial rapport, crucial for exploratory semi-structured interviews, the interviewee was asked to elaborate briefly on her / his personal professional experience (job title and role, company, years of experience etc.) also in regards to the research question (Balanced Scorecard and small and medium-sized enterprises).

The interviews lasted 44 minutes each on average, the shortest taking 32 minutes and the longest about 1 hour and 1 minute to complete. This was due to mostly two reasons: On one hand, one participant had less time than planned to complete the interview, on the other, due to the inductive

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[18] "Grandtour" questions are questions that encourage participants to open up and talk on about their experiences.

and semi-structured interview research design, the researcher could spend more time when interesting relevant themes emerged and this was in fact the case in some interviews.

For all interviews, it has been possible to cover all set of key themes. It turned out not to be necessary to ask each question separately as most respondents included answers to some of these questions already in their initial responses.

3.5 Method of analysis

The 15 performed interviews were the starting point to inductively develop and enrich the identified relevant literature by constantly comparing the content of the interview answers with the existing elaborated theory throughout the data retrieval and data analysis process.

The interviewee answers were examined in depth to obtain data about the main barriers for SMEs to implement a BSC as well as their success methodologies ("proven" success factors) for a BSC adoption in SMEs. After about 6 to 7 interviews, a first saturation regarding key core themes started to emerge. To do this, the researcher used an iterative approach of going back and forth between the recorded data during the data collection period, the relevant identified literature and emerging theory to confirm data but also create emergent topics that can be added to existing literature evidence. The researcher identified these core emergent themes by constant self-memos and integrated them in the subsequent participant interviews in order to stimulate respondents to talk about these themes, with the aim to achieve conceptual saturation as described by Corbin and Strauss (2008) and Glaser and Strauss (1968).
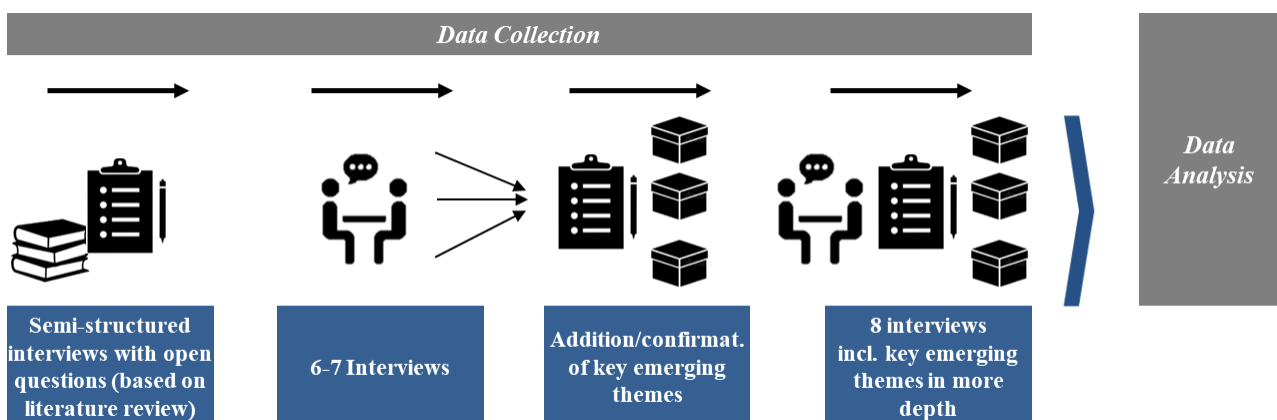

Figure 3.1: Overview of data collection approach

The understandings gained from the interviews served as a validation, rejection and enrichment of

available management theory, helped to adjust plans about what data should be gathered to ground the emerging aggregated results, provided insights on the appropriateness of the existing theory and enabled capturing new and relevant topics and themes (Isabella, 1990), as displayed in figure 3.1 above. However, the data presented in the subsequent sections cannot cover the richness of the data collected.

After the data had been collected, a stepwise approach in several phases to arrive at the conclusions presented in the next chapter as developed by Miles et al. (2014) has been used, the major phases being data reduction, data display, conclusions drawing and verification.

First, the researcher developed tables and mind maps to document the extent to which data could be found in each interview with the goal to capture data according to the salient research questions established in section 2.7. This step can be described as a first "sense making" in which key top-line information was gathered on paper before starting with the complete transcription of all 15 interviews.

For the second step, in a mostly inductive but also deductive approach, the theory grids developed in the literature review in section 2.3 and section 2.6 on reasons for non-usage of the BSC in SMEs and on the learnings/methodologies for successful BSC adoption in SMEs served to make sense of the collected data and categorise it in first-order categories, with the researcher continuously including relevant collected data in a descriptive way, trying, as far as possible, to not unnecessarily dilute the richness of the data. This step also included attempts to arrange the data in themes and patterns with the aim to discover additional information going beyond the one discovered during the initial process of data reduction (Miles et al., 2014).

For the third step, conclusions drawing, it was key to pull the implications of the developed success factors in regards to their validity by working across the data looking for similarities and differences with theories, meaning whether these were deemed as credible and able to withstand alternative explanations. Overall, the researcher was careful to ensure that in the end, the narrative represented a balanced view of the perspectives of both informed non-users and experts in regards to BSC usage in SMEs. Also, as typical for qualitative research, comments on twists and "outliers" in the collected data are done with some investigation of the meanings of these outliers, as proposed by Miles et al. (2014). The final version of the synthesis of emerging results is presented and discussed in chapter 4.
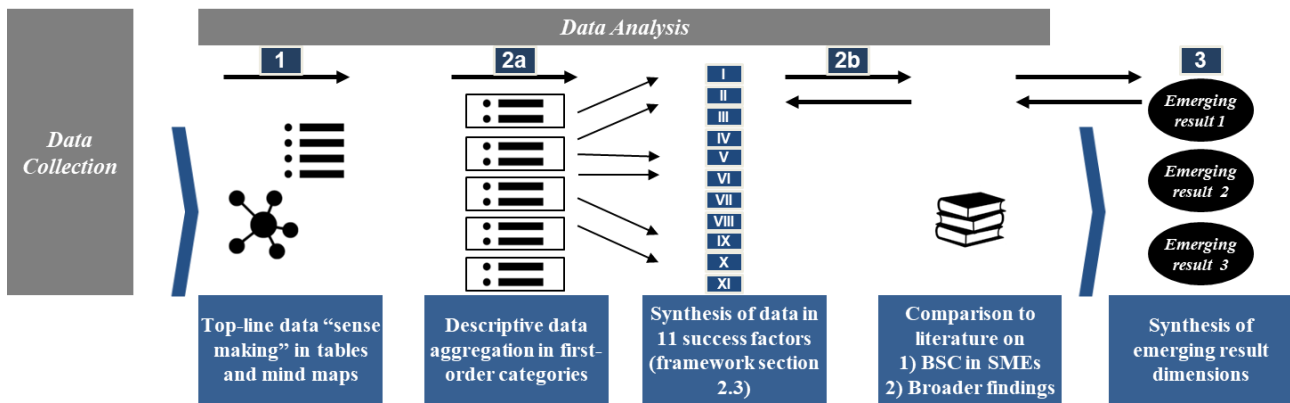
Figure 3.2: Overview of data analysis approach

3.6 Limitations

This section describes the major limitations based on the method of data retrieval and data analysis performed and if applicable, how these have tried to be mitigated.

Contrary to scientific empirist methods, the interpretivist philosophy and subsequently utilised research methodology is more influenced by a potential bias of human interpretation (Saunders et al., 2012). This is a risk that cannot be fully mitigated, however, the researcher tried to acquire a purposeful sample of respondents and to perform the analysis in the most objective and professional way possible. Also, as typical for inductive approaches, there is the risk that no useful theories or patterns or even just simply descriptive results will emerge out of the data collected (Saunders et al., 2012).

Even more relevant as opposed to a quantitative research method or a qualitative questionnaire, in semi-structured interviews with open questions much depends on the inherent skills of the interviewer (Saunders et al., 2012; Sreejesh et al., 2014). For example, as especially relevant for this research project with the relation MBA student (the researcher and interviewer) with comparably less working experience vs. experienced management consultants or managers (the interviewees), the researcher might have been unable to gain the interviewees' trust. This risk could be partially mitigated by, on one hand, recruiting participants that had past working relations with the interviewer, thereby enforcing personal credibility, trust and rapport (Saunders et al., 2012). On the other hand, for the interviewees recruited through cold calls, a first phone conversation, various Emails including background information on the research project helped to build rapport and credibility around the skills and professional background of the interviewer as well as the soundness of the actual research study and method, key to build rapport and trust as suggested by Lo Iacono et

al. (2016). Moreover, whenever the interviewee would agree, face-to-face meetings were scheduled instead of Skype calls. This is crucial for semi-structured or in-depth interviewing, with the aim to be able to explore participants' responses and meanings in more detail. However, even if rapport and confidence were established in most of the cases, it is likely that some participants may not have revealed aspects of a topic due to sensitive information they did not want to disclose. This is also a risk that cannot be fully mitigated.

Due to the inherent time constraint of some interviewees, the planned time frame for the interview was set to 50 minutes with the proposal to limit it to 30 mins if the originally planned time frame would have led to canceling the interview. In order to mitigate the tendency for participants in Skype calls (as compared to face-to-face) to give not ascertained responses to the interviewer's questions, most Skype calls were carried out with the video function, allowing the interviewer and interviewee to see each other face-to-face as well as giving the interviewer the chance to encourage further explanations with non-verbal cues. However, this was not always the case, as three interviews needed to be carried out via Skype without video function.

Due to the wide sample of interviewees with different cultural backgrounds (e.g. Italy, Germany, United Kingdom, Finland, China), there is a risk on how the researcher interprets the interviewees' words and meanings, or fails to understand these as well as possible translation mistakes, as three interviews took place in German and were later translated (Saunders et al., 2012). Also, for a few participants, English was not the first language and therefore some relevant thoughts might not have been expressed or developed to the full extent. The researcher however mitigated this by rephrasing questions and summarising thoughts and arguments mentioned by interviewees.

Another limitation is a potential interviewer bias. In some cases, due to lack of time or the interviewee not mentioning a specific recurrent theme that had emerged from comparing literature and past performed interviews, the interviewer would prompt the specific question to the interviewee. This might have led, in some cases, the participant to mention a topic she or he might not have found relevant mentioning or discussing in the first place. Also, as most of the participants had a consultancy background and were overall positively inclined towards the usage of the BSC in an SME environment, some of these might over proportionally stress the advantages of the BSC tool especially to what concerns the added value of consultancies, but be more reluctant to mention potential methodological pitfalls or barriers.

Based on the discussion above, table 3.4 summarises some potential limitations under the criteria of dependability, credibility, transferability and authenticity key for the quality level of any research and how these potential limitations have been partially mitigated.

Table 3.4: Overview of limitations mitigation strategies; overview of criteria as described by Saunders et al. (2012)

Criterion	Potential limitations	Mitigation strategy	Result
Dependability	• Modification of research focus leads to research focus that is not fully understood and cannot be evaluated by others	• Transparent illustration of research method and emerging themes/patterns	• Limitation persists partially due to richness of collected data
Credibility	• Socially constructed realities of participants do not match to what the participants intended	• Trust and rapport building • Checking data with participants, letting the interviewee confirm whether the summary was adequate • Limiting researchers' preconceived expectations	• Limitation partially mitigated
Transferability	• Limited external validity to another setting	• Full provision of the research themes, design and context to both the interviewee and reader to make judgment on transferability possible	• Limitation partially mitigated
Authenticity	• Not all views of the research are represented and therefore learning and awareness only generated in a few areas	• Data was recorded by taking notes but also electronically to enable reanalysing the data • Qualitative "outliers" mentioned in the research project • Related memos taken after each interview as a mean to control bias	• Limitation partially mitigated

To conclude, the limitations regarding the participant sample need to be mentioned as well. For example, increasing the number of interviews participants might have strengthened the findings or increased the likelihood for new insights to emerge. However, the generalisability/transferability of findings may always be questioned for this type of interpretivist inductive approaches typically based on a small sample.

4. Findings

4.1 Introduction

This chapter presents the results of the data analysis. Section 4.2 briefly describes the overview of collected data and section 4.3 discusses the research results in regards to the themes that emerged out of the data analysis in regards to the non-usage of the BSC in SMEs and strategies to successfully implement a BSC in an SME, describing the three identified key results in more detail.

