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Productizing Performance Measurement System for Small and Medium-Sized Enterprises

Case Finnish Service SMEs

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Abstract

This study strives to formulate a performance measurement system (PMS) for small and medium-sized enterprises (SMEs) and to offer guidelines for its productization. To achieve that end, a set of requirements for successful PMS for SMEs are derived from the literature, confirmed empirically and summarized into a outlining of a product. Additionally, this study provides a roadmap to productizing this performance measurement system.

The evidence from previous literature suggests that a successful PMS for SMEs has following qualities: it is able to assist organization in strategy work, it provides a balanced view of the organization, it enables recognizing and incorporates causal relationships between results and determinants, is dynamically adaptable, clear and simple to operate, accounts for stakeholder perspective and is developed with and for its users. To productize such a system successfully one has to recognize a need for such a service, outline the service, pilot it, concretize it and finally collect feedback and develop it further.

The study was conducted as a qualitative case study for a small Finnish company providing financial administration services. The empirical material for the study consisted of nine interviews within the case company and with the representatives of their clients. The data from the interviews was analyzed with thematic coding and complemented with financial statements and other readily available material.

Based on the empirical and theoretical research, it is suggested that small and medium-sized enterprises base their performance measurement in proper budgeting tool. It can be stated that budgeting, when implemented properly, meets the qualities of successful performance measurement system for SMEs and can be employed to achieve multiple ends. Budgeting tool can be complemented with proper key performance indicators, forecasting tools and strategy development consultation to achieve even more comprehensive performance measurement.

Keywords performance measurement, performance measurement system, small- and medium-sized enterprises, productization, expert services, key performance indicator, budgeting

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Tiivistelmä

Työn tarkoituksena on luoda suorituksenmittausjärjestelmä pienille ja keskisuurille (PK) yrityksille. Perustana tälle suorituksenmittausjärjestelmälle ovat aiemmasta kirjallisuudesta tiivistetyt vaatimukset, jotka vahvistetaan empiirisellä tutkimuksella ja tiivistetään lopulta tuoteluonnokseksi. Lisäksi tutkimus pyrkii antamaan suuntaviivat suorituksenmittausjärjestelmän tuotteistamiselle.

Aikaisemmasta kirjallisuudesta voidaan tiivistää, että onnistuneella pk-yritysten suorituksenmittausjärjestelmällä on seuraavat ominaisuudet: se tukee yrityksen strategiatyötä, antaa tasapainoisen kuvan organisaation koko toiminnasta, auttaa tunnistamaan syy- ja seuraussuhteet tulosten ja niiden tekijöiden välillä, on dynaaminen, selkeä ja yksinkertainen käyttää, ottaa huomioon tärkeimmät sidosryhmät sekä on kehitetty yhteistyössä käyttäjiensä kanssa heidän tarpeisiinsa. Jotta tällainen järjestelmä saataisiin onnistuneesti tuotteistettua, tulee ensin tunnistaa tarve sille, luonnostella suorituksenmittauspalvelu, pilotoida palvelua, konkretisoida se sekä viimein kerätä palautetta ja kehittää palvelutuotetta eteenpäin sen perusteella.

Tutkimus on kvalitatiivinen case-tutkimus, joka on tehty toimeksiantona pienelle suomalaiselle tilitoimisto- ja taloushallintopalveluita tarjoavalle yritykselle. Tutkimusmateriaali koostuu yhdeksästä haastattelusta sekä case-yrityksen sisällä että heidän asiakkaidensa edustajien kanssa. Tutkimusdata analysoitiin käyttämällä temaattista koodausta, ja sitä on täydennetty tutkimalla tilinpäätöksiä ja muuta julkisesti saatavilla olevaa aineistoa.

Empiirisen ja teoreettisen tutkimuksen perusteella voidaan sanoa, että pk-yritysten tulisi perustaa suorituksenmittauksensa kunnolliselle budjetointityökalulle. Budjetointi, kunnolla suunniteltuna ja implementoituna, täyttää kaikki onnistuneen suorituksenmittausjärjestelmän pk-yrityksille tunnusmerkit, ja sitä voidaan hyödyntää useissa mittaustarkoituksissa. Budjetointityökalua voidaan tarvittaessa täydentää luomalla yksittäisiä mittareita, tuottamalla kunnollinen ennustustyökalu tai tarjoamalla pk-yrityksille kokonaisvaltaista strategiakonsultointia.

Avainsanat suorituksenmittaus, suorituksenmittausjärjestelmä, pienet ja keskisuuret yritykset, tuotteistus, asiantuntijapalvelut, mittari, budjetointi

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1. Introduction

Why do companies need performance measurement? Every organization operating in competitive environment needs to contemplate on strategies for success, set up goals, execute activities by making proper decisions and monitor the results of those activities. When organization grows large enough, a single manager cannot adequately monitor the firm's resultant states alone. Therefore, performance measurement systems are needed to replace the eyes and ears of the managing director (Kellen & Wolf 2003). Consequently, performance measurement systems play a crucial role in organizations by revealing how well the organization is doing with respect to its objectives, and pinpointing where improvements are required (Dixon et al. 1990). How do you, then, measure a company's performance in the best possible way? This is the question academics and managers alike have attempted to answer for decades, leading to a plethora of different models, frameworks, suggestions and guidelines. Yet, measuring one's performance in an accurate, valid and reliable way seems to be the problem for companies notwithstanding their size, field of business or age, and despite many attempts, universally accepted best practices for organizational performance measurement still keep us waiting.

In the meantime, academic and business world alike have come up with numerous performance measurement solutions that, with some scrutiny, share common features. Thus, it can be concluded that performance measurement should be able to provide management with timely and accurate information (Laitinen 1996), be aligned with organization's strategic objectives (Greatbanks & Boaden 1998; Neely et al. 1995), provide a balanced view of the organization (Kaplan & Norton 1992; Taticchi & Balachandran 2008), help determine the causal relationships between results and their determinants (Fitzgerald et al. 1991; Suwignjo et al. 2000), and be dynamic, so that when organizational environment changes, performance measurement system changes with it (Bititci et al. 2000). As if this was not enough, to ensure that the system really captures all relevant perspectives of an organizational success and that the framework really gets used, it should be designed and implemented with close cooperation of organization's stakeholders (Atkinson et al. 1997) and its actual users (Neely et al. 1996).

Small and medium-sized organizations, commonly referred to as SMEs, on the other hand, are universally considered the engines of growth, the source of innovations and, in a word, the thing that keeps the business world rolling (Singh et al. 2008). They, however, differ from their larger counterparts in many respects. Typically, SMEs are less bureaucratic, more dynamic and flexible than

larger corporations, which leads to adaptable organizations, informal communication lines and quick decision-making (Hudson et al. 2001). Due to flat management layers and informal communication, SMEs are able to maintain personal relationships with their customers (Hong & Jeong 2006) and offer employees varying roles and responsibility. However, SMEs typically operate in highly competitive markets they have no control over (Garengo et al. 2005), face considerable resource constraints (Pansiri & Temtime 2008) and financial uncertainty and risk of failure (Ropega 2011). Therefore, it is not surprising that for most SMEs, all the time the employees have on their hands is spent on dealing with everyday operations, and issues like strategic planning, performance measurement or forecasting future are left undone (Hudson et al. 2001).

You would think that when talking about performance measurement, what works for a large organization can be applied to a small one just by scaling the system down proportionally. That, however, would be exactly what very often cited Marchini (1995: Garengo et al. 2005) describes “turning your binoculars upside down and making small what was big”. The features that distinguish SMEs from larger corporations also pose different requirements for performance measurement, and research shows that despite attempts to introduce systems answering these requirements, something is still lacking. In reality, performance measurement is for most SMEs a luxury that cannot be afforded, the something that will be done “then, when”, the project that always gets pushed aside for more pressing matters (Hudson et al. 2001). Alternatively, if there is some performance measurement system in place or some metrics are used, they are more often than not poorly implemented or improperly used and lack connections to strategy and operations (Hudson et al. 2001). This leads to poor strategic – if there is a strategy at all – and operational decisions by uninformed or misinformed management, to a loss of business, and, eventually for quite many SMEs, to bankruptcy and dying away.

Quite obviously, the frameworks and tools proposed for SME performance measurement lack something that these organizations require – or else we would have a lot more performance measurement and, consequently, more successful SMEs in our hands. The reasons for poor performance measurement vary, but one thing rises above all: performance measurement projects are generally too taxing for small companies that struggle to get through everyday business (Garengo et al. 2005). What if, then, there was a solution that would be relatively easily tailored to each business and company and with relatively light implementation could provide answers to the most critical

performance- related questions to each company – in a word, a performance measurement system product?

How do you turn a unique system into a product? In recent decades, a lot of attention has been placed on productization, which refers to defining and standardizing a service, product or product feature so that it could be sold to another producer without the quality suffering (Ukko et al. 2011). Productization strives to create a shared vision of the offering and its value proposition (Tuominen et al. 2015) and, in the context of abstract expert services such as performance measurement system, to make the service more tangible and easier to grasp (Nagy 2013). Quite often a productized service consists of certain packages or modules, some of which are very standardized and some of which can be customized to suit customer needs and requirements (Sipilä 1996; Jaakkola 2011). In the context of performance measurement systems, productization would involve coming up with a core service, standardizing it to suit most customers and complementing this standardized part with enough customizable adhesive services to be able to serve wide range of customers. The end-result should be simple enough for busy managers to be able to capture its value proposition and modifiable enough so that it suits to a wide variety of organizations with varying performance measurement needs.

An excellent example of a well-productized performance measurement system is the Balanced Scorecard by Kaplan & Norton (1992). In fact, it is so successfully productized that has in last two decades evolved to be a de facto synonym to performance measurement system that every academic, manager, business owner and business student knows by heart. Balanced scorecard, however, is not really intended for small and medium-sized companies, and attempting to implement it into one will most likely prove to be a failure (Hvolby & Thorstenson 2000). The same applies essentially to all other performance measurement frameworks that have been proposed over the years, because they are developed for larger organizations. However, there are a couple of frameworks developed only for small businesses, Organizational Performance Measurement by Chennell et al. (2000) and Integrated Performance Measurement for Small Firms by Laitinen (1996) but neither is very suitable for productization. The former lacks clear value proposition and the latter builds on activity based costing, thus ruling out all companies that do not operate such a costing system (Hudson et al. 2001) and both are a bit too complex to be reasonable for very small SMEs. Thus, there clearly is a need for a productized performance measurement system for SMEs that would be suitable despite the field of business, accounting system used or the size of the SME. The purpose of this thesis is to research the

requirements that theory and practice place on such a system and to come up with a suggestion for both the contents of the product and the way it should be productized.

1.1. Research Objective

The objective of this study is to outline a performance measurement system for SMEs and offer guidance to its productization. More precisely, this study firstly aims to develop a set of requirements for successful performance measurement system for SMEs by combining perspectives from the literature, and to verify these requirements with the empirical data. Secondly, the research strives to summarize these perspectives into a productizable entirety that contains a standardized core performance measurement system and adhesive modules that can be customized and tailored according to the customer needs and wishes. Thirdly, this research strives to create roadmap for productizing this performance measurement system service by combining perspectives from the productization literature.

The research is a commissioned case study to a small Finnish financial administration consulting company. The researcher, however, operated as an independent consultant with no employment contract to the case company. The study is performed as a qualitative case study, since the purpose of it is to solve a practical problem faced by one organization among its clients. That is not to say, however, that the study is without theoretical implications. The results from this research can, with some modifications, be applied to various organizations operating in various fields of business. In addition to this this study offers some further specifications to the growing body of literature about performance measurement in SMEs and about productization of performance measurement systems. The data for the study is obtained mainly by semi-structured interviews within the case company and with the representatives of the case company clients. As all of the case organizations client and the case organization itself operate de facto in service business, the scope of this study is limited to small and medium-sized organizations operating in service business.

Due to the resource constraints faced, this study focuses purely on performance measurement, which is to say to the *process of quantifying action* (Neely et al. 1996) that supports decision-making by gathering information on how well the targets have been reached (Simons 2000; Kaplan & Norton 2001). Thus, other tasks commonly attributed to performance measurement such as allocating

economic responsibilities and decision rights, planning and management control and generating employee and management targets and rewards, (Lönnqvist 2002; Dossi & Patelli 2008) are not in the scope of this research. These issues may be referred to in the context of performance measurement and performance measurement system, but the more thorough research of these issues is left to other studies. In addition to that, it is evident that going through the entire productization process of a performance measurement system in the empirical part is way beyond the scope of this study. Thus, the empirical research on productization focuses on the first stage of productization process, the recognition of product need, and the following steps presented are merely suggestions on how the case company could go forward. Therefore, the end result of this study is not a ready productized service, but rather a well justified first draft of it that defines the initial shape and content of the service. This draft can then be developed further by the case company in close cooperation with their clients. Despite that the ideas about performance measurement in SMEs and productization of performance measurement systems presented in this thesis are not without theoretical and managerial value and can, with appropriate changes, be applied to multiple performance measurement, SME and productization issues.

1.2 Structure of the Thesis

This thesis is structured as follows: at first the literature on performance measurement, SMEs and their current performance measurement practices and challenges is reviewed. Based on this information, a theoretical framework is formulated. A glance on the literature on productization and how a performance measurement system should be productized concludes the literature review. The third chapter focuses on methods and describes the data collection process and the research method deployed in the study. The fourth part of the thesis turns attention to the empirical results obtained from the research and at first presents the case. Then the theoretical framework is evaluated based on the empirical results. The last part focuses on the productized performance measurement system and presents suggestions on the contents of the service and on how the productization process should be carried forward. The fifth chapter discusses the results and concludes the study by offering some theoretical and managerial implications from the research.

2. Literature review

This section summarizes the literature on performance measurement, SMEs and the performance measurement in SMEs and presents a roadmap to successful service productization. The first part of the literature review focuses on performance measurement, SMEs and performance measurement in SMEs and develops a theoretical framework that is tested the empirical part. The second part of the chapter presents productization process in the form of a roadmap and offers some practical advice for productizing a PMS for SMEs.

2.1. Performance Measurement Systems in Small and Medium-Sized Enterprises

Performance measurement play crucial role in the success or organizations. It defines how strategic plans are developed and executed, achievements are evaluated and managers compensated (Ittner & Larcker 1998). However, especially SMEs rarely use predefined performance measurement frameworks, even though research has shown that most of them would benefit from bettered performance measurement (Laitinen 1996). This section reviews the characteristics of a good performance measurement system, the distinctive features of SMEs and the requirements these pose for SME performance measurement system. To begin with, some definitions are provided. Second part reviews the requirements for successful SME PMS and summarizes them into a theoretical model.

2.1.1 Definitions

Performance can be defined as the ability of an object to produce results (Laitinen 2002). Performance measurement, then, is the process of quantifying action, where measurement is the process of quantification and action leads to performance (Neely et al. 1995). A performance measure, then, is a metric used to quantify the efficiency or effectiveness of an action, (Neely et al. 1995). The terms performance measure, key performance indicator (KPI) and performance indicator are in this thesis used synonymously. Consequently, performance measurement system, henceforth referred to as PMS, is set of metrics used to quantify effects of actions that strives to support organizational decision-making by gathering, elaborating and analyzing information (Neely et al. 2002; Neely et al. 1995). Performance measurement can be examined either at the level of individual performance measures, observing the system as a whole or studying the relationship between the system and its environment (Neely et al. 1995). For the purposes of this thesis, PMS is examined as a whole, and single performance measures are expected to obtain same success requirements as the PMS as a

whole. Successful performance measurement is closely tied to company strategy (Hudson et al 2001; Greatbanks & Boaden 1998). Thus, in the context of this thesis, strategy is defined broadly as decisions about the long-term goals of the organization and plans to achieve them (Chandler 1962; Andrews 1997).

SMEs are considered the engines of growth and economic welfare all over the world (Singh et al. 2008). They contribute in providing employment, supply larger organizations and are the main venue for innovations (Rahman 2001). European Commission (2016) has defined small and medium-sized enterprises as companies that employ fewer than 250 people, have an annual turnover not exceeding 50 million euro and/or an annual balance sheet total not exceeding 43 million euro. This definition encompasses a wide range of organizations from individual entrepreneurs to start-ups and to well-established family businesses. However, it is generally recognized that size affects organizational behavior (Ghobadian & Gallear 1997) and thus there are some characteristics more or less common to all SMEs (Storey 1994). Generally, larger organizations are more bureaucratic, hierarchical and slow in their movements. SMEs, on the other hand, usually have more organic structure, informal working relationships and less formal culture, which leads to a more dynamic and adaptable organization with informal communication lines, centralized decision-making process and high innovatory potential (Hudson et al. 2001).

In recent decades, a lot of attention has been given to the stakeholders of the company. Stakeholders can be defined as groups of people who can influence or are influenced by the achievement of an organization's objectives (Freeman 1984; Freeman et al. 2004), and typically include such groups as owners, customers and employees. Organizations should know their stakeholder's expectations and strive to achieve the objectives that the stakeholders define (Atkinson et al. 1997). That way, the actions of the organization lead to a desirable future state for all stakeholders, which, according to for example Funk (2003), is the ultimate objective of the organization. Therefore, a stakeholder perspective is needed also in the PMS. As SMEs typically have rather limited customer base (Hong & Jeong 2006) are dependent on skilled and motivated employees (Ghobadian & Gallear 1997), it can be expected that these two groups form the most important stakeholders – even more so, when one considers that most SMEs are owned and controlled by a single person or family and thus conflicts of interest between owners and managers are nonexistent. Therefore, for the purposes of this thesis, the stakeholders are considered to mean customer and employees.

2.1.2 Requirements for Successful PMS for SMEs

There are probably as many performance measurement models as there are academics writing about performance measurement, but most of these frameworks share same basic features. This chapter presents seven requirements for successful PMS for SMEs that are derived from seven key features for successful PMS, seven key differentiating characteristics of SMEs, and their effect on SME performance measurement.

1. Supporting strategy development and strategic planning

There is a wide agreement between academics and practitioners alike that in order to be successful, performance measurement has to be aligned with company's strategy (e.g. Hudson et al. 2001; Greatbanks & Boaden 1998; Neely et al. 1995). In a way, the connection between strategy and performance measurement is self-evident: performance measurement may be the "process of quantification", but what it in the end is intended to do is identify the critical tasks and actions and to monitor whether they were performed properly (Grady 1991). If the monitoring is not explicitly tied to the organizational goals, it becomes a rather pointless exercise – why would you measure, if you do not know what you are measuring and why? Research has shown, however, that the alignment between strategy and performance measures does not necessarily realize in the business world. Bourne et al. (2000) found in their study on PMS implementation that even though the system at the beginning was consistent with the long-term plans, it soon became neglected when measures were updated with no consideration of strategy. Similarly, Grady found in his study of automotive industry (1991) that because performance measures had not been updated when the business strategy changed, the executives and factory workers were realizing completely different goals, leading to decline of results and loss of business.

On the other hand, PMS can be used as a tool for strategy development and implementation. It highlights the gaps between current performance and long-term goals (Tenhunen et al. 2001), forces organizations to reflect on its current operations and helps identify successful corrective initiatives before they are fully implemented (Feurer & Chaharbaghi 1995; Hakes 2001). Grady talks in his 1991 article about the importance of performance measures when communicating and implementing strategy to the organization. Kaplan and Norton (1992) go even further and propose using a set of metrics for strategy development as well as communication. Regardless of the framework chosen, it can be concluded that aligning performance measurement with strategy works in two ways: it ensures

that a company has a long-term strategy and objectives in place and simultaneously provides the organization with means to assess, whether its current performance is adequate to achieving said objectives. This requires, however, that the PMS be well designed and implemented.

The research has shown that more often than not SMEs lack formal strategy and long-term planning (Hudson et al. 2001). Somewhat surprisingly, Hudson et al. (2001) identified in their study a widespread acceptance of the value of strategic performance measurement among SME managers. However, only a few of the researched SMEs had taken steps in updating their current PMSs. This can be attributed to the situation most SMEs face: most of the time of SME managers and personnel is spent on coping with everyday business, “fire-fighting” for survival (Garengo et al. 2005). Thus, there simply is no time left to ponder upon longer-term issues, let alone formulate them to strategies – or if by miracle some time is found, the strategy developed is not reviewed regularly and updated when the business environment changes, thereby leading to strategic objectives that may even be detrimental to the business (Harris & Ogbonna 1999). Therefore, it comes as no surprise that PMSs found in SMEs rarely have any connection whatsoever to the organizational objectives (Garengo et al. 2005). However, studies have shown that SMEs, which link operations to their business strategies, outperform the competition (Argument et al. 1997; Singh et al. 2008). Chiarvesio et al. (2004) make a crucial point here: SMEs should adopt dynamic strategic behavior so that some long-term plans are always at place but they can be changed with little effort whenever the need raises. Therefore, the first and foremost requirement for PMS in SMEs is that it forces organizations to do strategic planning and to constantly monitor and update their plans.

2. Providing balanced view of the organization

Balance has become a key concept in performance measurement during the last few decades. The concept of balance emerged originally as a response to criticism on traditional, financially focused PMSs (Sinclair & Zairi 2000; Garengo et al. 2005), and referred first and foremost to adding non-financial measures alongside financial ones. Perhaps most famous critics for financially focused performance measurement were Kaplan and Norton (1992), and their Balanced Scorecard framework is considered to be the first balanced performance measurement framework. They argue that non-financial measures allow organizations to realize the drivers of their performance and thus assist organizations in realizing their long-term plans whereas focusing only on financial measures encourages also focus on short-term results at the cost of sustainable success.

There are, however, other aspects to balance as well. Keegan et al. (1989) advocate for balance between internal and external as well as financial and non-financial measures. Cross & Lynch (1989) talk of measurement diversity and integrating all organizational levels to the PMS. Neely et al. (1996) highlight the importance of having both operational and strategic measures in place. Ittner & Larcker (2001) and Ittner et al. (2003) raise the issue of balancing leading and lagging indicators in the PMS. They argue that a key element in managing the link between strategy and performance is identifying the value drivers that actually lead to strategic success. By combining right leading and lagging indicators the PMS can simultaneously drive organization to the right direction and evaluate whether this process was successful. It can be concluded that the concept of balance has evolved to mean the need of a PMS to give a holistic view of the organization (Taticchi & Balachandran 2008) – in other words, to reflect the key value drivers, strategy and goals of that specific organization operating in that specific business at this given time.

SME usually operate in highly uncertain environments especially considering their financials (Ropega 2011). They typically have very tight budgets and little access to external financing (Ropega 2011), but rely almost solely on short-term financing such as owner financing, trade credit and short-term bank loans (Padachi 2006). Therefore, as expected, many SMEs rely almost solely on financial performance measures (Waalewijn & Segar 1993), using indicators like profit, market share and growth rate as their key metrics (Singh et al. 2008). Consequently, the PMSs often ignore perspectives of human resources, flexibility and research and development (Greatbanks & Boaden 1998). Knowing the state of one's financials is obviously very important – financial performance is, in the end, the uttermost determinant of SME survival (O'Neill & Duker 1986). However, financial indicators often focus excessively on past activities with little attention given to the current, let alone future state of affairs (Cocca & Albertini 2010). In addition to that, they ignore the operational perspective of the organization altogether. More useful than measuring profits would be forecasting cash flows or drawing up and monitoring budgets, because they would draw the managerial attention to what is happening currently and what possibly will be happening soon. Thus, the second requirement for SME PMS is that it is able to provide the organization a balanced view of its entire business.