4.2 Data structure

For data analysis, the collected interview information was initially sketched in tables and mind maps based on the process discussed in table 3.2 of section 3.5. As a next step, the interview recordings information was transcribed and captured in detailed descriptive first-order category information. These data points from the electronic interview recordings were linked to one of the eleven identified success factors presented in the framework of Lueg and Vu (2015) in section 2.3. During data analysis, it became clear that the emergent patterns key for a deeper understanding of why the BSC is not adopted widely by SMEs as well as how the BSC needs to be implemented (differently to large companies) in SMEs occurred at three aggregate dimensions categorised as follows: *Cultural Change, Educational Empowerment* and *Payoff*.

Table 4.1: Transfer of first-order category information into aggregate result dimensions; factor categories by Lueg and Vu (2015)
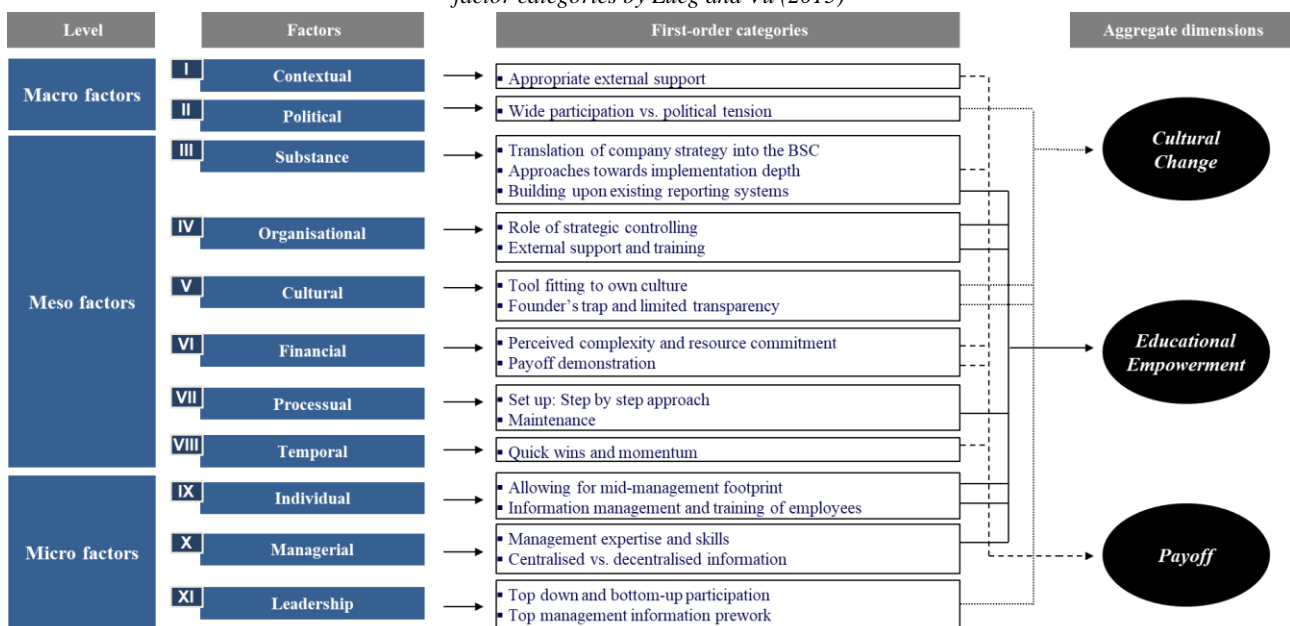
These aggregate dimensions are the identified emerging themes deemed as worth analysing further

in section 4.3. This is the case as it was found that each of these aggregate dimensions displayed findings with particular outcomes relevant for SMEs, thereby proposing key (mitigation) strategies when attempting to implement a BSC in an SME.

Evidence for this model of the first-order categories is provided in appendix 5, including representative statements made by the participants (both informed non-users and experts) during the interviews.

4.3 How to implement the BSC in SMEs

The herewith elaborated emergent topics aggregated under the three dimensions *Cultural Change*, *Educational Empowerment* and *Payoff* are the result in response of this research project to the research questions on barriers to implementing a BSC in an SME as well as to methodologies and learnings on the how to implement a BSC in an SME. The focus in the subsequent sections is to explain these dimensions in more detail by especially elaborating on aspects that are relevant for SMEs. When considering to implement a BSC in an SME, all three aggregated dimensions are strongly interrelated. Therefore, *Cultural Change*, *Educational Empowerment* and *Payoff* altogether must be seen as key in order to create the ground for a successful BSC adoption in an SME.

4.3.1 Cultural Change

The first key result dimension identified relates to cultural aspects that characterise SMEs and the thereby required *Cultural Change* to be able to advocate for and then successfully implement a BSC in an SME. In regards to the studied research question, the findings below both address reasons for non-usage but also respond to mitigation strategies on how to convince SMEs to adopt this leading management tool.

Resistance towards the BSC in SMEs: Fear to over-engineer, to fail, or resistance to disclose

Overall, experts claim that SMEs are most likely to have their own and unique culture, with different organisational dynamics compared to larger companies. Often, the leadership team or owner would have a more pronounced general scepticism towards goal-oriented steering systems (and therefore towards BSC like tools) in comparison to leadership teams of larger companies. In regards to this, experts would highlight that, smaller companies have a more pronounced natural "distrust" in methods and resistance towards anything that might be a "management fad", without always directly linking this distrust back to management expertise but to culture. Participants

suggest that this scepticism may be linked back to SME managers believe that the company's success is "homemade", based on their capabilities and "stomach-based steering", with little perceived need for overly academic and sometimes over-engineered tools. Their scepticism towards a goal-oriented steering of the company is exemplified by the argument that, as the SME type manager is close to the operational side of the business, these also do know what is going on in the business at any time in detail. This leads them therefore to perceive little need to over-engineer and / or to formalise procedures, goals, KPIs and activities as the BSC would require, since these are already present in their minds.

In regards to the way of steering a company, participants would especially mention the perceived theoretical focus of the BSC tool and the closeness to action of managers in an SME, which are factors that diminish the need for using a BSC in their SME.

"... [The BSC is] a method often contradictive [for an SME] to the traditional type of management and to how the company is steered" (H.V., Expert)

"For most SMEs I do consulting work for...instead of focusing on tools, they rather want to get the job done" (G.L., Expert)

"[...] For large companies, nothing seems to shift them... [....] ...in an SME, reality of everyday life dominates you – it just takes one phone call [of an important customer] and your strategy is altered" (R.M., Expert)

In regards to culture, interviewees commented that for the SMEs they do consulting work, in addition to the mentioned scepticism towards methods and tools, there is a naturally different perception towards whether and how information should be shared within the company. As they would comment, there is a higher likelihood to have information and therefore power silos compared to large companies. To give an example, some participants would appreciate that SMEs are often led by a founder that would share relevant information only with a small circle of trusted people (or leadership team). To cite an extreme, this would sometimes lead to what practitioners often refer to as "founder's trap", meaning that they have built up a non-scalable business and the success of the company is much dependent on a single's (the founder's) performance.

Some experts would reveal that this behaviour leads to a common underlying aspect within their clients (SMEs) that employees are often not aware of the profitability goals and results of the company they work in. In addition to this, the Organisational Learning perspective postulated by

the BSC is seen as a leadership task of the management team and therefore often not shared with employees.

> *"There is a refusal to go for a higher professionalization level in terms of transparency and numbers – this comes from a cultural problem" (D.B., Expert)*

> *"In fact, I would say that about one out of two of the companies I did project work for have a natural tendency to have kept power and information silos [not to show anyone any numbers] over the years" (M.M., Expert)*

> *"A large part of SMEs I worked with [family owned German businesses] were very hierarchy driven and decision making was mostly based on the will of the owner, regardless what numbers were saying" (N.K., Expert)*

> *"I am in favour of the BSC, however, I know that even our management would not be that open-minded… […] …getting their work evaluated by numbers in a combined KPI system is not something they are aiming for" (F.D., Informed non-user)*

In regards to the limited transparency within smaller companies, experts and informed non-users have different opinions on possible explanations. Two participants, given the experience in many years of project work with various SME clients, would contend the hypothesis of the reluctance to use a BSC being not wanted transparency, supported by the view that not all company owners and managers would be able to formalise and break down the own company's strategy in a clear and correct way. Besides missing management expertise, this view reveals a missing vision and certitude of where the company will be in a few years' time and what the levers of success are, leading to an increased fear or limited openness to welcome the change a BSC would bring. Other participants would partly support this statement saying that this might apply to companies that are family owned SMEs.

> *"A reason for a company not implementing the BSC could be that, out of my experience, a manager may not want to admit to don't know where the company is going and what will happen in the future … […] ….might fear to show not to be fully in control" (S.O., Expert)*

Regarding the aspect of a pronounced fear towards the unknown in regards to the BSC as a tool or to the company's overall future, one informed non-user would state:

> *"…I understand the barrier to implement such a tool – potential negative impacts [mistakes] accrue very fast in a small company… […] … if you have mismeasurement*

there are limited ways to limit the damage" (J.X., Informed non-user)

As revealed by the analysis, interview participants see a performance-driven company, both quantitative and non-quantitative focused, with an open debate and rationale management style and company culture as a basis for the chance to successfully implement a BSC. However, the cultural context described above with a general scepticism towards goal-oriented steering utilising management tools, the existing power and information silos characterising how a company is managed as well as the pronounced fear to display a missing vision of the company or of not being able to use the tool correctly, naturally build a barrier for the usage of any performance measurement system as this would require a certain extent of change in regards to how the company is steered, especially to what concerns KPI transparency (Financial, Customer, Internal, Organisational Learning).

Therefore, the analysis suggests that a major reason for the non-usage of the BSC within SMEs might already be explained by cultural requirements that are often not met in SMEs but are a prerequisite postulated by the BSC. Given the evidence provided above, there is reason to believe that of the large numbers of managers responding that "the BSC[19] is not suited for the needs of my company" contains a relevant grey area of companies in which this change its purposely not wanted or even feared (Giannopoulos et al., 2013; Vohl, 2014; Wieselhuber & Partner, 2002). This differentiates SMEs to larger companies, as, in contrast, for larger and leading FTSE, there might be a higher likelihood or predisposition of these cultural requirements to be met, as they, on average, have a higher need to disclose numbers as well as to discuss decision making within management, needing to be able to withstand critique or questions from a variety of (external) stakeholders (e.g. divisions or subsidiaries with corporate holdings, shareholders, investors etc.).

How to "break the resistance barrier"?

To answer the research question, approaches on how to mitigate the cultural barriers towards a BSC in SMEs are discussed in more detail. "Breaking" this barrier of missing awareness or resistance is not always possible, but experts contend ways of how to create the need for the BSC and to maintain the interest in using the tool over time. As the analysis above revealed, in order to

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[19] As compared to the study of Vohl (2014) in which 50% of German executives stated that the BSC is not suited for their SME or Wieselhuber & Partner (2002) in which about 63% of German SMEs responded that the BSC is known but currently not of relevance in the company. Also Giannopouolos et al. (2013) found that only 25% of UK SMEs with awareness of the BSC were using it.

convince SMEs in regards to BSC usage, it becomes rather a question of how to trigger interest for goal-oriented steering tools that, as the data proposes, most likely need to be accompanied with cultural change.

Given the reluctance to implement the BSC in SMEs per se, opening up the culture in a way to diminish the natural barrier against the BSC (and PMS in general) in an SME, there is the need to diminish the fear and reluctance to use a tool that is apparently contradictive to the own management style and culture. As experts would point out, a key to achieve this is translating the need and achieving buy-in from the owner:

> *"The first step is always to check for the need and then convince the leadership team"*
> *(G.L., Expert)*

As experts would contend, especially for SMEs, initially, the external champion (e.g. management consultant) must spend additional time on information management with the owner around creating the need for a goal-oriented steering system. Here, the key success factors turned out to be directing the discussion away from the BSC as a tool but initiating conversation from the "Strategic corner" such as strategic planning, strategy implementation and strategy review, also highlighting the customised implementation approach of a potential BSC project, by taking into account the existing management and leadership style.

> *"[The first thing to do in an SME] is to sit down with the entrepreneur or manager and do additional basic information management work and talk about the company's strategy"*
> *(H.V., Expert)*

> *"… [...]…. the last thing you want to make the impression is that the BSC methodology is repeatedly going to be used 1:1 for the specific company without taking into account the size, complexity and the leadership style of the company" (G.L., Expert)*

To mitigate the fear of over-engineering and a clash with the current company culture, Experts contend that, besides stressing the customised approach for the specific SME is crucial, that the BSC is a flexible and logical tool grounded on "common sense" and leading management practice.