3. Providing tools for quantifying results-determinants relationships

Hand in hand with balance walks the concept of identifying the value drivers, or critical success factors, and their causal chains in the organization. Fitzgerald et al. (1991) argue that there are two basic types of performance measures: those that relate to results, for instance competitiveness and financial performance, and those that relate to the determinants of those results, for example quality, resource utilization and innovation. According to them, in order for a PMS to be successful, the causal relationships between these two types – between the results and their determinants – have to be defined. Unless this is properly done, they argue, there is a danger that the PM system encourages focus on results and financial measures without really providing information on what is causing the performance. This is in essence the same what Ittner and Larcker (2001) wrote about identifying value drivers and incorporating them into the PMS, and what Kaplan and Norton (1996) argued when stating that strategy review and organizational learning can be supported with the right type of performance measures. Thus, as Laitinen (2002) concludes, satisfactory usefulness of balanced performance measurement can only be achieved by developing systems that take explicit account of the causal relationships between the measures.

How do you define the causal relationships, then? Suwignjo et al. (2000) have developed a model called the Quantitative Model for Performance Measurement Systems (QMPMS) that aims to identify the factors affecting performance and their relationships, structures them hierarchically and then quantifies the effect of the factors on performance. Similarly, Kaplan and Norton (2004) have transformed perspectives of the Balanced Scorecard into a strategy map that should help notice and quantify the causal relationships. However, as Garengo et al. (2005) state, performance is affected by a large number of different factors that often are both multidimensional and dynamic, and therefore it is difficult to define their actual effects on performance. In the end, it seems to come down to the fact that the people operating with the development of PMS need to know their respective companies, businesses and environments so well that they are able to identify their value drivers.

For SMEs recognizing these value drivers and being able to predict their movements would help focus organizational attention to the critical improvement points and assist in resource planning (Corbett & Campbell-Hunt 2002). Typically, SMEs operate in highly competitive, uncertain markets (Garengo et al. 2005). They rarely have control over the market and thus need to adapt to changes (Hudson et al. 2001) and excel simultaneously in several areas without compromising others (Singh

et al. 2008) in order to survive. However, Greatbanks & Boaden (1998) argue that in most SMEs the PMS fail to recognize the critical success factors. Thus, their performance measures rarely account for causal relationships between results and determinants and therefore provide little assistance in ensuring future success (Garengo et al. 2005). This is supported by Bititci et al. (1999) who state the inability to recognize causality between strategic objectives, processes and activities as a main reason for SME performance measurement failure. Hence, the third requirement for SME PMS is to provide tools for comprehensively identifying and quantifying the causal relationships between drivers of performance and business results.

4. Being dynamically adaptable and providing accurate and timely information

Dynamic adaptability is often stated as a key feature of a successful PMS (Garengo et al. 2005). Dynamism in the context of PMS can be defined as a system for reviewing measures, which enables adapting PMS changes in the internal and external environment and systematically assessing company's strategy in order to support continuous improvement (Bititci et al. 2000). In other words, a dynamic PMS lives with the company and changes when there are changes in the market or business field or when company strategy, objectives and such are updated. SMEs, on the other hand, are known from their ability to react quickly to changes and from their strategic and operational agility. A literature review by Smith and Smith (2007) found that most SMEs are considered to be adaptable and have high innovation potential precisely due to their few layers of management and flat hierarchies and bureaucracies. Similarly, Garengo et al. (2005) argue that lack of bureaucracy has a positive impact on flexibility, adaptability and rapidity in responding to the changing environment. In addition to this, Vinten (1999) points out that in SMEs internal lines of communication are typically shorter and more informal than in larger organizations, which allows centralized decision-making and quickly getting everyone on board with changes.

Despite the “built-in” dynamic adaptability, Bititci et al. (1999) find in their study that most SMEs still use static performance measures. They identify the inability to distinguish measures that are useful for the control aspect from the measures that support improvement, lack of external monitoring, and the inability of the management to relate systematically the environmental changes to changes in their PMSs as main reasons for this. This view is supported by Garengo et al. (2005) who recognize that all improvements made in SMEs usually emerge as response to specific identified needs. Thus, it is unlikely that SMEs would incorporate systematic monitoring processes, let alone

recognize the changes that emerge from these observations. Hudson et al. (2001) support this and add that performance measurement projects, in general, are a rather taxing process for organizations and thus companies are reluctant to make changes to the established measures, as this would quite often mean changing the entire system. Therefore, as Cocca and Albertini (2010) conclude, the PMS in SMEs needs to be able to provide accurate and timely information about external as well as internal business environment and be flexible, rapidly changeable and maintainable. This forms the fourth requirement.

5. Incorporating all critical perspectives into a simple system

Many scholars state clarity and simplicity as the most important characteristics of a successful PMS (Neely et al. 1996; Maskell 1989). This includes clear definition and communication of PMS objectives, careful selection and definition of measures, and clear procedures for data gathering and elaboration (Garengo et al. 2005). Most PMSs contain too much data and indicators, thus rendering them useless. In fact, Ewing and Lundahl (1996) set a limit of 25 indicators for each manager, arguing that if this limit is exceeded, the PMS becomes too heavy to manage. Rather than setting specific limits for the number of indicators, Barnes et al. (1998) argue that the set of metrics is sufficient when all measurement needs are considered without any useless indicators.

For SMEs, it is even more critical that performance measures and the entire PMS remains comprehensive but clear and simple to operate. Most SMEs face considerable resource constraints in many fronts including personnel, managerial time, financial stability, access to funding, knowledge loss and IT capabilities (Singh et al. 2008; Pansiri & Temtime 2008). Due to the resource constraints, performance measurement in SMEs is mostly not based on any predefined model (Garengo et al. 2005), and even if it were, the model is more often than not used incorrectly or implemented only partly (Tenhunen et al. 2001). Rather, performance measurement is introduced to solve specific problems and the PMS evolves when this process is repeated (Barnes et al. 1998; Cocca & Albertini 2010). Therefore, clear definition of the purpose of measurement, the measures themselves, the data collection and presentation and careful selection of the measures are at the core of bettering SME performance measurement. The fifth requirement for SME PMS is thus that it is able to incorporate all critical measurement perspectives in a system that is simple to use and easy to understand.

6. Considering the needs of the most important stakeholders

Many academics have advocated for stakeholder perspective in performance measurement to ensure that the wishes and needs of the stakeholder groups are taken into account (Garengo et al. 2005). Atkinson et al. (1998) stress that companies should know what their stakeholders expect of them and strive to achieve these objectives, and thus, these objectives should be reflected in the company PMS. Similarly, Globerson (1985) argues that all the groups involved in the organizational processes, such as customers, employees and managers, should be included in decisions about the performance criteria. According to him, only this way can one ensure that all the crucial aspects of organizational performance are identified and integrated into the PMS. Bititci et al. (1997) even go so far that they suggest taking stakeholder perspective, rather than strategy alignment, as the starting point for their performance measurement framework.

SMEs usually have a rather limited customer base, which means that they develop more personal relationships with them, (Hong & Jeong 2006), recognize customer needs better (Garengo et al. 2005) and are able to provide more personal service. This way, many smaller companies manage to create long-term, committed customer relationships. On the flipside, however, SMEs often are subservient to their larger counterparts (Hudson 2001) and lack control over their futures because of customer demands (Oakes & Lee 1999). Listening to customer requests and excelling in customer service is thus a prerequisite for successful business. In addition to this, SMEs often find it difficult to attract and retain skilled employees, since realizing long- and mid-term career goals in the flat organizations of SMEs is a lot harder than in a larger organization (Ghobadian & Gallear 1997). However, Singh et al. (2008) note that a structure with few management layers provides employees with direct contacts to management. Thus, in SMEs employees can influence the way company operates a lot more than in larger organizations. In addition to that, in SMEs employees often have multiple roles and through that also more responsibility, which for some may be more important than advancing one's career.

Considering the importance of good customer relationships and motivated employees, it is surprising how little attention is given to the most important stakeholder groups of SMEs in their PMS. Research suggests that only SMEs participating in quality awards gather information about stakeholder satisfaction (Barnes et al. 1998). This can partly be explained with the resource constraints of SMEs, since measuring stakeholder satisfaction takes up time and resources that the companies might not

have. However, as Vinten (2000) argues, assessing stakeholder satisfaction in SMEs is more than possible, when the system is simple enough and the most important stakeholder groups identified. Therefore, the sixth requirement for PMS SMEs is the consideration of stakeholder needs.

7. Being designed with and for the main users

A successful PMS framework is planned with and for its users (Neely et al. 1996; Maskell 1989). The system needs to fulfil the information needs of the decision-makers in the company or it is of no use to anyone and becomes easily disregarded. Hudson et al. (2001) support this view by advocating for interviews with the key users of the PM system as the main source of information when developing a PMS. Similarly, Laitinen (1996) reports that when developing a PMS for a small Finnish hotel, he placed the managing director of the company the sole decision maker in the development process, because it was her reporting needs that the system needed to fulfil. At the same manner, Globerson (1985) points out that in order to be successful, PMS needs to reflect the information needs of the users of the system.

Since SMEs often have very thin layers of management and flat structures, the influence of owner-manager or managing director in the everyday business is more prominent than in larger organizations (Ghobadian & Gallear 1997). Many SMEs start as one person companies or very small family businesses, and quite often the founders remain in the company for long time either in the board or as managing directors. In fact, it has often been said that the critical factors for the success of SMEs can mostly be found in the attributes of the entrepreneur-owner (Neubauer & Lank 1998; Garengo et al. 2005). These include flexibility and ability to react quickly to changes in environments and existence of specialist tacit knowledge that evolves through learning by doing (Garengo et al. 2005). However, this also implies that there is significant reliance on the decision-making processes and managing capabilities of the managing director and, as both Brouthers et al. (1998) and Hudson et al. (2001) argue, these decisions are more often based on intuition than analysis. Moreover, both Hannon and Atherton (1998) and Berry (1998) find in their studies that the more strategic awareness the owner-manager has, the less likely their firm is to fail. Thus, the key to bettering the performance and lessening the likelihood of failures in SMEs is educating the owner-managers, which is consistent with what Omerzel and Antončič (2008) suggest.

Reluctance in bettering the PMS can to some extent stem from misconceptions SME managers and personnel have about performance measurement. Using predefined, planned models is often perceived as bureaucratization and an obstacle to the flexibility of SMEs (Hvolby and Thorstenson 2000). Since a considerable amount of SME competitive advantage is based on flat hierarchies and flexibility, it is no surprise that SME managers are reluctant in implementing something that they perceive as detrimental to their business. Thus, planning the PMS with and for the managing director and educating the owner-manager about its benefits is of crucial importance for successful PMS project in SMEs. It is important that everyone involved in the project understands its purpose (Hudson et al. 2001). Additionally, the project needs to have close operational ties from early on (Garengo et al. 2005) and short and middle term targets than produce concrete improvements to keep the people involved into the project (Hudson et al. 2001). Hence, the last requirement for the PM system for SMEs: that the system is really designed with and for its users so that they are able to recognize its benefits and really adopt it in their everyday work.

Theoretical Framework for SME PMS

It can be concluded that in order to be successful, SME PMS needs to fulfil the seven requirements presented in this chapter. The theoretical framework presented in the Table 1 summarizes the literature on performance measurement, SMEs and performance measurement practices on SMEs and justifies the derived requirements. At the empirical section this framework is put to test to see whether the perspectives presented in the literature repeat themselves in the real world. This theoretical framework is tested empirically by interviewing managers of different SMEs. Before getting into that, however, a couple of words need to be said about productization of the framework.

| Performance measurementsystem: | Small and medium-sized companies: | Performance measurement in SMEs: | Requirements for the performance measurement system for SMEs: |
|--|--|---|---|
| Aligned with strategy and supporting strategy development | Lack formal strategy and long-term plans | Is rarely aligned with strategy because there is no strategy, even though the value of strategic planning is recognized | Force organization to do strategic planning and supports strategy development |
| Balanced so that a holistic view of the organization is given | Face considerable financial uncertainty and risk of failure | Relies excessively on financial, past-oriented indicators | Provide a balanced view of the entire organization |
| Recognizing the critical success factors and their causal relationships | Operate in highly competitive markets they have no control over | Fails to recognize critical success factors and their causal relationships | Provide tools for identifying and quantifying the relationships between results and determinants |
| Dynamically adaptable to changing business conditions | Are dynamically adaptable and possess considerable innovation potential | Uses static rather than dynamic models, fails to recognize changes in internal and external environments | Provide accurate and timely information about organizational environment and is flexible and rapidly changeable |
| Clear and simple to use and understand without losing the comprehensive view of the organization | Face resource constraints in many fronts | Is rarely comprehensively planned but rather emerges as response to specific problems | Incorporate all critical perspectives into a system that is simple to use and easy to understand |
| Accounting for the needs of most important stakeholders | Have close relationships with customers and empowered employees due to flat organizational hierarchies | Gives little attention to measuring the needs of customers or employees | Consider the needs of most important stakeholders, customers and employees |
| Designed with and for its users | Are greatly influenced by the characteristics and capabilities of the owner-manager | Using predefined and planned models is considered as unnecessary bureaucracy and obstacle to flexibility | Be designed with and for the users so that they are able to recognize the benefits and employ the system in their everyday work |

Table 1. Summary of the requirements for SME PM system and their root causes

2.2 Productization of Performance Measurement Systems

Productization refers to standardizing a service, product or product feature into a sellable package that has a clear value proposition (Tuominen et al. 2015). It involves planning, describing, developing and continuously improving the service so that the customer benefits are maximized and the service process becomes easily repeatable (Lehtinen & Niinimäki 2005). The end-result of a productization process is a product that could be manufactured by another producer without the quality suffering (Sipilä 1996). This chapter presents the concept of productization and presents the productization process through which a successfully productized PMS can be achieved. Since a PMS is essentially an expert service, the remainder of the chapter concentrates on expert service productization.

2.2.1 The Concept of Productization

Productization translates an abstract service and its creation into concrete, exchangeable product. It strives to create a shared vision of the service and its value proposition (Tuominen et al. 2015). Productization can be either external, in other words defining and describing the features of a product visible to customers, or internal, which means defining and describing the service process, methods and responsibilities (Jaakkola et al. 2009) or both at the same time. Expert services differ from traditional services in couple of ways: they are very knowledge-intensive, (Muller & Doloreux 2009), usually more like instructions, advice and ideas, their development and production processes are not visible to customers (Ukko et al. 2011), they require lot of special knowledge (Lehtinen & Niinimäki 2005) and they are very risky as an unsuccessful expert service can considerably damage the customer's business (Sipilä 1996). Productization makes expert services more tangible and product-like (Nagy 2013) and thus facilitates the development of mutual understanding with the customer (Valminen & Toivonen 2012).

Standardization of service is a vital part of productization process (e.g. Tuominen et al. 2015). Jaakkola (2011) interviewed managers of professional service firms about the concept of productization. When asked, what productization meant to them, the interviewed managers started by describing the need to specify and standardize the service offering so that it is easier to sell and buy. Similarly, Sipilä (1996) states that in the context of expert services, customers lack a clear understanding of what they need and what the company could offer them. Creating and standardizing simple and tangible offerings reduces the service variability and ambiguity, and thus facilitates communication with the customers (Jaakkola 2011). Interestingly, there seems to be a strong

agreement among practitioners that standardizing the service is a crucial prerequisite for customization (Jaakkola 2011; Sipilä 1996). Standardizing the “basic” content of a service reduces the need to reinvent the wheel with every customer and thus leaves room for customization that actually is needed and better the service for the organization (Jaakkola 2011).

Successfully productize service brings along clear benefits both for the organization providing the service and for its customers. Productization facilitates the work of professional service organization by accelerating organizational learning and allows for further development of the service (Jaakkola 2011). Thus, productized services can be provided to customers with less variability, more efficiency and most likely, with smaller costs (Sipilä 1996; Ardley & Quinn 2014). Additionally, productization enables internal sharing of knowledge and information, and engages professionals to the service in a completely different way. This way also the recognition of interdependencies and synergies becomes easier (Tuominen et al. 2015). Productization enables also more efficient marketing, clearer pricing and bettered management policies in the professional service organization (Sipilä 1996; Artto et al. 2008).

There are, however, also some downsides to productization. Probably the most critical one is the potential loss of customer perspective (Tuominen et al. 2015). If the productization process does not account for customer perspective, there is a danger that the product no longer answers customers’ needs. Additionally, the personnel may perceive the productization as a threat and refuse to collaborate their silent knowledge into the product, thus rendering the product to a mere shell of a service without any real value (Sipilä 1996). The underlying issue here is the perceived loss of freedom that combining individual service projects into one homogenous product may result in. As productization inevitably results in to somewhat standardized procedures, the personnel may lose their motivation, which, in turn, results in stiff service product and loss of innovations. Thus, the organization productizing a professional service should strive for proper balance between standardization and customization in the product (Valminen & Toivonen 2012). This is primarily achieved by involving customers and personnel in the product development process from early on. The next section explores the productization process further.

2.2.2 Productization Process

There are several ways to actually transferring seemingly individual services into a product. However, as Ukko et al. (2011) identify, most of them share same or similar steps and the only variation is in the sequence of stages. This chapter presents a synthesis of the methods discovered in the productization literature, building on the works of Torkkeli et al. (2005) Sipilä (1996), Tuominen et al. (2015), Lehtinen & Niinimäki (2005), Artz et al. (2010) and Jaakkola et al. (2009). It strives to formulate a concrete roadmap to productizing a service and, essentially, to productizing PMS for SMEs. The process consists of five stages.

1. Recognition of product need or potential

The start of productization process is the recognition of product need or potential in separate customer projects (Artz et al. 2010). This stage is predeceased by a series of seemingly individual successful customer projects whose ideas and concepts can be reused in later projects. The recognition may stem externally from customer or from within the company (Tuominen et al. 2015). It can be a solution to existing problem, result from systematic research performed by the service organization or from general business research (Sipilä 1996). Productization may stem from desire to produce services more efficiently or to offer customers better solutions with lesser price (Jaakkola 2011), or it may originate from eagerness to facilitate communication with customers (Valminen & Toivonen 2012). Whichever the case, the driving force is a recurrent customer need that can be answered with a product-like service.

At the first stage of the productization, one should strive to define and outline the service as clearly as possible to avoid misconceptions and unnecessary work at the later stages (Jaakkola et al. 2009). This involves defining the value offering of the service for the target customer, outlining their needs and benefits from the service and examining the service's market potential. The service needs to be outlined so clearly that everyone participating in the productization process understands what the service is intended to do and what not. Edvardsson and Olsson (1996: Lehtinen & Niinimäki 2005) add the evaluation of the economic viability of the product to this stage, because obviously productized service needs to be economically sensible for the providing organization. Similarly, Sipilä (1996) reminds that when productizing a service, an organization needs to consider its capabilities. More often than not the reason for failed productization process is the lack on internal capabilities for producing the service in the organization (Tuominen et al. 2015). Additionally, most

productization experts advocate for alignment between productized services and company strategy (e.g. Torkkeli et al. 2005; Sipilä 1996; Jaakkola et al. 2009).

When considering productization of SME PMS, this stage would involve, at first, the recognition that there is a need for better performance measurement in SMEs. After the need has been recognized, the organization productizing the PMS should, at first, strive to outline the content of the PMS. This could be done for instance with reusing ideas from previous, successful PMS projects or by conducting preliminary interviews among the possible clientele. Secondly, the organization should consider its internal processes, resources and capabilities and determine, whether it could produce the intended service with reasonable costs. After both the preliminary contents and the internal capabilities required have been outlined, the company can move on to the second stage, which is designing and outlining the service.

2. Designing and outlining the service

After the need has been recognized, the product planning process can begin. Essential in this stage is the definition and description of service packages and its production processes (Ukko et al. 2011). Tuominen et al. (2015) advocate for summarizing the service value proposition, its contents, the production process and resources required with as much detail as possible. This so called blueprinting aids both the providing organization and its customers in realizing the potential benefits and pitfalls of the product (Lehtinen & Niinimäki 2005). Sipilä (1996) argues that in order to be of any use, this blueprint should contain detailed information about the product, the processes with which the service is actually performed, its customer benefits, its market potential and competitors, its versions, the most important references, price, delivery time, person in charge and lastly, its impact on the organizational processes. That way, all crucial perspectives become considered very early on, and the rest of the productization process is greatly facilitated.

Most expert service productization literature recommends using service packages or modules in the productized service (Ukko et al. 2011). A service package is an entirety that consists of different kinds of concrete and immaterial services forming a service product. Due to the intangible nature of services companies usually face variable set of customer demands they should be able to answer with the productized service (Docters et al. 2004). To achieve this, Sipilä (1996) recommends thinking the

service process as an onion: at the core of the productized service is the standard component the organization excels at, and, depending on the organizational capabilities and customer needs, the core is complemented with adhesive services and tailored solutions. This approach highlights standardizing most of the service product and offering for instance three different versions: a very basic package, a medium package that suits most customer needs and a specially customized package that offers the highest value. Alternatively, service package can be divided into the core service, additional services and support services (Grönroos 1998). Thus, an expert service should be seen as a wholeness which includes an as big as possible standard component, module parts and a tailored part. Because the customer always approaches the service from the tailored end, the service seems more tailored than it actually is (Sipilä 1996).

The contents of the product itself can be designed in multiple ways. Productization literature is full of suggestions and guidelines for productization workshops, facilitation sessions, productizing with storytelling et cetera. Regardless of the method chosen, one should at this stage engage the most important stakeholder groups for the success of the productized service: the employees and the customers (Jaakkola et al. 2009). Quite often the initial planning is made internally among employees and customers are introduced into the process later on, when there is something tangible to show them (Lehtinen & Niinimäki 2005). Also, whenever there is a software involved in the project, as it is always the case with a PMS, the realities of the software should be carefully kept in mind during this phase, because there is no point in trying to productize something if the software it is built on cannot perform as planned (Artz et al. 2010).

This stage in the productization of a PMS for SMEs would involve designing the actual product based on the outlining made in the previous stage. In a PMS SME product, there would most likely be a rather standardized performance measurement solution, for example a budgeting template that would form the basic component of the product. This component would then be complemented with different performance measurement solutions, such as forecasting tools, cash flow management tools, key performance indicators and possibly also strategic management and strategy development tools. These adhesive components would form the customizable part of the product, and they would most likely result from customer interviews or otherwise recognized customer requirements. At this point of the process, a pilot version of the system, including the software it operates in, would be built. After the pilot version is sufficiently ready, it is time to move on to the next stage, piloting the service.

3. Piloting the service

Piloting the service is the stage that quite often becomes neglected (Ukko et al. 2011). It should not, however, be overlooked, because at this stage a valuable information about the customer's needs and requests can be obtained when the service product is still rather easily modifiable. Also, piloting forces the expert organization to launch the pilot version even if the professionals feel it should still be improved. Sipilä (1996) notes that expert service organizations have a tendency to strive for perfection, when, in fact, customer feedback and actual market experiences would be the things needed. It should be kept in mind that no matter how well one standardizes, defines and describes, service is, in the end, always generated in interaction with customers (Sipilä 1996). Thus, obtaining customer feedback as early on as possible may prove fundamental to the success of the expert service product.