> *"[Apart from the cause-effect relationships] … Kaplan and Norton's BSC is pretty common sense management thinking, it is knowing what you want to measure for success – you don't need to overcomplicate the discussion" (J.D., Expert)*

To mitigate the fear to implement the tool with possible negative implications, experts propose to accompany a possible BSC implementation with, as far as possible, elements of change management. This would include the appointment of a suited external consultant (external champion) as well as an internal employee (internal champion) that would drive the change process. More detail on this aspect is provided in the next section. Here, it is key that the external consultant, often being smaller consultancies that fit the "budget" of the SME, has extensive understanding on both the BSC content and methodology but also change management tools.

Overall, experts, however, agree that no change can be forced and if the need cannot be successfully triggered and management buy-in achieved, the likelihood of implementation success gets close to zero. Here, waiting for internal management change might sometimes be the best solution as "hard selling" of the BSC does not make sense (e.g. better to wait for the takeover of the next management generation or management replacement).

An overview of the mitigation strategies to create the need for the BSC, correct misconception and alleviate fears on implementing a BSC is given in table 4.2 below.

Table 4.2: Overview of mitigation strategies to overcome cultural barriers for BSC implementation in SMEs; own analysis[20]

Potential barrier towards BSC	Description	Mitigation strategy	Description
Little need for goal-oriented steering	▪ A general skepticism towards goal-oriented steering systems characterised by perception to have all relevant information as being close to action	Create need	▪ Additional time on information management with entrepreneur/owner ▪ Focus client discussion on the need for strategy, past initiatives or investment failures of the company, need to focus on financial investments, continuous improvements, professionalization requirements
Distrust in tools (over-engineering), BSC contradictive to power and information silos	▪ Fear to create a tool that is not suited for the specific SME ▪ Fear to create a tool that clashes the company culture	Correct misconceptions	▪ Stress customised approach for the specific SME, taking into consideration the company culture ▪ Avoid using terminology "Balanced Scorecard", rather call it differently and focus on the explanation of the top-line concept, explaining the BSC with accepted management principles (vision/mission, SWOT, strategy alignment, budgeting, strategy communication, strategy review etc.) ▪ Elaborate on BSC advantages for SMEs
Fear of implementation failure and immediate negative effects	▪ Resistance to not show potential lacking knowledge, management expertise or missing forward-looking plans	Alleviate fears	▪ Stress BSC as a tool to support strategic direction, implementation and communication (not to create a parallel system to existing infrastructure) ▪ Stress BSC advantage to enhance understanding of critical success factors ▪ Identify appropriate internal champions as advocates for the change process

To summarise, most experts highlight that the implementation of a BSC is not just an implementation of a steering tool, but, due to the changes it requires in how you see, control and

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[20] The reader shall appreciate that all mitigation strategies are hereby written from the perspective of consultants (Experts) that advocate and support the BSC implementation in SMEs.

communicate the business, it requires a great amount of cultural change that encompasses the whole company.

"A change towards goal-oriented steering implies and adaptation of leadership style, transformation that must be accompanied by change management" (C.F., Expert)

4.3.2 Educational Empowerment

The previous section highlighted the required *Cultural Change* within a company in order to establish a favourable ground for BSC adoption. However, the needed cultural buy-in is just a starting point for a successful BSC implementation in SMEs, with SMEs having some more peculiar aspects to be mitigated. The next sections focuses on the educational aspects emerged from the collected data to achieve *Educational Empowerment* to increase understanding on the benefits of using a BSC, sustaining its correct utilisation but also long-term success within this type of company.

<ins>Management Knowledge: Top-management and employee expertise</ins>

Overall, experts and informed non-users contend that the actual managers in SMEs able to take the decision to adopt a BSC in their company often do not have the necessary management or finance background. Here, as the initial reluctance to change might be comparably higher than in larger companies that are often used to professional steering tools and might also see the BSC under a reputational aspect of being able to install a professional management culture within their company[21].

"SME managers often have different background… […]… not many of them have finance knowledge….so the BSC becomes a blank field" (D.B., Expert)

"Often the qualification level is lower than in larger companies… […]… what counts for the top- management also counts even stronger for the employees" (M.M., Expert)

"In SMEs often mid-managers come from the operational side, are there since many years… […]… and have less of an academic background" (N.W., Expert)

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[21] The researchers intent is not to stigmatise findings as it is clear that the term SME is pretty broad and "there is not one typical SME". However, the section reports the result of the collected data pointing towards a lower expertise level especially in regards to managerial tools within SMEs.

Most experts would comment that, beyond a lower level of management expertise, in SMEs the role of the controlling function is not adequate for a BSC implementation, as the controlling department would not be forward-looking and focus on administrative tasks.

> *"Most companies I work with use whatever they have as even these don't have a real controller in the company - they end up taking what they have from the accounting software" (S.O., Expert)*

> *"Beyond the lacking awareness [in regards to the BSC] an obstacle in the functional team like controlling is the usage of very few and basic controlling tools" (D.B., Expert)*

> "*Controllers are the wrong people to implement the BSC – they often do not understand the strategic importance and the professional way of how to use the tool" (C.F., Expert)*

This view contends that greater skills and attention is needed in accompanying the requirements in knowledge a BSC implementation brings to an SME, both referring to the internal and external champions. This is the case as often employees in smaller organisations in their past would not have been exposed to goal-oriented steering systems as well as would not know what is expected from them in regards to their contribution.

> *"In an SME you will find reluctance [for a BSC, for management tools] unless seriously championed by someone really knowing what they are doing" (J.D., Expert)*

> *"For an employee in an SME the BSC implementation can be a massive cultural change… if she or he was not used to be asked to contribute" (H.V., Expert)*

What is required, also within individuals in the company, therefore, is more effort and time to explain the process, the reasoning and the activities need for a BSC implementation in a small sized company. As experts would agree and from what emerged by interviewing informed non-users that were in the position to actually implement a BSC in their SME, most managers and employees within the SME actually do not know what to exactly expect from a BSC implementation in terms of work required, processes, benefits but also to what concerns their involvement that is needed.

> *"It is a matter of responsibility …[…]…Clarify well the responsibility - don't hand over to regular controlling as it gets administrative [contrary to the actual intent]" (H.V., Expert)*

How to achieve "Educational Empowerment", necessary for commitment and buy-in?

To put management and employees in the position to successfully implement a BSC, experts would

reveal that taking away the resistance from the unknown is important. Here, it comes down to the skills of the external champion (most likely a consultancy) to explain the need for the tool, the simplified process and the contribution expected from individuals within the organisation. The resistance from individual employees could be mitigated by ensuring two aspects, on one hand allowing the footprint of mid-management, on the other by supporting the change, aiming to install a goal-oriented steering system within the organisation.

> *"The understanding [for BSC like tools] in larger companies is greater as they are more used and exposed to controlling processes… […]… there is more need to explain in a small sized company" (G.L., Expert)*

When implementing a BSC in an SME, it is therefore critical to be able to cascade down the company's strategy in a way that is understandable to a large part of the organisation by finding a good match between complexity, detail level and understanding of the single individuals.

> *"Larger companies often tend to have higher calibre staff… […]… but you still need to make the Scorecard measures and activities clear to everyone" (I.A., Informed non-user)*

> *"There is often heterogeneity in the quality/expertise level within the management team and employees… […]… you still need to find ways to get them on board" (N.W., Expert)*

Often, it is a good approach to study which KPIs are being measured in the company already and to build upon them, in order to have a basis that is already familiar to most employees.

> *"…[…]… Set the basic KPIs with top management first, then, depending on SBUs do the process with the employees so that they are involved… […]… it is important that it is driven from the top but the result shouldn't be surprising for the bottom" (M.M., Expert)*

On top of fostering the understanding of management and employees, a balanced approach of educating but also empowering, allowing a clear footprint of the employees is crucial to strengthen the commitment and buy-in for the later stages. The BSC implementation foresees a top-down commitment, but must, therefore, be validated and "empowered" also from the bottom.

> *"Teaching of mid-management and BSC development with them is key …[…]… they will be the champions of how to work with and to advocate the BSC in the group …[…]… otherwise it will remain just a tool for the top" (N.W., Expert)*

> *"Allow the footprint of the mid-management …[…]… it should become their own BSC"*

(H.V., Expert)

The reasoning on what method to use in order to strengthen educational buy-in differ between experts. Some favour methods originally brought forward by Kaplan and Norton advocating for a clear BSC link to the employees' remuneration bonus system, but most experts advocate to select a cross-functional, team-based approach that fosters learning from each other as well as a team-based bonus remuneration system to foster achievement. Also, experts contend that appropriate external champions support tailored to the needs of the SME is necessary and besides this, it is key to identify and train internal champions early in the process. These, over the years, will maintain focus on the BSC within the organisation.

> *"If there is not someone passionate and educated about the BSC than it doesn't work – it will become just another reporting system often in parallel with others …[…]… and will die"* *(J.D., Expert)*

As indicated partly above, the last aspect crucial for *Educational Empowerment* within an SME refers to the maintenance after the setup stage. As often within SMEs processes for goal-oriented steering are missing, experts recommend a pragmatic support of consultants. These can add real value by identifying ways to implement a steering-process that fits the needs of the specific SME. Hereby, it must be ensured that top-management always needs to be fully capable to drive conversation, but also the organisation must be supported by installing a way to discuss the progress of the BSC.

> *"Top-management needs to own the BSC and drive the conversation [with all involved departments] around performance"* *(J.D., Expert)*

The overview of the mitigation strategies to share BSC understanding, allow for employee footprint and educate on the review process is presented in table 4.3 below.

Table 4.3: Overview of mitigation strategies to overcome educational barriers for BSC implementation in SMEs; own analysis

Potential barrier towards BSC	Description	Mitigation strategy	Description
Management and employee expertise	▪ Resistance to the unknown ▪ No perceived need for goal-oriented steering	Shared BSC understanding	▪ Identify already existing and agreed upon goals and KPIs as starting point (avoid creating a parallel system or not shared system from scratch) ▪ Sharing of best practices of other similar SMEs ▪ Coaching on pragmatic usage and review process
Missing buy-in and commitment	▪ Resistance due to low involvement ▪ Resistance due to missing KPI alignment ▪ Fear of no link between BSC and actual work	Employee footprint and educate on review process	▪ Top Management sets general vision and Strategy Map, but involve mid-management in KPI and target development to increase employees' footprint ▪ Identification and fostering of internal BSC champions ▪ Team-based remuneration with BSC targets

4.3.3 Payoff

The previous sections have stressed the importance of required *Cultural Change* and *Educational Empowerment* in order to establish a favourable ground for a BSC adoption in an SME. Moreover, in order to convince any manager to implement a BSC or a company to continue using such a performance management and measurement tool, the benefits of using it must outweigh the financial and human cost for set up and maintenance. However, as highlighted in many studies (Barnes et al. 1998; Hvolby and Thorstenson, 2000; Hudson et al., 2001), the perception of a too high set up and maintenance cost, therefore no positive payoff, is often a barrier of BSC usage in SMEs. This section will provide insights into why this perception exists within SMEs and how the mentioned positive payoff when implementing a BSC in an SME can be achieved.

Perceived complexity and resource commitment

As most experts would contend and what can be confirmed by the researcher after interviewing also current informed non-users, SMEs would often see the benefits of potentially using a BSC, but would perceive that the setup and maintenance cost would outweigh the actual payoff.

> *"It is expensive to implement such things if you are a small or medium-sized company"*
> *(M.K., Informed non-user)*

> *"In larger companies there is the organisation [in place] and the time to spend for such*
> *tools to handle the data, feed it, analyse it" (S.O., Expert)*

The researcher contends that this perception of SME owners and non-users of "too high cost" often comes from a wrong perception in regards to the actual depth of implementation that is needed or that can actually work for an SME. As experts would state, successful BSC implementation in a company always requires a level of pragmatism, regardless of the company's size, as well as that the BSC tool itself is flexible enough to be implemented in any type of company, meaning that the required resources always need to be put in relation to the existing financial and human resources.