Involving the customers into the productization process may not be as simple as it sounds, however. If the customers receive no clear value from participating in the project, issues that are more important will most likely overrun the participation. Before involving its customers in the projects the organization should ponder upon the value promise of the product for the customer and aim to design the productization processes so that these value promises can be realized also in the early phases of launch (Sipilä 1996). There should also be some rather immediate benefits for the customers participating at this stage (Tuominen et al. 2015). This concrete benefit may for instance be a right to use the pilot version of the product and the software it operates in for free or with considerably smaller costs, or discounts on current services.

A PMS for SMEs would most likely be piloted with the customers that participated in the initial interviews, because the pilot version of the service was developed based on their demands and requests. Crucial at this stage would be to obtain feedback from as wide range of companies as possible to ensure that the product is modifiable enough to suit most customer requests. As the feedback from the pilot projects is reviewed and the service product bettered accordingly, it is time to concretize the service.

4. Concretizing the service

After the service has been developed further based on customer feedback, it is launched to the market. Before full launch, however, some consideration need to be placed on concretizing the product, on reducing the ambiguity that the complexness and uniqueness that inevitably surround the expert service product (Sipilä 1996). Concretization happens at many levels. At its simplest, it means coming up with a catchy name, designing an effective brochure and adding some concrete part such as software to the service product (Sipilä 1996). This stage, however, involves also the pricing of the service, branding it, and collecting reference lists and customer stories to ease the marketing of the product (Ukko et al. 2011).

Selling the productized service can be eased by adding some concrete components to the service. Having a good brochure that depicts the service and its benefits facilitates the communication with customers and also reduces the ambiguity that always surrounds the service. Additionally, adding something concrete, such as a software, to the service product adds the attractiveness of the service, because benefits received from new software are easier to comprehend and justify than benefits from mere immaterial service (Jaakkola et al. 2009; Sipilä 1996). Also, having an easily recognizable name increases the likelihood of succeeding in selling the product, because customers are able to identify the name to a certain product or to a certain organization producing that product (Sipilä 1996). Kaplan and Norton's Balanced Scorecard is a good case in point.

Reference lists are possibly the most effective way of convincing new customers on the benefits of the service product (Sipilä 1996). Thus, reference lists and successful customer stories should be collected already in the piloting phase. In addition to references, the service organization may strive to create a so called flagship service, a service that the organizations excels at and is known of, or to employ an superstar professional that serves as the flagship (Sipilä 1996). Flagship services are closely related to the service brand the organization can strive to create. A brand is a trademark that distinguishes the product mentally from similar products (Ukko et al. 2011). Personal interaction is an essential part of an expert service, and thus the brand should represent this connection (Lehtinen and Niinimäki, 2005). Alternatively, the organization can offer potential new customers some samples or tasters of the product. These include for instance free trials on the software or offering training sessions that demonstrate the benefits of the service (Jaakkola et al. 2009).

Pricing of an expert service is at its best very hard, because the value of the service may be hard to quantify or realize during a very long time (Sipilä 1996). In addition to that, in expert services there commonly is an information asymmetry between service provider and the customer, because the service provider knows the contents of their service and its potential and the customer the state of their business, but both of these pieces of information are hard to share (Jaakkola et al. 2009). Thus, Sipilä (1996) recommends so called active pricing for productized expert services, indicating that the price should reflect the newness and creativeness of the product, the competitive situation and alternatives, and the extent of the customer relationship. Ukko et al. (2011) echo this notion and note that pricing is closely connected to the competitive strategy organization chooses for the product. They remind that in expert services, competing with price should always be carefully considered, and that focusing on service quality or uniqueness are probably better competitive strategies.

Pricing a PMS for SMEs is made easier by the fact that quite often the starting point for pricing comes from the license fee or some other cost of the software. That also eases justifying the price for customers, because the organization can point out that this amount of the fee consists of the software costs, and by paying the added consulting fee you get this, this and this done for you in the software. For productized PMS, a reference list and enough samples and tasters are of crucial importance. The organization should aim to positive word-of-mouth –marketing and the raising of awareness by actively asking for customer experiences and actively providing new customers a chance to test the product. This chance can be in the form of a training session in a seminar, a free trial or a consultancy session at the reduced price, or something alike. Even though a fact is that most PMSs developed never end up as brands, one should nevertheless aim for that, because that way the PMS product is marketed in a proper way. Providing guidelines to service branding, however, is well beyond the scope of this study.

5. Developing the service further

Once the service has been successfully launched, the service organization should actively collect feedback and suggestions from customers and develop the service further. That way it stays competitive over time and can, with luck, prove to be a long time success (Ukko et al. 2011). Feedback should be collected and improvements made on a continuous basis.

A successfully productized PMS should, then, contain clear value proposition for a customer, which would be delivered via a package of services consisting of both standardized and customized parts. This package could be modified to suit the customer's needs with reasonable expenses. Most likely productized PMS would be built on a specific software, and the license and consultation to this software would be included in the product. There would be at least a couple of different packages to choose from, ranging from the basic core of the service, such as setting up basic performance measures, to a comprehensive system that could involve consultancy with strategic planning and implementation, the creation of PMS and some monthly consultation with the interpretation of the numbers. The rest of this study focuses on empirically researching, whether the perspectives presented in the literature have any connection to the real business life, what are the actual requirements SMEs place for their PMS and how these requirements should be translated into productized solutions. This analysis is commenced with the description of the methods used and data collection process in the empirical study.

3. Data and Methodology

This chapter reviews the data collection process and the methods used to analyze it. Additionally, the reliability and validity of the study are addressed. The chapter is structured as follows: first part presents the methodology and second part the data collecting process. The discussion on validity and reliability issues and some biases the researcher might have is provided in the second part in connection with data collection process.

3.1 Methodology

This study is a qualitative case study. Case study can be defined as a research strategy that focuses on understanding the dynamics present within single settings (Eisenhardt 1989), aiming to provide empirical descriptions of particular instances of a phenomenon (Yin 1994). In recent years most of the academic writers on accounting have agreed on that when the research problem requires deeper understanding of the nature of management accounting in practice, a case study method provides the best results (Scapens 1990; Vaivio 2008). It can be seen as means for the researcher to develop contextually sensitive knowledge of the actual practices taking place in the organizations (Keating 1995). Since this study focuses on solving a problem experienced by a company in its current business setting, researching this topic with case study methods seemed like the only sensible option.

This study employs so called multi-case study method. Multi case study allows for searching patterns and similarities in activities performed by independent actors (e.g. Eisenhardt 1989) and in that way "automatically" triangulate the data obtained from the interviews. This allows for greater credibility in the results and solutions presented, because the biases and perspectives of a single interview are somewhat diminished by the comparison with other cases. In the context of this research, despite the fact that all of the data was in the end analyzed in the viewpoint of this single case organization, the actual research included interviewing several different companies and the solutions were derived by analyzing and comparing information provided by them. Thus, the solutions presented can with greater probability be applied to also other organizations than the case company because they were developed based on perspectives of multiple companies.

Miles and Huberman (1994) argue that the researcher should make clear their preferences. According to them, this indicates first and foremost clarifying of the research paradigm. Building on the works

of Ryen (2010) and Silverman (2016), this research follows the naturalistic-positivistic paradigm, indicating that the social reality is considered "real", and the data collected are facts. Thus, the interviews were conducted as semi-structured and followed a similar pattern across all of them. It is, however, recognized that PMSs are, in the end, socially constructed systems that do not operate in a vacuum but shape in the social reality of the organization (e.g. Simons 1991). Following that logic, the interviews were allowed to occasionally drift from the original topic and the sequence of themes was varied based on the natural course of the discussion. By doing this, it was recognized that the researcher could not capture all of the interesting phenomenon in pre-formulated questions, and some room needed to be left for previously unconsidered themes and topics to come up and be addressed in the interviews.

The analysis of data was based on thematic coding by Flick (1998). This method was chosen, because it is identified suitable for studies *"in which theoretically based group comparisons are to be conducted in relation to specific issues"* (Flick 1998). Thematic coding is a multistage procedure that can be applied simultaneously to both single case and multi case analysis. Additionally, this method had been successfully applied to a similar, although rather larger scope, research on SME performance measurement by Hudson et al. (2001). Consistent with Flick's procedure, the first stage of the data analysis observed each of the interviewed companies, including the case company, as single cases. The second stage of the analysis concentrated on finding common factors across the cases and interpreting their meaning. After this procedure the analyzed data was compared with theoretical considerations.

At the first stage of analysis, to begin with short case descriptions were prepared. These descriptions included the case statements, i.e. the most important takeaways from each interview, descriptions of the company, of the persons interviewed and their role in their respective organizations. Additionally, they summarized the central topics mentioned by the interviewees concerning the research topic. These case descriptions were constantly rechecked and modified throughout the analysis. After the case descriptions, attention was turned to the transcribed interviews. A deepening analysis was performed to each of them with aim for developing a system of categories for each single case. This was achieved by open coding (Strauss 1987), which aims at expressing data in the form of concepts by segmenting it to relevant units of meaning. In the context of this case, these codes included strategy, theoretical consideration of performance measurement, critical success factor and change in

PM system due to internal changes, to mention a few. These codes were then grouped to categories using selective coding (Strauss 1987) so that the issues concerning same topic could be better captured and analyzed. The categories used in this process were the ones identified in the literature and specified in the theoretical framework (Table 1). This process was repeated to each of the single cases.

At the second stage of analysis, the thematic domains and categories for single cases were cross-checked and compared with each other. The purpose of this process was to extract similarities and differences across cases and to corroborate the theoretical framework – or disprove it, if that was the case. The result of this stage was a thematic structure that allowed for further specifications and analysis of the problem at hand. In this case, the thematic structure was very close to the original theoretical framework with few specifications added. These thematic domains were then dug into more deeply by analyzing single passages of transcribed interviews in greater detail. Similar codes in individual groups were summarized into specific topics that allowed for further scrutinizing the viewpoints of the interviewees. In the end, after constant comparison of cases based on the developed structure, the topical ranges in the way the interviewees dealt with each theme could be outlined. These topical ranges were compared to the theoretical framework and in the end summarized into a concrete suggestion for PMS product for SMEs. Both the comparison of categorized data to the theoretical framework and the empirical framework are presented in greater detail in the next section.

3.2 Data Collection, Validity and Reliability

The data for the research was obtained mostly from four interviews within the case company and five interviews with the representatives of their customers. The companies interviewed were the clients of the case company, because at this stage the objective of the case company was to develop solutions with which it could better serve its existing customers, not to acquire new customers. The choice of companies was made by the case company representatives and discussed with the researcher before performing the interviews. The companies chosen were the ones that the case company deemed most potential for the development and adaptation of the new performance measurement product. The client companies received an email from the case company CEO asking for their consent to the research, and included in the email there was a short description of the project at hand and a summary of the topics that would be discussed in the interview, but no interview questions. All the originally considered client companies agreed to be part of the research. Henceforth, the companies will be referred to as companies A, B, C, D, and E.

All of the companies interviewed fulfilled the criteria for SMEs, although within that definition they varied considerably in many respects. Largest companies had some 100 employees and had net turnover and balance sheet total measured in millions and smallest employed less than 10 people and measured their net turnover and balance sheet total in thousands. A common factor to all of the interviewed companies was that they operated in a service business, even though the type of service provided varied from software services to accommodation services and beyond. Companies A and D provided software services, company C provided accommodation services and companies B and E operated in personnel and consulting business. This variation was a deliberate choice: since the purpose of the project was to develop a performance measurement product that with little modifications could be applied to very different companies, it seemed suitable to research companies that differed considerably from each other. One company, company E, had been in business for more than thirty years and was considered very well established, whereas at the other end of the scale was company C, that had been founded a year ago. Excluding company D, all of the companies operated for the time being only in Finland. Company D had a branch office in the U.S and was planning further expansion of that business. None of the companies had subsidiaries or affiliates.