> *"It is always a question of cost vs. benefit ...[...]... a pragmatic approach is always to be*
> *used, from small to large companies"(C.F., Expert)*

> *"SMEs don't have the time and the will to design something that is overly complex;*
> *however, the [BSC] principles are equally adaptable from a corporate to an SME" (J.D.,*
> *Expert)*

Also, experts would bring forward that often there is a misconception that a BSC like tool would make a company less flexible, therefore take away an advantage SMEs naturally have due to size and other aspects. This view is strongly refuted by non-users that had used a BSC in the past as well as leading practitioners that were interviewed:

> *"I don't agree that the BSC is less suited to SMEs; strategies might change more quickly – but adapting to issues should be part of a vision/strategy as the critical success factors remain the same" (I.A., Informed non-user)*

> *"A strategy is a strategy and should be there for a few years …[…]… you might go more on a tactical level in an SME in order to react tactically …[…]… even though you want to be agile, there is no alternative for strategy, goals and communication" (H.V., Expert)*

> *"[To implement a BSC in an SME] It is absolutely the same phases as for large companies, but it is a potentially easier implementation not so strongly threatened to changes in strategy in SMEs" (D.B., Expert)*

The mentioned perceptions barriers point out that, when consulting SMEs on the BSC, in order to persuade managers to use a BSC in their SME, it becomes the consultant's task to convincingly demonstrate the potential positive benefit vs. cost payoff. Here, many experts would highlight that in fact, the BSC might have an image problem within SMEs due to a high number of less successful consultancies with comparably little BSC implementation methodology knowledge, aiming to implement BSCs in SMEs often in a standardised or weakly thought-through way.

> *"There are many people out there selling BSC software, another whole parallel process to maintain, missing the actual intent of the BSC …[…]… this is an issue as [in these cases] the BSC is promoted and designed as a parallel process like creating a new system" (J.D., Expert)*

> *"There are consultancies trying to implement BSC like tools with little professionalism and expertise. This is also leading to an image problem with less best practice and success stories for SMEs out there" (C.F., Expert)*

Most experts would overall contend that the BSC concept can successfully be adapted to small companies, yield positive payoffs and keep maintenance cost and time at an acceptable level. The next section will elaborate on the how this payoff can be achieved and kept over time.

How to achieve "Payoff"?

The major insights have been clustered in the aspects of *payoff argumentation*, *implementation depth* and *momentum*. Payoff argumentation refers to suited arguments on the benefits of the BSC, implementation depth considers processual and substance aspects of the actual BSC implementation while momentum includes additional processual (project management) aspects that proved successful for SMEs.

Consultants face the challenge to quickly convince the SME owner/entrepreneur that the project is worthwhile to pursue. Experienced SME consultants recommend to start the discussion on strategic topics, find ways to start a discussion about past unsuccessful investment projects of the company, missing focus etc., all this in order to centre the discussion on strategic topics and only in a second step propose ways to initiate a BSC process by focusing on the pillars of the Strategy Map, major activities and goals of the SME, stressing the comparably low investment needed to set this up.

> *"First discuss strategy and goals, then step by step do the Strategy Map, then focus on the interdependencies between goals" (H.V, Expert)*

> *"Therefore.....start simple, step by step on the way to a holistic BSC" (G.L, Expert)*

> *"…[…]… start the discussion on mismanaged project because of wrong or missing focus and make the impact of such a tool tangible" (N.W., Expert)*

The process of the implementation in an SME can be faster and less complex compared to a larger company due to quicker communication ways (often working directly with the owner/entrepreneur), an often less complex organisational structure as well as fewer interdependencies with other business units. These are advantages that especially SMEs have and that as such need to be leveraged. In fact, some experts would even claim that, due to this, an implementation in an SME, once the decision to implement a BSC is taken, is even less laborious in an SME than in a large company.

> *"SMEs have often the advantage that the owner understands and overlooks the whole business …[…]… fewer scorecards need to be reconciled because of mostly simpler company structures" (G.L., Expert)*

To what concerns implementation depth, experts recommend focusing a small number of KPIs and activities, following the credo "quality over quantity".

"For an SME, the fewer KPIs, the better" (J.D., Expert)

"For the restaurant round the corner you should have 5 instead of 20 strategic initiatives" (N.K., Expert)

"Yes, 20 is plenty – go for a maximum of 16 KPIs, sometimes even below that" (H.V., Expert)

Also in regards to implementation depth, experts would point out that there are no rules to what concerns the extent to which a BSC should be applied to an SME. However, most would agree that often in an SME the usage of the BSC as a strategic management tool is enough (Type I, Type II[22]).

"For an SME it might be enough to go for a Strategy Map with Type II BSC [include the cause-effect relationships]" (H.V., Expert)

Due to the huge importance of cash for an SME at any moment in time, demonstrated by the saying "cash is king" as well as the type of measures perspectives typical of an SME[23], external and internal champions must continuously keep an eye on the payoff to materialise even quicker than in large companies, that, as experts would contend, have more patience for the actual payoff to kick in. This can be achieved in different ways, as for example by explaining well the whole BSC set up procedure at the beginning, demonstrating that the Strategy Map and 1st draft of overall company BSC can be elaborated in a few weeks' time. A proven way to demonstrate a positive payoff with tangible results and an immediate impact at the beginning of the process would be the following:

"In an SME you could get management together in 1 day to design a first BSC …[…]… they are pretty aware of their vision and strategy" (J.D., Expert)

In order to keep momentum, it remains crucial to continuously keep an eye that what has been worked on can quickly be tested in practice. Especially for SMEs, it is mentioned as a critical success factor to design each implementation step from the very beginning so that each one becomes a "jumping-off point" and can be communicated as a success to create excitement and confidence for future stages. As some experts would contend, no SME BSC project should take more than a few months to set up the company's BSC as well as that, if needed, you might go for a stepwise approach of introducing the BSC perspectives one at a time in order to keep resource

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[22] It is important to appreciate the following distinction: Type I BSC refers to a multidimensional KPI system (financial, non-financial), Type II BSC additionally integrates cause-effect relationships, Type III BSC add. includes strategic activities linked to a bonus reward system (Schäffer & Matlachowsky, 2008).

[23] As cited evidence by Giannopouolos et al. (2013) has revealed.

usage at an acceptable level. However, by using this approach, a company needs to pay attention to still observe and introduce the cause-effect relationships of the different strategic goals and activities within the BSC, not to end up with 4 different and not related reporting dashboards.

> *"Find ways to prevent frustration, create first quick wins, don't spend a year on it; 1. Scorecard should be created in 8 weeks if you have one or two levels" (H.V., Expert)*

> *"SME will want to spend minimal time on management infrastructure and controls and maximum time on manufacturing, selling – therefore, fairly do it quickly" (J.D., Expert)*

> *"Explain step by step what has been reached so far to stress the benefits and keep the motivation high [to sustain momentum]" (D.B., Expert)*

As emerged from the collected data, the aspect of payoff at each stage is crucial to keep the process going, as SMEs would be more impatient compared to larger companies to reach benefits of the BSC implementation by applying it into practice as soon as possible. In terms of the overall project payoff, experts and non-users would propose that SMEs do also require the payoff to materialise in a short time frame, as the sentence below reveals.

> *"The payoff period should be within or maximum 1 year" (J.M., Informed non-user)*

The interviews also could confirm the view that a BSC does not need to be fully integrated into an existing ERP system or that, if an ERP system does not exist, a new one must not be created. Here, experts agree to the credo "if you know what you are doing, the simplest (Office package) tools are sufficient". Hereby it is important to not create a new or parallel system that would need to be fed in a completely new way.

> *"Being scared by the costs must not be the case, a simple Excel can do the job" (N.K., Expert)*

> *"Excel/PowerPoint is all you need - if you know what you want to measure" (J.D., Expert)*

Mitigation strategies to argue in favour of the BSC payoff in SMEs, recommendations on the implementation depth and how to keep momentum are presented in table 4.4 below.

Table 4.4: Overview of mitigation strategies to overcome a negative payoff perception for BSC implementation in SMEs; own analysis

Potential barrier towards BSC	Description	Mitigation strategy	Description
Perceived set up and maintenance cost	• Perception that set up and maintenance will not be customised to the reality of a smaller company • Misconception of BSC being suited more for larger companies	Payoff argumentation	• Step by step approach to a BSC (positive ROI at each stage) • Start with Strategy Map during strategy retreat • Stress BSC implementation advantages in SMEs (communication, decision-making etc.)
Missing flexibility and high complexity	• Fear that BSC implementation will slow down existing processes in the SME	Implementation depth	• Decide on BSC depth to adopt (I, II, III) • Below 16 KPIs • Reduce number of initiatives to reasonable level
Missing benefits at single stages	• Likelihood of frustration if benefits of tools do not get visible quickly	Momentum	• Create first scorecard within 8 weeks • Do not create a new parallel system ("simple Excel is all you need") • Explain what has been reached so far and what can put into practice

5. Discussion

5.1 Introduction

The aim of this research study was to add knowledge to the limited methodologies and learnings available and identified in literature so far on regarding how to successfully implement a Balanced Scorecard in the reality of an SME. SMEs count for about 99% of companies in the EU and the BSC has proven beneficial to this type of company. Therefore, a higher diffusion rate of the BSC in SMEs might be seen as worth pursuing, this research bringing forward knowledge to support this. Section 5.2 discusses the summary of the findings, section 5.3 analyses the contribution to the existing literature and section 5.4 sums up the implications for practice. Lastly, section 5.5 describes the limitations as well as implications for future research.

5.2 Summary of findings

Building on existing literature, the research study highlighted barriers to BSC adoption in SMEs and presented how to convince SMEs on the beneficial use as well as BSC implementation methodologies that are suited for SMEs. The research study found that major knowledge gaps exist in literature until today. Through an in-depth analysis of 15 interviews with experts and informed non-users of the BSC in SMEs, the research proposes that a successful BSC implementation in an SME grounds on the proposed three aggregate result dimensions, namely *Cultural Change*, *Educational Empowerment* and *Payoff*. These dimensions have been found to be especially relevant for the successful implementation of a BSC in an SME as they materialise differently to larger companies, while a number of aspects are similar to large companies. For a successful BSC implementation in an SME, it is not about making the process shorter or less expensive. This study addresses the different barriers as well as needs SMEs have in regards to the BSC, mentioning significant barriers in awareness, management expertise, company culture, employee buy-in, perceptions on set up and maintenance cost as well as in regards to payoff.

The findings largely resonate with previous evidence from literature citing lack of financial and human resources, misconceptions in regards to the benefits of PMS as well as short term planning typical for SMEs as barriers to the usage of PMS (Garengo et al., 2005). However, this research puts forward additional aspects that are not found in literature up to today. First, the research stresses the importance of a different approach to argument BSC usage in an SME with ways to break the resistance barrier towards goal-oriented steering systems typically found in SMEs,

proposing mitigation strategies to create the need for the BSC. The research also contends ways to correct misconceptions and alleviate fears on using a BSC in an SME. Secondly, due to often missing management and employee expertise as well as employee-buy in, the study proposes ways to create a shared BSC understanding and allow for mid-management and employee footprint, securing the usefulness and success of the BSC in an SME. Thirdly, it brings forward ways to trigger the "game changer" for any BSC implementation in an SME, which is to successfully argue and find ways for a quick materialisation of BSC usage payoff in SMEs, including adequate implementation depth as well as to keep momentum.

The next section will highlight the results in light of existing literature, stressing which new insights emerged as well as what findings contradict past research.

5.3 Discussion and contribution to literature

Cultural Change: How to "break the resistance barrier"? Comparison to the academic literature

As previously found by Hvolby and Thorstenson (2000) and McAdam (2000), especially in SMEs, management methods and tools are often perceived as of negative impact to the flexibility of an SME, causing needless bureaucratisation. Also, as characterised by Hudson et al. (2000) a "firefighting" mentality is often embedded in SMEs, counterintuitive to using a BSC. These perceptions have been confirmed by the experiences contended by experts and informed non-users in this research study, citing the "stomach-based" and more operational, tactical steering done in SMEs. Interview participants, however, suggested the argument that an effective BSC, if set correctly, can support in "firefighting" and provide as a valuable tool setting the boundaries of the daily operations within an SME. As there is no alternative for strategy, goals and communication, the BSC, therefore, becomes the guiding framework within a company moves and not, as stated above, an over-engineered tool making an SME inflexible.

In regards to the type of measures used, the study could provide confirmations in regards to the depth of BSC perspectives utilised by SMEs. As Giannopouolos et al. (2013) had found, only 30% of studied SMEs stated that non-financial measures were very important. This study confirmed that most of the times, SMEs measure the financial and customer perspective, sometimes also the internal business perspective, but mostly leave out or give little importance to the organisational learning perspective. Not all participants hereby would state that this is due to data availability but the study suggests that this limited usage of non-financial KPIs can indeed be traced back to culture

and management perceptions regarding KPI importance.

Up to today, little attention has been paid by academic literature regarding SMEs being approached to adopt a BSC in regards to their reasoning for not using or to what concerns the company culture required to successfully implement a BSC, as most case studies as presented by Andersen et al. (2001), Biazzo and Garengo, (2012), Chow et al. (1997) and Gumbus and Lussier (2006) are representative for SMEs that have a predisposition and willingness to implement the BSC, as noted by Biazzo and Garengo (2012) their BSC projects were carried out with companies "extremely willing to improve and innovate their administration and management" (Biazzo and Garengo, 2012, p. viii). This leads to a considerable knowledge gap that cannot be filled by Chavan (2009) stating that the BSC approach requires changes in culture within organisations, highlighting that different companies (also small vs. large) may have different needs.

The mentioned mitigation strategies relevant for SMEs provide aspects on how to create the need, correct misconceptions and alleviate fears in more detail than done before and highlight the importance to especially pay attention to the interplay of culture and BSC, challenging the view of Claver et al. (2001) claiming that a company's culture should be adapted to the needs of the performance measurement system, but, for the reasons stated above, that BSC adoption and culture are bidirectional suggesting the underlying factors to be more subtle. Most importantly, the research study confirms that there is a coaction between a company's culture with a performance measurement system being or not being used. As previously found by Bititci et al. (2004, 2006) when studying Performance Measurement Systems, one can influence the other but also organisational culture can greatly impact the BSC implementation success. However, despite this apparent link between BSC implementation success and a specific company culture, little literature regarding barriers to BSC implementation in SMEs due to organisational culture exists. Comparable but, however, more general studies refer to the resistance of Total Quality Management implementation in SMEs as studied by Sousa and Aspinwall (2010). They found that, while there is a natural advantage of an owner in an SME being close to action and if committed to an activity, key to permeate and enable change within her/his company, the disadvantages often lie in the lack of willingness these owners often seem to have concerning change processes, accompanied by a general fear towards change of existing culture leading to a natural resistance to change. This is also suggested by this research study and confirmed by Deem et al. (2010), finding a statistical link between BSC effectiveness and organisational culture (especially in regards to empowerment and team orientation, coordination, agreement, core values, customer focus and creating change).

This research study confirms the findings of Yusof and Aspinwall (2000), explaining that a barrier of TQM implementation in SMEs may be linked to company structure, with often incompatible organisational structures with isolated departments as well as finding that hierarchies in SMEs are different and the owners are performing both strategic and operational tasks.

Educational Empowerment: How to achieve it? Comparison to the academic literature

Whether large or small, an organisation's success depends on having aligned actions of employees with the strategic goals. Back in 1992, Kaplan and Norton appreciated that employees need to understand what is required of them, that they have the appropriate knowledge and are able to achieve what is being asked (Kaplan and Norton, 1996a) or as stated by Rucci et al. (1998) "…[…]… unless employees grasp the purpose of the system …[…]… and have a clear picture of how their own work fits into the employee-customer-profit model, they will never succeed in making the whole thing work" (Rucci et al., 1998, p. 84).

According to Abernathy (1998), the typical employee does not understand the organisation's strategy and therefore also not know what is needed in terms of contribution, besides often not understanding how to improve strategic results. This study further stressed the importance of empowering all employees to understand how their BSC works and how employees can influence KPIs with their actions, as the collected data points towards the importance that seems to be especially key for SMEs, to take further steps in educating the employees who will need to take over the process and to identify internal champions that will work as advocates during and after the implementation period in order that the organisation "lives" with the BSC.

Hereby, the research project confirms the importance for BSC implementation in SMEs to tackle the aspects of limited management and employee buy-in by, stressing the importance to emphasize the BSC team-based process as well as the need for extensively communicate the usefulness of the BSC as presented by Gumbus and Lussier (2006). Craig and Moores (2010) propose the arrangement of initial kick-off workshops to set expectations and achieve engagement when starting the BSC implementation within SMEs. This, however, is a methodology used at a point when the adoption of the BSC is already decided upon as well as does not consider cultural aspects of an SME and can therefore be seen as a best practice for all type of BSC implementations, not specific to SMEs.

Also, the study provides additional evidence for the importance to integrate customised or also pre-existing KPIs into the implementation stages as proposed by Craig and Moores (2010) and Biazzo and Garengo (2012). Beyond that and more in detail, experts confirm the importance of the BSC dashboards to be transparent, understandable and accessible, as highlighted by Biazzo and Garengo (2012) and Person (2013). However, these literature suggestions do not relate back to SMEs as they are applicable to all types of companies, as, for all cases, a cost-effective, pragmatic and smooth BSC implementation needs to be pursued.

Beyond the literature mentioned above, little is known today on how to further mitigate the lack of commitment and confidence by employees in Quality Management as presented by Ngai and Cheng (1997) often found in SMEs. As mentioned by Atkinson and Holden (2000) "change is sustained only when people in an organisation take ownership" (Atkinson and Holden, 2000, p. 10) so that the new culture is considered as the one to continue pursuing in the future. Especially in regards to BSC implementation in SMEs, this study mentioned the importance of triggering understanding via buy-in and educational empowerment. Here, it would be worth understanding, beyond what has been mentioned in this research, what triggers employee understanding and buy-in for employees less exposed to goal-oriented steering[24]. These aspects are especially worthwhile to study, since as some participants of this research study would point out, an unsuccessful implementation often goes back to limited employee buy-in:

> *"Even if implemented correctly, over time failure comes due to resistance at a level below the champions" (R.M., Expert)*

Payoff: How to secure adoption ROI? Comparison to the academic literature

The aspect of payoff, stressing the importance to convincingly argue the benefit vs. cost of a BSC introduction in an SME, despite being an aspect of utmost importance, has been strongly overlooked by literature so far. In fact, there is very little as well as too broad literature tackling this problem in an empiric way.

This research project found strong evidence confirming findings of Barnes et al. (1998) and Hvolby and Thorstenson (2000) claiming that SME often cite required resources as a major hurdle to

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[24] As compared to the case study of the US retailer Sears by Rucci et al. (1998), in which town halls and learning maps to increase understanding on how the company's business model are utilised. For SMEs, more pragmatic solutions need to be found.

implement a BSC, also in regards to its maintenance. This research proposes that these arguments are mostly due to unawareness of the tool as well as a missing customised approach for an SME, since, as some studies by Chow et al. (1997), Machado (2013) and Rickards (2007) would state as well as the experts interviewed could confirm, the strength of the BSC lies in its flexibility to be adapted to any size of company with some experts highlighting that, once it has been decided in favour of a BSC adoption in an SME, the implementation is even easier than in large companies.

> *"Due to different reasons (complexity levels etc.), the BSC is even more suited for SMEs than for large companies" (C.F., Expert)*

This study found evidence that the processual (BSC implementation phases, maintenance etc.) and temporal (time frame) factors of a BSC implementation are not, as stated by Lueg and Vu (2015), citing evidence from Papalexandris et al. (2004), "overrated" critical success factors with already high attention level being put on them. Relevant literature, such as Hudson et al. (2001) point out that the implementation process of a BSC in an SME must be iterative, maintain the strategic relevance and help sustain momentum, without, however, giving advice on how this should be achieved. These arguments are therefore too general to add knowledge on how to succeed with an implementation of a BSC in an SME. In fact, as suggested by this study, the processual aspect of setting up the follow-up and review as well as the temporal aspect of time to implement and to reap benefits varies strongly from SMEs to larger companies and are a real "game changer", needing closer attention in an SME. The study suggests that the processual iterations of introducing a BSC in an SME are similar to large companies, however, the timings of these phases need to be different and shorter to large companies as well as a constant focus must be put on demonstrating payoff at each phase of the process. Hereby, the research refutes the model for BSC implementation in SMEs of Davig et al. (2004) that achieves a payoff after a couple of years, as this is not found to be realistic for an SME. No relevant literature exists on this aspect yet, however, the finding is similar to Sousa and Aspinwall (2010) stating that in an SME a Performance Measurement System implementation methodology needs to adopt a framework that will give a short-term return. Therefore, this study proposes clearer guidelines than those existing in literature so far.

Finally, this research also refutes the view of Rompho (2011) proposing that the BSC often fails in SMEs due to the continuous changes in strategy – as the collected data demonstrates, this failure is due to the wrong usage of the BSC, which actually should help in supporting strategic decisions and adaptations. The argument of this research study is confirmed by Cheng and Humphreys (2016), stating that the BSC undoubtedly enables firms to face strategic uncertainty more effectively and

that firms using a wide range of measures are more likely to be aware of strategic uncertainty. Therefore, this research project adds considerable knowledge on the payoff aspect by pointing out some strategies on how to convincingly argument the usage of a BSC in an SME, explaining aspects of implementation depth and method suited for an SME as well as stressing the importance of for the champions to communicate the positive return on investment at every stage.

5.4 Implications for practice

This research highlighted the need for an effective BSC implementation tailored to the needs and characteristics of SMEs. Several barriers and improvements on how to implement a BSC in an SME were identified in this research study. As William Shakespeare used to say "If there is a good will, there is a great way" - this research proposes how to obtain *Cultural Change*, achieve *Educational Empowerment* and prove *Payoff*, all crucial for a BSC implementation in an SME. The summary of the recommendations for practice is given in table 5.1 below.

Table 5.1: Summary of findings for practitioners for BSC implementation in SMEs; own analysis

Aggregate dimensions	BSC implementation strategies for SMEs
Cultural Change	▪ Consider additional time investment in information management with entrepreneur/owner ▪ Initiate discussion on Strategy (Priorities, Investments, Decision-Making, Critical Success Factors), not directly on the BSC ▪ Stress customised (company tailored) approach
Educational Empowerment	▪ Take existing and agreed upon strategic objectives/KPIs as a starting point ▪ Involve mid-management to allow for footprint ▪ Identify and educate internal champions, also on BSC process review ▪ Highlight importance of non-financial perspectives (e.g. Organisational Learning)
Payoff	▪ For most SMEs, apply the Strategy Map and Type I or Type II BSC ▪ Use a similar implementation process as for large companies, but create a timeline with shorter payoff periods vs. large companies ▪ Avoid creating a parallel system and be pragmatic (e.g. use Microsoft Office if possible) ▪ Establish about 10 key KPIs (maximum 16) ▪ Create first scorecards within 8 weeks ▪ Keep momentum with clear payoff communication, put results immediately into practice

By using the proposed techniques, practitioners can now anticipate these obstacles as well as use methodologies to overcome them successfully, ensuring management and employee buy-in, a pragmatic customised project design, a demonstration of the benefits of a BSC in an SME as well as appropriate project length and ultimately, return on investment.

5.5 Limitations of this study and implications for future research

This research project has been able to demonstrate that the data and the findings are grounded on pre-existing theory, meaning that the results have a broader significance than the basis of the actual work. However, there are limitations to this work that need to be mentioned.

The study was designed to obtain emergent topics on how a BSC can work in an SME environment. Considering the nature of the research being explorative and consisting of interview descriptions, the limitation of this study is that the collected data is, despite being relevant, largely perceptual. Hereby, no attempt was made to link the emergent topics and descriptions of experts and non-users to measure their actual success in each of the mentioned cases. This limits the implications of this study, as no conclusions on the relative effectiveness of the three patterns *Cultural Change*, *Educational Empowerment* and *Payoff* can be inferred, as these do not represent decision rules.

Due to the sample size, it will be important to validate the findings with larger samples, also testing the proposed aspects through longitudinal case studies. Here, it might be worthwhile choosing a sample with SMEs of a more specific size, as the definition of SME left a broad range and variety of companies to be included as such.

Also, it would have been interesting to include the view of the current BSC users in SMEs that had worked with the interviewed experts in order to share their views on barriers as well as their opinion on the actual success factors for implementation of the BSC in their SME. This would have helped to validate the arguments of experts but also to more strongly validate successful methodologies from an internal (SME) perspective. Without their view, this research project remains strongly focused on the experience of management consultants, with a predominantly positive view towards the BSC and their adoption success in SMEs.