The interviews were performed as semi-structured thematic interviews. The topics discussed with each interviewee were the same, but the sequence of questions and themes differed in each interview based on the natural course of conversation. Within the case company the interviewees included the chairman of the board, the CEO, the current team leader and one of the accountants, thus spanning all levels of the organization. In the client companies the interviews were conducted with the person deemed most suitable to answer to questions about performance measurement. In companies A, B and E it was the CFO, but in company C the interview was conducted with the CEO and in company D in interviewee was one of the founders, currently occupying the position of COO. This was due to the fact that companies C and D lacked CFOs.

The interviews within the case company concentrated on the perceived problems considering performance measurement among their client companies and the solutions the case company could offer. Within the client companies, the focus was on obtaining a comprehensive view of the company in question, its strategic objectives, critical success factors and current performance measurement practice. In addition to that, emphasis was placed on the problems experienced with current PMS and

the desired solutions. The themes dealt with in the interviews were chosen on the basis of the literature review and concentrated around the theoretical framework presented in chapter 2.1.2. However, room was left for other topics to surface from the conversation and some probing questions were used to obtain more information on these themes. The duration of the interviews varied from 20 minutes to 40 minutes.

The interviews were taped and transcribed by the researcher. This increases the reliability and validity of the data, because the exact course of the conversation and quotes could be reviewed later. At the same time, however, it can have implications on what the interviewees say, because they know that everything they say goes on the record (Vaivio 2008). In the context of this research, the risk of the interviewees not saying everything there was to say was, however, fairly small. All of the interviewees occupied positions in their respective organizations that allowed for great influence in the PMS and some had even conducted the system their organization was currently using. Most of the interviewees were also the main or only operators of the PMS. Thus, they should have little fear of being exposed or, in a sense, being caught doing something that was against the organizational culture or conventions. All interviewees agreed to the tapings readily.

However, when the transcribing is done by the researcher, there is a danger that the researcher becomes selective on and in a way already performs data analysis when transcribing. No researchers' mind is *tabula rasa* and as Vaivio (2008) argues, it is only natural that the researcher formulates some kind of standing on the research topic based on the literature review, whether they want it or not. If the researcher is not careful, this original standing may persist throughout the research process, and some interesting and novel perspectives presented by the interviewees may even go unnoticed (Vaivio 2008). To minimize the effect of this bias, the original tapings were listened multiple times and the transcriptions corrected so that they corresponded word to word on what was said – even the expletives were not omitted. In addition to that, after the empirical analysis had been completed, the tapings were listened one more time to see that the citations really corresponded to what was said. However, as all the interviews were performed in Finnish, the citations had to be translated into English, thus submitting them to the danger of incorrect translations and loss of relevance. To address this issue, the translations were checked by an independent party on the request of the researcher.

The original research design was twofold: first interviews were performed within the case company to obtain a general view of the problem at hand and to formulate an estimate of what the case company could offer to its customers in terms of performance measurement. The second round of interviews were performed with the case company clients to obtain a comprehensive view of the performance measurement systems they currently had, the problems experienced with the current systems and the desired solutions. After the interviews with client companies it became clear that more information was needed on the services the case company currently provided for the clients. These views were provided by the CEO and the team leader who were responsible for the customers in the case company. At the same time the data obtained from the client company interviews was in a way triangulated, when the case company representatives were asked to provide their view on the problems their respective client companies experienced with their current PMSs. This further increases the validity and reliability of the obtained results, as the observations made by the interviewees are backed up with the observations of their accounting service company. However, it is recognized that this triangulation is alone is not sufficient to say that the observations of the interviewed managers are objectively correct. Therefore, they are treated as subjective experiences of these particular companies operating in these particular settings, and the consequently one may not be able to generalize the results of this study beyond this specific research setting. The next section presents the empirical results.

4. Empirical Analysis

This chapter presents the main findings from the empirical data. The first part presents the case and the case company. In the second part, the data is analyzed via the theoretical framework to obtain a comprehensive view on whether the perspectives presented in the literature emerge in the real world. The last part of the analysis concentrates on productization of the SME PMS.

4.1 Case Description

The case company is a small Finnish consulting company that provides financial management and administration services coupled with accounting software. The company employs approximately 10 people and has some 70 customers ranging from larger, well established SMEs to small one person companies. Most of the case company's clients operate in a service business, but the fields of service vary from software services to recruiting and staffing services and beyond. Currently, most of the customers purchase only rather basic bookkeeping and financial administration services. These services fulfil the legal obligations regarding financial management but offer little help in steering the company or evaluating whether the decisions taken were even by a mile the correct ones.

Recently, the case company has obtained licenses to new software that allows for more extensive offering of financial consulting and controlling services, and expanding the business to that direction is one of the case company's main middle- and long-term goals. Case company executives feel that they could do much more to their customers regarding their performance measurement and management, if only the customers could be made to see the value of timely and accurate information a decent PMS would provide. To serve that end, the case company management decided to develop a new performance measurement tool and service that could serve all their customers, from small one person companies to larger and well-established SMEs. Because previous experiences with productization had proven successful, turning this service into a product seemed an obvious choice. Having a performance measurement product to sell, felt the case company executives, would make it easier to communicate to customers the benefits provided by bettered information.

To serve that end, the case company employed the researcher to act as an independent consultant to develop a PMS for SMEs that could then be turned into a product. The purpose of the researcher was to interview case company's clients and clarify the problems the organizations experienced with their

current performance measurement. In addition to this, researcher's task was to find out, which requirements the clients had for a PMS they would be willing to purchase. The empirical and theoretical research would then be combined into a framework that the case company representatives would develop further into a productized service.

4.2 Evaluating the Theoretical Framework

The theoretical framework for SME performance measurement system was presented in Table 1 in chapter 2.1.2. The first part of the empirical analysis focuses on evaluating, whether the perspectives on performance measurement, SMEs and PMSs used in SMEs ring true with the researched companies. The analysis is performed through the PMS requirements defined in the first part of the literature review. In addition to verifying the requirements, some practical ideas and insights on how they could be fulfilled are sought within each requirement. This part of the analysis focuses on the client companies and strives to find similarities and dissimilarities between the companies.

1. Supporting strategy development and strategic planning

It seems that the observation of, for instance, Harris and Ogbonna (1999) and both the CEO and the accountant of the case company about the state of strategic planning in SMEs holds true. When asked about strategy and vision, all of the interviewed companies claimed that they had at least a vision and some milestones for reaching that vision in place. However, excluding company E, the longer-term plans these companies had were either very vague or spanned a very short time horizon, and can scarcely be called strategic. For company B that operates in a personnel business the strategy work had just begun, since there had been considerable changes in the ownership and management of the company. Company C that operates in an accommodation business was so young and small that planning very far ahead with very much detail was, according to the CEO, a waste of time. Company E, on the other hand, was so well established and had so stable financial situation that it was able to plan rather far ahead and incorporate different scenarios into the plans. For companies A and D, both operating in software service business, the planning horizon was approximately a year, beyond that the plans were more like detailed visions. The CFO of company A justified this by stating that:

"In this [software development] business the planning horizon is shorter because the product development cycle is shorter. The feedback on what works and what does not work comes rather quickly and there is no need to invest in production equipment or materials. There simply is no need for concrete plans for more than year ahead."

Despite the state of strategic planning in the interviewed companies, it seems that the observation of Hudson et al. (2001) about the recognition of the value of strategic planning by SME managers rings true. Even though the planning processes in the companies could not all be called strategic, it was evident that all of them practiced some form of long-term planning and recognized the added value it brought. The long-term planning process seemed at least in the interviewed companies to be less formal and less key performance indicator -focused than in many larger organizations, which is consistent with the findings of for instance Garengo et al. (2005) and Chiarvesio et al. (2004). The CFO of company A admitted that he was used to developing strategy with closer involvement of the key metrics and was still somewhat searching how much they should be used in the company, but did not see an immediate need to implement such procedures. None of the companies interviewed confessed using any strategy development tools, such as Balanced Scorecard. Instead, interestingly, for most of the companies the long-term planning tool seemed to be, at least to some extent, budgeting. More than one manager mentioned budgets and budget-based targets when asked about strategic planning and implementation, and several reported using for instance sales budgets to steer the organization to the desired direction, suggesting that the managers recognized the importance of implementing and communicating strategy via performance measures. The COO of the company D concluded:

"If we say that we want that we have x clients bringing in y in revenue it starts to guide the entire organization strategically to that direction. In a way, the key metrics become the drivers of business and thus align the entire organization to support the reaching of those objectives. "

The first requirement for the SME performance measurement system was that it forces organizations to do strategic planning and also to constantly monitor and update these plans. Based on these interviews, it can be concluded that the notion that SMEs do not practice strategic planning rings true. However, all of the interviewed companies had some form of longer-term planning in place and recognized its importance. Thus, it can be assumed that with little guidance these longer-term planning processes, budgeting practices and budget-based targets, could be turned into proper strategic planning and implementation procedures. This suggests that budgets could be employed also in smaller organizations to aid them in developing their strategic planning and implementation processes so that the recommendation of Chiarvesio et al. (2004) of dynamic strategies that do not

contain too much detail and can relatively easily be changed realizes. Budgeting is in SMEs often perceived as heavy and bureaucratic, but as the CEO of the case company observed, it does not have to be when the process is designed and implemented properly. The fulfilment of the first requirement, then, could possibly be achieved by proper use of budgeting coupled with needed amount of consultation.

2. Providing balanced view of the organization

Considering the balance between financial and non-financial indicators, the findings of Singh et al. (2008) about the financially focused performance measurement in SMEs seem to ring true among the interviewed companies. Revenue and cash flow emerged from most interviews as something that was followed almost on a daily basis. Even though all of the five companies were either so established or so well capitalized that the cash flow was not an immediate worry, it was something that most managers wanted to be aware of constantly. In addition to that, most interviewees mentioned some financial, typically revenue-based, indicator when asked about their key performance metrics. This would suggest that the observation of O'Neill and Duker (1986) is true: financial success is for SMEs, in the end, the determinant of success and failure, and thus needs to be monitored on a constant basis. Alternatively, the definition of key performance metric is misunderstood among SME managers to mean a financial indicator, even though the indicators used in reality would span the entire scope of key metrics.

The latter argument is supported by the amount of non-financial operational measures that emerged in the course of conversation. For company A, most of the performance measurement concentrated on measuring the funnel through which marketing investment turned into registered and paying customers, which the CFO identified as a commonly accepted best practices in software business. Company B and company E focused on measuring working hours and related measures, such as daily revenue adjusted with working hours. For company C, the critical measures focused on the time customers spent in their respective processes, and company D had a considerable amount of operative measures concentrated on their product and product development that were used alongside the financial ones. Interestingly, non-financial, qualitative measures were mentioned explicitly only by the CEO of company C. He talked about measures that were used in the operational units but due to time and resource constraints not reported to management, even though these measures captured considerable amount of critical success factors. It seems, indeed, that the concept of performance

measurement is misunderstood to mean the financial measurement but despite that the managers are able to recognize the metrics that really provide them with a comprehensive view of the organization – and that the financial measures, may, in the end, not be nearly as central as even the managers believe. The CFO of company A concluded:

“I have noticed that in this business and in company this size the financial metrics clearly have a less central role in everyday work than in larger organizations. – For instance for us a very good metric for our performance is the amount of monthly active users [in our software] because it correlates with how much we have paying customers and thus, with how much money comes in.”