Although this research study raised a multitude of relevant aspects of the how to successfully implement a BSC in an SME for practitioners, it also suggests several important aspects worth studying in future research.

First, the research results stressed the importance of a certain cultural predisposition to have a possibility to convince the management of an SME to adopt a BSC. Besides broadly describing the kind of culture needed, it would make an important contribution to study the cultural predisposition

in more detail by considering and categorising cultural determinants such as structural, political, emotional aspects to study how they can be influenced accordingly. Herewith, it would add a contribution to research to better understand what the effects of an adoption of a PMS like the BSC are on top and mid-management.

Secondly, the research project highlighted the importance of misleading perceptions towards the BSC as being not suited for the reality of an SME. The research proposes that there is a grey area of non-users pretending to know but actually not knowing the BSC in detail, in terms of what to expect from the tool. The research contends that the lack of BSC adoption within SMEs might be partly due to managerial incompetence, lack of best practice usage and poor financial controlling, but that there are also more profound and underlying reasons to this. It would, therefore, be interesting to study this grey area in more detail to allow for a more specific elaboration of strategies on how to overcome these barriers. Also, it would be worth understanding in more detail what the conceptual difficulties encountered in SMEs are, as for example whether they relate do difficulties in agreeing on the right strategic objectives or setting the right targets. Here, it would be interesting to understand more about the methodologies used to identify the right strategic objectives, measures and activities in SMEs, as interview participants would only provide basic information on this aspect and whether there is a difference between large and small companies.

Thirdly, as it turned out, the payoff demonstration is a key "game changer" for the BSC adoption in an SME and the temporal aspect of time to implement and to reap benefits varies strongly for SMEs compared to larger companies. Up to today, however, little attention has been paid by academic literature regarding the argumentation to how to convince and demonstrate to SMEs that a BSC implementation yields considerable payoffs also for this type of company. Here, further research should be carried out to elaborate on SME-friendly ways to ensure BSC payoff. Also, it would be useful to better understand when BSC application benefits actually start occurring within a company. Here, it would be interesting to shed some light with more case studies on the difference in payoff strategies of successful vs. unsuccessful cases. Within this aspect, it would also make a contribution to both academia and practice to better study the role digitisation can play in enabling payoff demonstration, lowering costs for BSC set up and maintenance.

Lastly, the role external management consultants play in driving BSC implementation in practice is key. As it cannot be expected from most SMEs to implement a BSC completely relying on own resources, it would be interesting to gain more knowledge on the roles played by consultancies for

successful implementations, looking at aspects such as BSC content support provided, depth of cooperation, training of employees as well as the sparring partner function after an implementation. Hereby, the role public funding bodies can play in helping SMEs in adopting a BSC is worth studying. Hand in hand with this observation, there is an interest to know whether and how many of the companies with a successful past BSC adoption are still using the tool and what the common pitfalls to avoid especially for SMEs in the mid and long term are.

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Abbreviations

BSC	Balanced Scorecard
CSF	Critical Success Factors
EU	European Union
FTSE	Financial Times Stock Exchange (Index)
OECD	Organisation for Economic Co-operation and Development
KPI	Key Performance Indicator
PMS	Performance Measurement System
ROI	Return on Investment
SME	Small and Medium-sized Enterprise

Appendix 1: Example of a Strategy Map
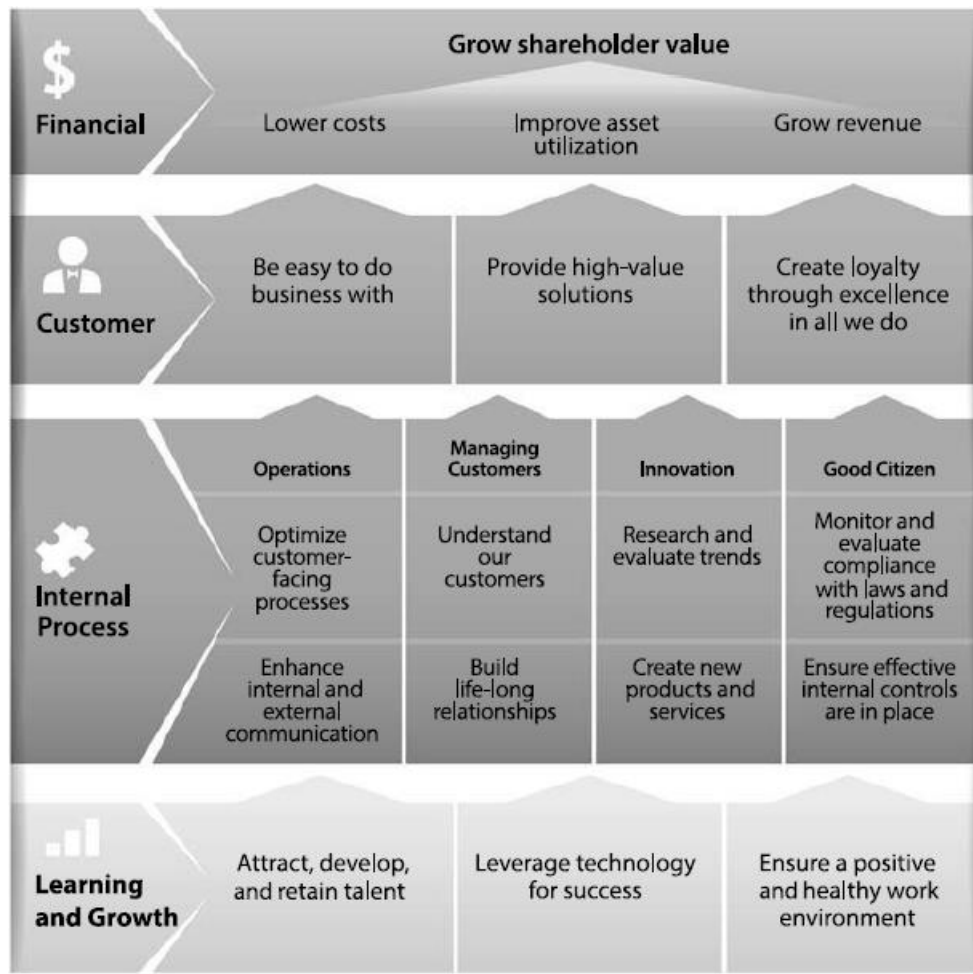
Figure showing an example of a generic Strategy Map as shown by Niven (2014, p. 10)

Appendix 2: Examples of BSC Strategic Objectives
(Financial, Customer, Internal Processes, Learning and Growth Perspectives)

Possible Financial Objectives

- Increase shareholder value
- Maintain positive cash flow
- Grow net profit
- Minimize costs
- Increase revenue
- Improve project profitability
- Increase revenue from new products
- Achieve targeted gross profit
- Achieve sustainable profitability
- Invest strategically
- Optimize asset management
- Broaden revenue mix

Drive Value for Shareholders

Revenue Growth | Productivity

Sell new products or services to the market | Reduce costs

Deepen relationships with current customers | Improve asset utilization

Note: These are generic objectives, and should be refined/altered to suit your strategy execution needs.

Operational Excellence	Product Leadership	Customer Intimacy
• Offer best value	• Build brand awareness	• Increase training on key products offered
• Maximize inventory turns	• Leverage key partnerships	• Increase number of solutions per customer
• Minimize stock-outs	• Increase key product functionality	• Grow share of targeted customers' spending
• Reduce customer complaints	• Provide the best product in the market	• Ensure all employees have access to customer information
• Increase ease of purchase	• Develop brand ambassadors	• Utilize analytics to target customer offerings
• Reduce manufacturing defects		• Grow number of customer awards received
• Eliminate service errors		• Increase average length of customer relationship
• Grow in targeted segments		• Maximize customer loyalty
• Provide fast and accurate service		
• Be easy to do business with		

Operations Management	Customer Management	Innovation Management	Regulatory and Social
• Optimize supply chain	• Understand customer needs	• Leverage key partnerships	• Build lasting community partnerships
• Increase throughput	• Develop and utilize customer profiles	• Develop innovative market-leading solutions	• Reduce environmental footprint
• Maximize yield	• Increase cross-selling	• Identify and learn from lead users	• Ensure full compliance with all regulations
• Attract channel partners	• Maximize share of wallet	• Leverage affinity groups	• Encourage employee community involvement
• Continuously improve operational efficiency	• Identify and target high growth market segments	• Lower product development cycle times	
• Enhance risk management processes	• Strengthen the sales process	• Leverage R & D	
• Re-engineer bottleneck processes	• Grow customer loyalty		
• Align resources with strategic goals	• Build brand recognition		

Human Capital	Information Capital	Organization Capital
• Attract employees that match our skill requirements	• Ensure our people have access to the right information at the right time	• Foster an environment where people feel valued and can deliver their best
• Close strategic skill gaps	• Transform information into a competitive advantage	• Build a high-performing, disciplined team
• Align training with strategy	• Use technology to capture, share, and apply information	• Clearly communicate expectations, accountabilities, and achievements
• Leverage a highly engaged workforce	• Optimize information management through information technology	• Inspire associates to live the brand
• Be an employer of choice	• Share best practices	
• Develop succession plans for key positions		
• Retain high quality performers		

Figures showing examples for BSC Strategic Objectives within the four Perspectives as shown by Niven (2014, p. 176, p. 186, p. 194, p. 207)

Appendix 3: Interview guide for study participant

University
of Glasgow

Adam Smith
Business School

Thank you for participating!

Dear participant, a sincere thank you for taking part in this interview and for helping me in my MBA Dissertation with the title "How does the Balanced Scorecard work for SMEs?" at the University of Glasgow, Adam Smith Business School. This guide is intended to provide you with an overview of the research study as well as the themes that will be discussed during our interview.

Study title and researcher details:

Title: "How does the Balanced Scorecard work for SMEs? An explorative study"

Matthias Troebinger, MBA Candidate, Adam Smith Business School, University of Glasgow

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Documents:

As a participant, you will have received this document **("Interview Guide and Themes") as well as the "Plain Language Statement" and "Consent Form"** some days in advance of the interview. If any of the three documents is missing or you do have any questions or remarks on these documents, please do let me know at the start of our interview.

Background information about the study:

The Balanced Scorecard (BSC), despite being widely appreciated by academia and practitioners as a leading strategic management and performance measurement tool and very diffused within leading large companies, is rarely used in Small and Medium-sized Enterprises (SMEs). After deriving the theoretical reasoning for why SMEs should use a BSC, the trigger of this research is to explore the reasons for non-usage of the BSC in SMEs in more detail as well as, for the cases in which the BSC is implemented in SMEs, gain more understanding regarding methodologies (how) the BSC can be implemented and successfully used in these type of companies.

In fact, up to today, there exist very few comprehensive and empirically tested studies on how to combine the BSC with the characteristics of an SME being a "simpler" and responsive organisation.

For more detailed information as an introduction to the study, please see the last section **("FURTHER BACKGROUND INFORMATION")** of this document.

Practical information about the interviews and the roles of interviewer and interviewee:

You have been selected since you are either

- A consultant or professor, expert on the usage or implementation of Balanced Scorecard in SMEs

- A Manager, non-user of the Balanced Scorecard in your company despite knowing the tool

To take part, you **do not need** to have an opinion, experience and be **knowledgeable on all** of the themes of the interview, but your personal experience and opinion on each question is highly appreciated.

The interview is a **semi-structured questionnaire**. Due to the explorative nature of this research, you are herewith below provided with the interview **themes** but not exact questions, as they may vary based on your actual responses during the interview and your knowledge on the topic.

The role of the interviewer (Matthias Troebinger) will be to stimulate your responses with mostly open questions, **not** to engage in a debate. The interview wants to bring up your experience with and knowledge of the topic to be analysed in accordance and comparison with the other respondents answers.

The interview will last maximum **50 minutes**. The interviewee has the right to not answer any question and the interview will be stopped if the participant wishes.

The data collected will be **anonymised and stored in a safe location**.

If interested, the participant can request an electronic copy of the result of the final dissertation.

Plain Language Statement, consent form and electronic recording:

You will be required to confirm before the interview that you have read and understood the document "Plain Language Statement" as well as "Consent Form" and that you agree that the interview will be recorded electronically in order to give the interviewer the possibility to actively concentrate on questioning and listening, provide an unbiased record and to reanalyse the data at a later date.

Interview themes:

- Applicability of the Balanced Scorecard (BSC) to Small and Medium-sized Companies (SMEs)

- Needs and requirements of an SME in regards to the BSC (also in comparison to larger companies)

- Main reasons for low implementation levels of the BSC in SMEs

- Main reasons for failure when implementation of BSC in SMEs is attempted

- Participants group consultants: Major concerns of and issues with clients when potential BSC implementation is discussed

- Adjustments needed to apply the BSC successfully in SMEs (also in comparison to larger companies)

- Usage of the BSC in the future

- Other questions that should have been asked from the point of view of the interviewee

Appendix 4: Interviewer guide

![University of Glasgow — Adam Smith Business School logo]

Introduction

▪ **Data and Time, Location; Introduce myself**

▪ **Plain Language Statement and Consent Form:**

"Please orally confirm that you have read and understood the Plain Language Statement as well as Consent form and that you consent that the interview will be recorded electronically."

"The interview is a semi-structured questionnaire. The role of the interviewer (Matthias Troebinger) will be to stimulate your responses with mostly open questions, NOT to engage in a debate. The interview wants to bring up your experience with and knowledge of the topic to be analysed in accordance and comparison with the other respondents' answers."

"To take part, you **do not need** to have an opinion, experience and be **knowledgeable on all** of the themes of the interview, but your personal experience and opinion to each question is highly appreciated."

▪ **"Could you please sum up your job position role, type of company you work for, your area of expertise and your relation to the research topic (BSC, SMEs)?"**

Should SMEs use the BSC?

▪ "**From your point of view and experience, should SMEs use a Balanced Scorecard?" OR "Are there specific advantages you see for an SME using a BSC also in relation to differences in advantages vs. larger companies?"**

If question was challenged, some additional information was given: Literature and practitioners advocate BSC adoption also by small companies, since, due to its flexibility and adaptability, it is a tool for all types and sizes of businesses, as beneficial for large organisations as SMEs (Andersen et al. 2001; Biazzo and Garengo, 2012; Giannopoulos et al., 2013; Gumbus and Lussier, 2006; Rompho, 2011).

If usefulness was critically questioned: Researchers such as Rompho (2011) state that SMEs often have a much higher need to change strategy more quickly compared to larger companies and therefore conclude that the BSC often fails in SMEs, despite considering all other factors critical for BSC implementation success**.**

▪ **"Is the BSC therefore unsuitable for SMEs per se? Why is this the case for SMEs but not for larger companies?"**

Why are so few SMEs using the BSC?

▪ **"From your experience, what are the main reasons for the low implementation level of the BSC in SMEs (in comparison to larger companies)?" OR "Do you see the reasons for the low**

implementation level of BSC in SMEs being due to the tool, the requirements of SMEs or due to consultancies targeting larger companies?"

Depending on the participants interest, additional information was given: According to studies, BSC implementation rates are well below the diffusion rates in large companies (FTSE 1.000 with about 50%-70%) (Mackay and CIMA, 2005; Giannopoulos et al., 2013; Horváth and Partners, 2014; Rigby and Bilodeau, 2016; Vohl, 2014; Wieselhuber & Partner, 2002).

If limited depth of response, the interviewer will stimulate discussion by citing evidence, including reasons such as: <u>Knowledge of BSC</u>, <u>commitment of management/owner</u>, <u>missing involvement of key users</u>, <u>arduous maintenance</u>, <u>missing software</u> (capabilities), <u>no BSC understanding of employees</u>, <u>no formulated vision/mission statements</u>, <u>politics</u> (sensitive information), <u>low perceived value vs. implementation cost</u>, <u>frequent changing of goals and strategies in an SME compared to large companies</u> etc. and would ask participant to comment on selected aspects.

- **"From your opinion, what are the most important needs in regards to BSC usage that clearly differ from the ones in large organisations?"**

If the question was challenged, some additional information was given: Studies focused on the implementation of the BSC in SMEs stress the different needs SMEs have in regards to BSC implementation in comparison to larger enterprises (Biazzo and Garengo, 2012; Craig and Moores, 2010; Gumbus and Lussier, 2006; Hudson et al., 2001; Rompho, 2011).

If limited depth of response, interviewer will stimulate discussion by citing evidence from literature review, including needs such as: <u>Flexibility</u>, <u>easy maintenance</u>, <u>lower cost</u>, <u>employee buy-in at all levels</u>, <u>lower implementation time</u> etc. (Biazzo and Garengo, 2012; Hudson et al., 2001; Manville, 2007; Wieselhuber & Partner, 2002; Vohl, 2014).

Hurdles to implement the BSC (in SMEs)

- If expert had extensive experience with BSC implementation within SMEs and time permitted, further questions were asked:

- **"Some scholars agree in saying that in business, the causal relationships of the Organisational Learning, Business Process, Customer and Financial Perspective postulated by the BSC are not that obvious (Epstein and Manzoni, 1998; Liedtka et al. 2008) and question the ability of an organisation to agree on a strategy in such clear terms. Do you see this issue as well?"**

- **"Is setting the wrong goals / not holistically (Barnes et al., 1998) a more pronounced problem in SMEs compared to larger companies?"** (missing ability of management to set the goals, missing understanding of employees, KPIs and activities correctly (Hoque, 2014))

- **"What do you think of the reason for low implementation, especially in SMEs, being the increased transparency in terms of data sharing with all employees a BSC brings to a company as well as the increased "risk" to admit failure in terms of performance or not knowing the direction the company is heading? "**

- **"Do you see a higher scepticism level towards the BSC in small vs. larger companies? If yes, why is this the case?"**

- **"Is full employee buy-in even more crucial for BSC implementation in SMEs than in large companies?"**

How to implement? Overcome barriers, best practice examples/methodologies

▪ **"Does the BSC need to be adapted for implementation in SMEs?"**

▪ **"How important is the company culture to successfully implement a BSC in an SME – what is your experience?"**

▪ **"Should the BSC implementation in an SME be top-down or also bottom-up?"**

▪ **"Do you see ways to enable company owners and SME managers to adapt a BSC in a more pragmatic and less laborious way?" OR "How does a BSC for an SME need to look like – how is the process different?"**

If the question was challenged, some additional information was given: Practitioners propose scorecard as a checklist to bypass long and costly "Audits" aimed at preparing a first structure and facilitate the set-up of a BSC. Biazzo and Garengo (2012) propose a "circular methodology" to implement a BSC in SMEs by evaluating the tacit knowledge that often exists in SMEs step by step.

If BSC had been implemented often in an SME:

▪ **"What are your "proven" steps to get the 'Strategy Map' as well as goals and activities formulated for a specific BSC in an SME?"**

▪ **"What type of BSC (1st generation, 2nd generation, 3rd generation) is most suited ("enough") for an SME?"**

Concluding questions

▪ **"Where do you see the usage of BSC in SMEs in 10 years?"**

Examples were given, such as: Increased due to wider data access, increased management capabilities, easier software usage through digitisation or decreased due to a missing flexibility or other tools that are more useful.

▪ **"Is there any question I should have asked but I didn't ask to understand "how" a BSC should be implemented in SMEs?"**

We will conclude the interview now. Thank you again for your time.

Appendix 5: Representative data for first-order categories

(1/5)

Factors	Representative Data
I Substance	
A) Translation of company strategy into the BSC	• "Getting the companies strategy to fit in a standard form and operational goals is indeed the biggest challenge" *(R.M., Expert)* • "SMEs have often the advantage that the owner understands and overlooks the whole business …[…]… fewer scorecards need to be reconciled because of mostly simpler company structures" *(G.L., Expert)* • "More business units and interdependencies actually make the construction of a BSC in a larger company more difficult - larger organisations are way more complex and more interdependencies to capture correctly" *(D.B., Expert)* • *"*Taking the future into account, creating a forward-looking tool is important" *(R.M, Expert)* • "A strategy is a strategy and should be there for a few years …[…]… you might go more on a tactical level in an SME in order to react tactically …[…]… even though you want to be agile, there is no alternative for strategy, goals and communication" *(H.V., Expert)* • "Really good managers sometimes can't explain the why of something, they just know *(R.M., Expert)* (in regards to tacit knowledge) • "I don't agree that the BSC is less suited to SMEs; strategies might change more quickly – but adapting to issues should be part of a vision/strategy as the critical success factors remain the same" *(I.A., Informed non-user)* • "In our company in fact we aren't able to translate the vision try to have a vision - we never do connect these things but should put focus on it…" *(F.D., Informed non-user)* • "Don't tell me you need a list of more than 40 KPIs to have a clear view of where the journey of the company is going – the management team should be able to do this!" *(M.K., Informed non-user)* • "I do see the barrier of making the clear connection of the BSC with the actual work of employees" *(J.X., Informed non-user)*
B) Approaches towards implementation depth	• "Every company is different, but to me, for an SME the BSC Type I or Type II seems enough" *(H.V., Expert)* • "[…] For large companies, nothing seems to shift them…[…]…in an SME, reality of everyday life dominates you – it just takes one phone call [of an important customer] and your strategy is altered" *(R.M., Expert)* • "For an SME, I don't think that always all 4 dimensions are needed as by the book" *(N.W., Expert)* • "In an SME you might decide to remain with the strategy map on the goal level" *(C.F., Expert)* • "Yes, 20 is plenty – go for a maximum of 16 KPIs, sometimes even below that" *(H.V., Expert)* • "For an SME, the fewer KPIs, the better" *(J.D., Expert)* • "For the restaurant round the corner you should have 5 instead of 20 strategic initiatives" *(N.K.)*
C) Building upon existing reporting systems	• "Try to build upon and integrated into the existing reporting system to not have a huge change" *(G.L., Expert)* • "Most often companies might have single perspectives measured in-house, but not all perspectives used altogether or interrelated" *(C.F., Expert)* • "Tedious maintenance has always been an issue, it often took time to update there was the risk of getting inflexible" *(C.F., Expert)* • *"*Take a number of existing KPIs and see what you can use of them, this is always better than starting with completely new ones" *(G.L., Expert)*

Appendix 5: Representative data for first-order categories

(2/5)

Factors	Representative Data
II **Individual**	
▪ **D) Allowing for mid management footprint**	▪ "The mid management is the backbone of every SME – they either make or break things - they need to be behind it as well as they will provide the input for the metrics" *(J.D., Expert)* ▪ "Teaching of mid-management and BSC development with them is key…[…]… they will be the champions of how to work with and to advocate the BSC in the group …[...]… otherwise it will remain just a tool for the top" *(N.W., Expert)* ▪ "Allow the footprint of the mid-management …[…]… it should become their own BSC" *(H.V., Expert)*
▪ **E) Information management and training of employees**	▪ "Sometimes the BSC is harder to implement because of this natural distrust in methods" *(H.V., Expert)* ▪ "For an individual in an SME the BSC implementation is somehow a big step if she or was not used to be asked to contribute in this way" *(H.V., Expert)* ▪ "SME employees may be more resistant to accept anything that might be seen as a management fad" *(J.D., Expert)* ▪ "Often the qualification level is lower than in larger companies… […]… what counts for the top-management also counts even stronger for the employees" *(M.M, Expert)* ▪ "For SMEs BSC like tools have something like and educational benefit, also in regards to management development, forcing managers to cascade down strategies and initiatives in a quantitative way" *(N.W., Expert)* ▪ "I would go one step further saying that ex-employees of leading consultancies don't necessarily work for SMEs later in their career" *(N.K., Informed non-user)* ▪ "Larger companies often tend to have higher calibre staff… […]… but this means you still need to make the Scorecard measures and activities clear to everyone" *(I.A., Informed non-user)*
III **Managerial**	
▪ **F) Management expertise and skills**	▪ "In an SME you will find reluctance unless seriously championed by someone really knowing what they are doing" *(J.D., Expert)* ▪ "This might sound a bit harsh – but the understanding for how the tool works is intellectually often not existing" *(C.F., Expert)* ▪ "One of the key reasons for not using the BSC in SMEs is that managers simply don't know it" *(H.V., Expert)* ▪ "A strong owner is often the one that hinders the BSC implementation" *(G.L., Expert)* ▪ "SME managers often have different background… […]… not many of them have finance knowledge….so the BSC becomes a blank field" *(D.B., Expert)* ▪ "In SMEs often mid-managers come from the operational side, are there since many years… […]… and have less of an academic background" *(N.W., Expert)*
▪ **G) Centralised vs. decentralised information**	▪ "A large part of SMEs I worked with [family owned German businesses] were very hierarchy driven and decision making was mostly based on the will of the owner, regardless what numbers were saying" *(N.K., Expert)* ▪ "In a first instance, managers don't like the effects of the BSC in terms of steering, central vs. decentralised information etc." *(C.F., Expert)* ▪ "There is often lack of openness in SMEs to share goals and plans - often even not profitability goals are shared across the whole company or for example personnel development is kept as a leadership task" *(G.L., Expert)* ▪ "If there are not many shareholders and mostly just the owner, then decisions are taken centrally and not many people are involved" *(J.M, Informed non-user)*
IV **Leadership**	
▪ **H) Top-down and bottom-up participation**	▪ "Top management commitment is key regardless of size – implementation from down or the side inevitably leads to failure" *(C.G., Expert)* ▪ "Management never really took care of this topic the way it should be handled – but Top Management participation and cascading to the organisation is key to success" *(M.K., Informed non-user)* ▪ "If there is not someone passionate and educated about the BSC than it doesn't work – it will become just another reporting system often in parallel with others…[…]… and will die" *(J.D., Expert)* ▪ "Top Management needs to own the BSC and drive the conversation around performance" *(J.D., Expert)*
▪ **I) Top management information prework**	▪ "[The first thing to do in an SME] is sit to down with the entrepreneur or manager and do additional basic information management work and talk about the company's strategy" *(H.V., Expert)* ▪ "The first step is always to check for the need and then convince the leadership team" *(G.L., Expert)*