Unsurprisingly, most of the financial indicators were reviewed monthly, thus supporting the notion of past-looking indicators. SME managers, however, placed considerable importance on forecasting. Typically, they forecasted cash flows, revenues, and sales, but also other important success determinants such as the number of customers. In this regard, the companies differed from each other. For companies A and E, the most central forecast was the cash flow forecast. Company D focused on forecasting revenue and sales, company B sales and revenue, and company C did not see an immediate need to prepare detailed forecasts as the cash flow situation was at the moment very stable and expenses well known and easily predictable. In the context of forecasting, the need for better tools arose in multiple interviews. Most managers considered the lack of proper tools as the main obstacle to future-looking performance measurement. The CFO of the company B concluded:

“Now all of this [performance measurement] reflects the current situation – we notice that the revenue starts falling or starts rising, but why does this happen? Okay, the customers are better or worse of, but could we have seen this coming? If there was a way of getting closer to the customers, of obtaining forecasts from them, we could estimate our own demand and plan supply accordingly. Now all of our performance measurement is more like tactical measuring and reacting to what happens in the business field.”

Interestingly, the limited ability to forecast seems to be an important reason for using financial indicators at the core of performance measurement. The CFO of the company B went on:

“You notice that when you start forecasting and correcting forecasts, you are quite conservative. It [inability to forecast future demands] may even limit investments, when there is all the time that small voice at the back of your head asking, what if something

happens tomorrow? We could probably better our business results if we invested, but we have to be careful with our cash situation all the time."

The second requirement for PMS for SMEs was that it is able to provide a balanced view of the entire business. Based on these interviews, it seems that SMEs employ mostly financial and past-looking indicators in their performance measurement, but have coupled them with appropriate operational measures and forecasts and are able to obtain rather comprehensive view of their business even though they are not necessarily able to name it. What they need assistance in is the forecasting of future, and even more urgently, proper tools for that. The desire for tools was mentioned by multiple managers. One went even so far as to suggest that he would be willing to pay as much as for proper accounting system for a tool that would help them forecast better. Currently the forecasting tool was, for most of the companies, Excel, which, as the CFO of company E stated, is an excellent tool, but requires a considerable amount of manual work and thus, time – which SMEs typically do not have. Thus, for the second requirement to be fulfilled, proper performance measurement and forecasting tools need to be developed.

3. Providing tools for quantifying results-determinants relationships

Based on short interviews it is rather hard to evaluate, whether these SMEs have proper results-determinants relationships in their PMSs. What is possible to evaluate, however, is whether the SME managers are eager to find root causes for changes that occur in their performance. Those managers that want to stay on top of things can with reasonable accuracy also be expected to know the relationships that exists between their business results and operations and at least to some extent also be able to relate these relationships into their performance measurement. Additionally, the existence of causality is examined through the critical success factors managers were asked to name and whether these factors are reflected in their PMS. This link is used as a proxy to determine, whether the SME managers are aware of the importance of results-determinants relationship and able to relate that to their performance measurement.

The degree to which the measures in the researched companies reflected their critical success factors varied, but at least all those companies that had been in business for more than a couple of years, companies A, B, D and E seemed to have a clue of why their respective businesses had succeeded,

and had at least to some degree tied their measurements to those factors. Company C differs from others in this respect because a lot of its performance measures are given by an external financier and therefore cannot be influenced. For companies developing a product, companies A and D, the critical success factor was obviously the product and the organizational structure surrounding it. Therefore, it was no surprise that most of their key metrics focused on measuring how well the product fared on the market. For company A, the main focus at the moment was to measure how well marketing programs paid off, and for company D the critical measurement point was how well the product had been commercialized. For companies operating more in a service business the situation was somewhat differed. The CFO of company B identified the team as the most important success factor, and, consequently, all of the measures followed how well the team had been able to perform with the customers. For company E, the critical success factors were flexibility and motivated employees. They talked about "rolling snowballs", meaning that all of the business focused on finding the right person for the right project for the right customer. The success of this process was monitored with sales information, budgets and budget-based targets.

The amount of consideration placed on finding the root causes seemed, at least to some extent, to be determined by whether the company had a controller or financial officer function or not. All of the CFOs interviewed, from companies A, B and E mentioned multiple times the need to "stay on top of things" and to "find the root causes" for the things happening, for changes in revenues, expenses, results, business environment et cetera. The interviewees from companies C and D, on the other hand, were not that interested in finding out causes for deviations or some specific expenses. The CEO of company C justified this:

"Thus far, it has not been worth the while to start hunting for reasons for the smallest expenses because concentrating on obtaining more customers and growing our own operations has been much more profitable."

The COO of company D echoed this by saying that right now the important thing was growth, and the small expenses and causes for deviations could be dug into later on. Partly this is certainly due to the fact that neither of the companies at the moment experienced huge cash pressures – company C due to its external financier and company D due to its capital investors. Both of the managers, however, also explicitly identified the lack of controller function as a reason for not digging in too deep to the numbers. The CEO of company D went on:

“Our resources are still limited and we do not have a controller function, there is no one who would have time to concentrate systematically on expenses and their root causes. This is probably something we have to improve at some point.”

Interestingly, both of the companies expected their accounting agencies to act as controllers for the time being, indicating that providing controlling services might benefit case company's other clients as well.

The third requirement for the proper SME PMS was that it provides tools for comprehensively identifying and quantifying the causal relationships between the drivers of performance and business results. From the evidence presented above, it can be concluded that Suwignjo et al. (2000) were correct in their observation that this is easier said than done. However, it seems that whenever there is a financial officer who has time to concentrate on such things in the organization, the PMS incorporates at least some form of causality. Hence, perhaps the most effective way of gradually introducing causality into PMSs would be educating the financial officers or other people responsible for creating a PMS about its value and providing them with tools to recognize the drivers of their specific businesses.

4. Being dynamically adaptable and providing accurate and timely information

The need for dynamic PMS was reflected on by multiple interviewees. None of them, however, explicitly defined their PMS as dynamic. Rather, the measures mentioned were, consistent with the observations of Bititci et al. (1999), static financial measures reported monthly to the board of directors. However, SME managers seemed to be well aware of the need to change the performance measures when business environment changed. The COO of company D talked about how their entire PMS had been redone at the beginning of this year because the company's business model and competitive strategy had changed from freemium to commercialization. Similarly, both the CFOs of company A and B had begun their work by updating the PMSs used in their respective organizations, and this process was still somewhat ongoing. The CEO of company C reflected on how their PMS was constantly evolving when other operations gradually stabilized and more time was available to concentrate on such things. For company E, the long experience of the business had brought rather static financial management and thus also performance measurement, but dynamism was

incorporated into it via scenario budgeting and rolling forecasts, so that both external and internal changes could be accounted for when they happened and not a year afterwards.

Thus, reading between the lines, a considerable amount of dynamic adaptability in the PMSs of interviewed SMEs can be identified. This suggests that dynamic adaptability is another concept the SME managers are aware of without knowing that they are aware of it. The CFO of company A was to only one to explicitly mention it when asked about an ideal PMS for SMEs:

"The performance measurement system needs to be able to live with company's dynamics and life cycle so that there are no dead metrics. Target levels are one way to bring dynamism into performance measurement. – Very easily very static metrics are adapted; one division aims for same delivery reliability target for ten years in a row. – One should really ponder about the changes one aims to do with the measures and how to support them. On one hand performance measurement needs to tell you where you are now, but on the other also to clear to path for changes. And these are two different things, even though they very easily get mixed up."

Target levels were, indeed, a way for more than one of the companies to account for changes and prepare for possible changes. In addition to company E, companies D and B admitted using them, and even the CFO of company A had pondered upon introducing rolling forecasts and business targets into the performance measurement. This suggests that adding target levels and some scenarios or rolling forecasts could benefit also smaller SMEs in incorporating dynamic adaptability into their performance measurement.

The fourth requirement presented in the theoretical framework was that PMS needs to be able to provide accurate and timely information and be flexible, rapidly changeable and maintainable. From the evidence presented above, it can be concluded that SME managers are aware of the need to change and update their PMS whenever there are considerable internal changes. In addition to that, they incorporate dynamism into their PMSs by deploying target levels, rolling forecasts and scenario budgeting. However, even the interviewed SMEs could perhaps benefit from consultation in accounting for external changes in their PMS. Additionally, the availability of timely and accurate information was not self-evident for all of the companies. This most likely has to do with the data and software issues that are explored further in the next section.

5. Incorporating all critical perspectives into a simple system

All of the interviewed managers claimed that their performance measurement systems were thought of as a whole, or quoting the CFO of company B, contained *"surprisingly little ad hoc"*. None of the companies, unsurprisingly, used any performance measurement framework defined in the literature, such as Balanced Scorecard, but the PMSs in use clearly were logical unities that provided comprehensive view of the organization. Company A based its PMS on best practices in the field, and the CFO described the measurement system as a *"logical funnel that conveys the consumer into a paying customer."* Similarly, company D operated a system that supported their commercialization strategy and simultaneously provided their external investors the information they needed. For company C, the information needs of the external investor were the drivers behind the entire PMS. Companies B and E on the other hand, based their PM systems on the information needs of the board of directors. Thus, it seems that the pressure to develop a comprehensive system came either from external investors or from the management.

All of the managers claimed that the current PMSs provided them with the information they needed. What they had issues with, however, was the data. All of the interviewees spent considerable amount of interview time talking about problems they faced with collecting, updating and checking the data. Either the data was difficult to obtain because it had to be collected from multiple sources and edited manually, or the systems did not provide the tools needed to manage it, thus forcing managers to resort to Excel. In addition to that, the managers experienced issues with the correctness of the data, and, as the CEO of company C noted, the resources in the financial administration were so limited that there really was not enough time for manual corrections. The same problem was identified by both the CFO of company A and company E, who stated that they could only trust the data that had been obtained during their time in the company, thus rendering measurements against past performance virtually useless.

Hand in hand with issues with data came the issues with, or rather the lack of, proper reporting software. Data was entered *"here, there and everywhere"*, and more often than not these systems did not communicate with each other. If the working hours were entered into one system, the integration into accounting system did not work, causing immense amount of manual work, or the accounting

system could only incorporate things that had already happened, forcing managers to prepare forecasts and other reports manually in Excel. The CFO of the company B reflected on this:

"I would prefer that all data was concentrated and easily available. – It seems that data collection is always a bit ad hoc. Although even big corporations use Excel in their reporting and they operate with huge Excels, I would prefer if all data was in one platform. Now we have to operate with multiple software systems because the system that would fill all our requirements simply does not exist."

The CFO of company E echoed this notion.

"I stay on top of things, but it requires a huge amount of work. I have to look for data from different reports and combine it into Excel. – The thought that I would have a single dashboard, where all the data from different places would be easily available is very tempting and something that we strive for. – You would think that in year 2016, almost 2017, there was another option for financial reporting than Excel. Excel is a good tool, but it does not update the numbers automatically, and that's what I have to use two days per month for."

More than one manager was in the opinion that a better system would release their time for something more important and productive. If they did not have to spend their time collecting and combining data, there would be more time to really analyze and dig into the numbers. The CFO of the company A concluded this notion:

"The most important thing with the planning and measurement software is that it frees controller's time for activities that add more value. The end result of planning and measurement is numbers, but the numbers are not important, at most they validate the result. The important thing is the dialogue, the what if, the what can we do to achieve this or that. "

It seems, then, that the main issue with the clarity and simplicity of PMSs in SMEs is not the systems themselves but the software needed to operate them. A better software and more easily available data would better SME performance measurement without any extra effort just by releasing financial manager's time. Thus, obtaining a simple and functional accounting software that could incorporate all needed performance measures and present them without extra manual work would fulfil the fifth requirement of comprehensive but simple PMS.

6. Considering the needs of the most important stakeholders

At the surface the interviewed companies seem to confirm Barnes et al.'s (1998) observation of SMEs not including stakeholder perspective into their PMS. Only one of them, company B, explicitly mentioned that it collects feedback from its customers and employees. This was done via survey that had thus far been performed every two years, although the plan was to make this an annual procedure. Despite that, the customers came up in every interview and customer satisfaction and retaining of customers were mentioned among the key things that were under constant observation and improvement. Most likely the lack of customer perspective in PMS is due to two things: the formal collection of feedback, for instance with surveys is too taxing a job for small organizations and on the other hand, it is not needed because communication with customers is rather close and personal and feedback can be received directly and constantly. There is no need for formal PMS to incorporate customer perspective because the issues with customers become known anyway and because coming up with reasonable metrics proves a difficult task.