Appendix 5: Representative data for first-order categories

(3/5)

Factors	Representative Data
V **Organisational**	
▪ **J) Role of strategic controlling**	▪ "Controllers are the wrong people to implement the BSC – they often do not understand the strategic importance and the professional way of how to use the tool" *(C.F., Expert)* ▪ "Controlling tends to not be the driver in SMEs… these are often bureaucrats" *(H.V., Expert)* ▪ "In SMEs, supporting functions like controlling are less developed" *(D.B., Expert)* ▪ "Most companies I work with use whatever they have as even don't have a real controller in the company… so they end up taking what they have from the accounting software" *(S.O., Expert)*
▪ **K) External support and training**	▪ "The low implementation level is a competency issue, controlling sometimes in SMEs not up to the level" *(C.F., Expert)* ▪ "Beyond the lacking awareness in regards to the BSC a concrete obstacle in the functional team like controlling is the usage of very basic controlling tools" *(D.B., Expert)* ▪ "There is very often little understanding for BSC usage – these companies need a consultant from outside" *(S.O., Expert)* ▪ "In larger companies there is the organisation [in place] and the time to spend for such tools to handle the data, feed it, analyse it" *(S.O., Expert)* ▪ "The understanding [for BSC like tools] in larger companies is greater as they are more used and exposed to controlling processes… […]… there is more need to explain in a small sized company" *(G.L., Expert)* ▪ "Try to convince more the employees why we do it" *(N.K., Expert)* ▪ "I don't believe on the validity of some of the numbers beyond the financial perspective that are being captured in our company" - e.g. customer perspective "I have the feeling that if they are not happy with the results 100 more participants are taken in" *(M.K., Informed non-user)* ▪ "There is data being measured without really knowing what we want to control with it" *(M.K., Informed non-user)* ▪ "In an SME the whole knowledge needed is not necessarily within the company" *(M.K., Informed non-user)* ▪ "An independent objective team should be established to deal with the BSC set up and maintenance - ensure a fair process and objectivity this is key" *(J.X., Informed non-user)*
VI **Cultural**	
▪ **L) Tool fitting to own culture**	▪ "Often due to power structures there is a restriction of information to a smaller circle - this is a common underlying aspect in 5 out of 10 companies" *(G.L., Expert)* ▪ "For many owners the BSC is even too holistic, some perspectives are harder to grasp and makes a strong academic impression to some of the managers" *(N.W., Expert)* ▪ "Often the BSC is just contradictive to the lived type of "stomach based" management" *(H.V., Expert)* ▪ Most SMEs I know are just less numbers driven" *(D.B., Expert)* ▪ "There is a refusal to go for a higher professionalization level in terms of transparency and numbers – this comes from a cultural problem" *(D.B., Expert)* ▪ "I would often find that it was older managers less likely wanting to embrace the BSC due to resistance and tendency to use what has worked for them in the past" *(I.A., Informed non-user)* ▪ "I am in favour of the BSC, however, I know that even our management would not be that open-minded… […] …getting their work evaluated by numbers in a combined KPI system is not something they are aiming for" *(F.D., Informed non-user)*
▪ **M) Founder's trap and limited transparency**	▪ "In SMEs often there are small "kingdoms" within a company, which leads to power/information silos that are hard to keep together" *(N.W., Expert)* ▪ "I think in larger companies there is more often the pressure concerning transparency so more direct need to steer precisely" *(D.B., Expert)* ▪ "In SME, so much is concentrated on one single person" *(M.M., Expert)* ▪ "There is always a reason for hiding bad figures or not sharing mostly being bad management" *(I.A., Informed non-user)* ▪ "The owner may see the usage of a BSC as dilution of power" *(J.D., Expert)* ▪ "Managers are often driven by power games vs. open and rational BSC – here it is less a question of company size but more of company culture" *(C.F., Expert)* ▪ "A reason for a company not implementing the BSC could be that, out of my experience, a manager may not want to admit to don't know where the company is going and what will happen in the future … […] ….might fear to show not to be fully in control" *(S.O., Expert)*

Appendix 5: Representative data for first-order categories

(4/5)

Factors	Representative Data
VII Political	
N) Wide participation vs. political tension	• "Even if implemented correctly, over time failure due to cultural resistance at a level below the champions" *(R.M., Expert)* • "If the owner at the very beginning of the project did not understand the value of the concept it is now going to work, they should not see it as an unnecessary evil" *(D.B., Expert)* • "Bring down the different business units all under one roof is almost impossible - single business units keep adding their KPIs and this is accepted" *(M.K., Informed non-user)*
VIII Financial	
O) Perceived complexity and resource commitment	• "Does the BSC appeal immediately to mid-management and team members to do their job better thinking of the resources required to set it up? Probably not" *(R.M., Expert)* • "Implementing a BSC in an SME while feeding many consultants doesn't work" *(H.V., Expert)* • "The main barrier is still that the BSC is considered mainly as too complex for a small company - this might also be an excuse to avoid creating too much transparency in the company" *(G.L., Expert)* • "It is expensive to implement such things if you are a small or medium sized company" *(M.K., Informed non-user)* • "SMEs don't have the time and the will to design something that is overly complex" *(J.D., Expert)*
P) Payoff demonstration	• "It is always a question of cost vs. benefit …[…]… a pragmatic approach is always to be used, from small to large companies" *(C.F., Expert)* • "The principles are equally adaptable corporate vs. SMEs" *(J.D., Expert)* • "In an SME you could get management together in 1 day to design a first BSC …[…]… they are pretty aware of their vision and strategy" *(J.D., Expert)* • "It comes down to the skills of the consultancy to explain the need for such a tool and procedure" *(H.V., Expert)* • "1) What is your strategy? 2) How do your measure strategy? 3) How do you make an investment decision? 4) Then start the argumentation about a BSC framework" *(J.D, Expert)* • "Mitigate the cost by using a good Excel sheet out of best practices and connect it to the companies database" *(S.O., Expert)* • "Yes, the cost barrier might be inhibitory for the benefit you will reach in one year" *(G.L., Expert)* • "Being scared by the costs must not be the case, a simple Excel can do the job" *(N.K., Expert)* • "Software tools can save time and money, but pay attention not to let the tail wagging the dog " *(R.M., Expert)* • "After a hard-selling of a BSC software companies realise that populating a new system is often more trouble than it is worth" *(J.D., Expert)* • "Digitisation offers opportunities to integrate steering cockpit in apps and be more real-time steered; also lower cost; interactive goal setting, a manager receives recommendations from the system" *(C.F., Expert)* • "Excel/PowerPoint is all you need - if you know what you want" *(J.D., Expert)* • "…[…]… start the discussion on mismanaged project because of wrong or missing focus and make the impact of such a tool tangible" *(N.W., Expert)* • "It is crucial to break the preconception of what the BSC is as most owners I worked with saw it just as a tool to share figures; so you need to explain that it is a key way to communicate with staff and to drive forward the business, quickly and efficiently" *(I.A., Informed non-user)* • "Yes, digitisation can help to gather data and for KPI evaluation - but it is not the game changer because as said a BSC implementation is about change management" *(F.D., Informed non-user)*

Appendix 5: Representative data for first-order categories

(5/5)

Factors	Representative Data
IX **Processual**	
▪ **Q) Set up: Step by step approach**	▪ "First discuss strategy and goals, then step by step do the strategy map, then focus on the interdependencies between goals" *(H.V., Expert)* ▪ "Therefore…..start simple, step by step on the way to a holistic BSC" *(G.L.,, Expert)* ▪ "Start with small steps, do the strategy map first as a quick payoff is needed; also, you could first just do one perspective and then you can get resources allocated for each step - not all at the same time" *(J.M., Informed non-user)* ▪ "…[…]… Set the basic KPIs with top management first, then, depending on SBUs do the process with the employees so that they are involved… […]… it is important that it is driven from the top but the result shouldn't be surprising for the bottom" *(M.M., Expert)*
▪ **R) Maintenance**	▪ "Even if implemented correctly, over time failure due to cultural resistance at a level below the champions" *(R.M., Expert)* → *link to organisational buy-in and empowerment/footprint* ▪ "There definitely needs to be one or more responsible for the BSC or the tool - also for consistency; with contact persons in all departments" *(N.K., Expert)* ▪ "It is a matter of responsibility …[…]…Clarify well the responsibility - don't hand over to regular controlling as it gets administrative [contrary to the actual intent]" *(H.V., Expert)* ▪ "For each initiative one page, with description accountable people, reasons why, 3 most important KPIs - this is a good starting point" *(N.K., Expert)* ▪ "In the companies I do consulting work for the review of strategic initiatives is often weakly structured" *(N.W., Expert)*
X **Contextual**	
▪ **S) Appropriate external support**	▪ "In the 90s the BSC was a good money maker, well designed, well presentable…therefore easy to defend against aggressive clients, due to many levers" *(R.M., Expert)* ▪ "The low implementation level of the BSC within SMEs is linked to the market development of large consultancies as the tool's diffusion level is driven by these consultancies" *(C.F., Expert)* ▪ "There are consultancies trying to implement BSC like tools with little professionalism and expertise as the method of the BSC seems simple at first sight. This is also leading to an image problem with less best practice and success stories for SMEs out there" *(C.F., Expert)* ▪ "There are many people out there selling BSC software, another whole parallel process to maintain, missing the actual intent of the BSC …..[…]… this is an issue as [in these cases] the BSC is promoted and designed as a parallel process like creating a new system" *(J.D., Expert)*
XI **Temporal**	
▪ **T) Quick wins and momentum**	▪ "Find ways to prevent frustration, create experiences and first quick wins, don't spend a year on it; a first scorecard should be created in 8 weeks if you have just one or two levels" *(H.V., Expert)* ▪ "Set your time for the first iteration - 6 weeks and not more" *(H.V., Expert)* ▪ "SME will want to spend minimal time on management infrastructure and controls and maximum time on manufacturing, selling - fairly do it quickly" *(J.D., Expert)* ▪ "[To implement a BSC in an SME] It is absolutely the same phases as for large companies, but it is a potentially easier implementation not so strongly threatened to changes in strategy in SMEs" *(D.B., Expert)* ▪ "There are less levels in smaller companies to spend on for the scorecard, this is an advantage for getting the BSC momentum" *(H.V., Expert)* ▪ "The payoff period should be within 1 year" *(J.M., Informed non-user)* ▪ "Explain step by step what has been reached so far to stress the benefits and keep the motivation high [to sustain momentum]" *(D.B., Expert)* ▪ "The BSC after implementation party proved as very useful to keep momentum and sustain the commitment of employees at all organisational levels" *(D.B., Expert)*

Appendix 6: Ethics approval

Ethics application - CSS/BS/PG/2017-18/005 - Fully Approved

B

Business School Ethics Application
Fri 22/06, 12:01
Matthias Troebinger; Stylianos Zyglidopoulos ⌄

Dear Matthias,

Ethics Application reference number: CSS/BS/PG/2017-18/005

Your supervisor has confirmed the appropriate amendments have been made for ethical approval.

Your application is now fully approved.

If you have any queries please do not hesitate to contact me.

Best wishes,
Business School Ethics Administrator