Interestingly, all of the companies systematically ignored perspective of human resources in their performance measurement even though almost all of them named personnel as their key success factor. It seems, however, that this is not because they did not recognize the importance of measuring the human resources perspective, but because in organizations their size, job satisfaction did not need a specific metric to be captured and noted. Instead, the few management layers and short communication lines identified for instance by Vinten (1999) allowed for direct observation and operating based on the "feel" of things. Considering that four of the five companies were well-established and all of them were at the moment going successfully forward, it does not seem that the personnel is discontent despite the fact that personnel satisfaction is not included in the metrics. The CFO of the company A reflected on this:

"A classic pitfall is the people metric. You need to have one, but then when you should really come up with one, no one has any ideas – and then you end up with something completely bizarre such as how many percent of performance appraisals have been conducted or what is the job satisfaction of personnel. These are not things you can measure on a monthly basis or do something about based on that kind of metrics."

The sixth requirement from the theoretical framework was the consideration of stakeholder, most notably customer and employee, needs. From the evidence above, however, it can be concluded that for most SMEs, the need to incorporate customer and employee perspectives into their PMSs is questionable – not only do they lack sensible indicators, they also usually obtain the information that larger organizations receive from PM system directly from their customers, employees or other important stakeholder groups. This is no to say, however, that SME performance measurement should completely ignore stakeholder perspectives, because if they are systematically ignored in the early phases, there is a danger that they are not incorporated later on even if there was a clear need (Laitinen 2002). Careful consideration should be exercised and the obtaining of necessary information via informal channels ensured before the stakeholder perspective is dropped from the official PMS, and this decision should be reviewed regularly.

7. Being designed with and for the main users

An important point when evaluating this perspective from the interviews is that only two of the interviewees were owner-managers, the managers of companies C and D. The other three were employed from outside the organizations rather recently. However, all of the CFOs employed had, in fact, developed the PMSs that were currently used in their respective companies, and it was evident that at least CFOs of companies A and B had been employed because the management needed someone who was able to bring financial management and performance measurement properly into the everyday operations of the company. Company E was so well-established that performance measurement practices had been in place for decades. Based on this evidence, it can be concluded that at least the managers of companies A, B and E had no misconceptions about the importance of proper performance measurement but valued it greatly. The CFO of the company B reflected on this:

"They [performance measures] have been chosen because I interviewed the board of directors about what they want to see monthly, quarterly, annually. We have really tried to think what is relevant for us."

However, both the CFOs of company A and B admitted that implementing the systems were still more than a bit under way and would need concentrating on so that the performance measurement really became part of everyday operations. The CFO of the company A described this:

"Similar metrics have been used in this company before, but it has always been a bit of a one man's endeavor to create the performance metrics. This was what I did during my

first month here, and now we just have to get the metrics really implemented to everyday business."

The two companies, companies C and D, which did not currently have a financial officer seemed to value performance measurement no less, however. Both of the interviewed managers had, unsurprisingly, been involved in the development of PMSs in their respective companies. What was somewhat surprising was how much these managers relied on their accounting agency considering their performance measurement. The COO of company D concluded:

"We expect that our accounting agency takes a bit of a CFO role. The accounting agency has to be able to understand this business and the way we run it and be the signal that says that hey, 'why did you do that' or 'why haven't you followed the budget'. We want them to take a strong role when we plan and budget and on the other hand when we measure how we did."

At least with these five companies, the notion of misconceptions about performance measurement does not ring true. What does ring true, however, is the influence of management in the PMS and in its importance. In these five companies, performance measurement was valued by the management, but had it not been, companies A, B and E would probably lack financial officers. Thus, educating managers about the importance of performance measurement, something both the literature and the case company representatives advocate for, seems to play a key role in bettering SME performance measurement. The last requirement presented in the theoretical framework was that the system is designed with and for its users so that they are able to recognize its benefits and adopt it to their everyday work. Based on the evidence from these interviews the notion that managers exercise considerable control over the PMSs used in the organizations and that the appreciations of the manager are main determinants of whether a proper PMS is adopted or not can be confirmed. Thus, for SMEs to consistently raise the level of SME performance measurement, educating managers about its value is required.

Some concluding remarks

Based on the analysis presented in this chapter one can conclude that the perspectives presented in the theoretical framework echo in the real world as well. Therefore, it can be stated that the theoretical

framework is a comprehensive presentation of PMS requirements for SMEs and that these requirements can, with some modifications, be applied to a real world PMS. The theoretical framework, however, is more of a justified list of requirements for successful PMS for SMEs than a basis for a product. Therefore, the next section presents a more concrete suggestion for the PMS product and offers guidelines to its productization.

4.3 The Empirical Framework

This chapter presents a suggestion for the SME PMS product and offers guidelines to productizing it. This part of the analysis stresses the views and points presented by case company representatives. The framework strives to transcribe the theoretical requirements into concrete suggestions that the case company can employ when productizing the performance measurement solutions for their clients.

4.2.1 PMS for SMEs

At the core of the performance measurement product is building a comprehensive but simple enough PMS that is dynamically adaptable, incorporates all critical perspectives of the organization, provides timely and accurate information and supports strategical planning and development. Too often the only information the SME managers receive are the numbers from accounting that they translate into financial, past-looking indicators (Singh et al. 2008). Therefore, the proposed SME PMS strives to provide SME managers with easy way to obtain timely and accurate information for organizational decision-making. In addition to that, the product aims to provide organizations with comprehensive view of their businesses so that both operational, financial and strategic issues are considered and value drivers properly identified.

The core product

Based on the evidence from the literature and from the interviews, the suggested tool for this is budgeting. Despite its weaknesses, budget is a very employable tool especially for small organizations, because it can simultaneously perform many tasks, and the data is easy to retrieve from accounting data (King et al. 2010). As budget encompasses information from all levels of organization and combines operational and financial information, budget-based data and indicators can answer multiple information needs. Deriving operational budgets from strategic budgeting should

be relatively simple and adding target levels to budgets or updating the budget on a rolling basis brings much needed dynamism and timeliness to the PMS, as identified by, for instance, the CFO of company A. Additionally, budget is a rather familiar and easy way to communicate strategic and operational issues in the organization. As the CFO of the company A stated, in the end the most important thing with the PMS is how it affects the way people behave because its ultimate purpose is to stimulate change in the way organization operates. The way budgeting directs organizational behavior has been the topic of many studies in recent decades, and as long as the perceived adverse effects are explicitly addressed in the organization, the desired effect should be relatively easy to obtain. In a word, a budget can answer most PMS problems SMEs face. The team leader concluded:

“Even for the smallest companies the budget would assist in preparing for the future and acknowledging problems and possible targets of development. It brings the whole shebang to a new level.”

The information that needs to be easily available varies from one company to another, but it is possible to make some generalizations. Both the CEO and accountant of the case company reflected on this. The basis for PMS in any for profit organization is, according to them, the sales budget and possibly a light expenses budget that would be updated frequently enough, monthly or quarterly. For companies that have multiple offices, departments or business units the PMS should also be able to provide financial results per unit rather easily. Similarly, most companies would benefit from customer-specific financial information, sales, profit brought in by the customer et cetera, because, as the CEO pointed out, surprisingly many of their customers have problems recognizing profitable customers from unprofitable ones. In addition to that, personnel budget and costs is something that should be readily available in the PMS, as SME managers more often than not have difficulties in recognizing the costs and benefits of hiring a new employee, for instance. For some companies, tools to support pricing would also be in order. All of this information can, with proper templates and tools, to be obtained from accounting and budget data and transformed into key performance indicators if need be.

In addition to operative issues, budget can be employed in strategy development and implementation, as demonstrated by several client companies. Company D rolled the strategic goals down to all functions of the organization by separate budgets containing forecasted targets. Company E employed scenario budgeting to account for different strategic alternatives. Company C guided the strategic

direction of their operative units with budgets. As budget data is relatively easy to derive from accounting data and to transform into rolling forecasts and target levels, deploying budget and budget based tools for strategy development and implementation should be relatively easy and not too taxing for even the smallest SMEs, thus aiding them in achieving what the literature suggests (Chiarvesio et al. 2004): a dynamic strategic planning process that focuses on steering the organization to the right direction on a broader scope and incorporates sufficiently little detail.

As budget is a practical tool to small business performance measurement from multiple perspectives, it is suggested that the case company develops an easily modifiable but comprehensive enough template to their performance measurement software that can then be implemented in multiple organizations. The availability of the data is crucial: if it is not something that can be obtained more or less directly from the accounting system, the whole planning procedure is rendered useless. The chairman of the board reflected on this:

“The numbers have to come directly from the accounting system so that there is no need to do any manual work. If the data cannot be obtained systematically from somewhere but has to be dug up from different places, the planning will not get done.”

In addition to that, the system has to be simple enough so that every manager, business background or not, is able to understand how the tool operates and how the numbers resulting from it should be interpreted. As budget is a rather well-known tool even outside the business world, this should not prove too difficult, and can even be aided with involving key users of the tool in the development process and providing regular, for instance monthly, consultation sessions.

Adhesive services

There are at least three obvious ways to complement the core budgeting PMS product. The easiest and most inexpensive involves coming up with different KPI that either result from the accounting and budgeting data directly or use separate data templates the company representatives fulfil. This adhesive service allows for customization of the PMS product with rather low costs, but if the KPI are properly selected to answer the information needs of the management, the value they provide may be considerable. The most asked for by the SME managers is proper forecasting tool that allows for cash flow, sales and revenue forecasts with as little manual work as possible. The most comprehensive

adhesive service could involve complete strategic planning and development in cooperation with the customer. This would profit in particular those companies that are growing from small startups to bigger and more established SMEs, the companies that thus far have been able to survive without any kind of longer-term planning and hence are in danger of forgetting the importance of planning ahead when the company grows.

The software the case company plans to build the product on allows for forming a dashboard of most relevant KPIs. Thus, the case company should create templates for KPIs that would benefit most of their clients. These could include, for instance, the daily revenue adjusted with working hours – something that both companies E and B considered essential to their business – the amount of active users in the software – defined crucial by companies A and D, – or a summarization of the non-financial measures mentioned by the CEO of company C. Emphasis should be placed on the relevance of the information the KPI provides, because building KPIs for the sake of KPIs does not serve anyone's purpose. Also, the observation of Laitinen (1996) should be taken into account. He advocates for presenting the KPI so that the information really "goes to the brain of the user". Therefore, careful consideration should be placed on how the KPI is presented and the manager or other user of the PMS should have their say in it.

The importance of forecasting and future-looking financial management system was identified by all interviewed SME managers. The CFO of company A concluded:

“If the financial management system enables a situation where 10 percent of management and controllers’ time is spent on looking at the review mirror and 90 percent of the time is spent looking into the future it is a system worth paying for.”

The lack of proper forecasting, on the other hand, was identified by all case company representatives. The team leader contemplated:

“Forecasting would help most companies to obtain a better idea of the future. – The customers are never stupid, but they think of the services too narrowly. Most of them are only concerned with doing the basic legal accounting and getting the month wrapped up. Then, when they receive a report from us it depicts already very past time.”

Therefore, providing a tool for forecasting alongside the budget tool would add great value to the performance measurement service. The software case company includes a tool for cash flow

forecasting, and the case company is also able to provide a separate invoicing software that automatically predicts cash flows. In addition to these the case company should actively investigate the possibility to build a comprehensive forecasting part into the budgeting tool that would allow for sales and revenue forecasts and research, whether some input from the customers' customers could be integrated into the system.

The third possible adhesive service is comprehensive strategic planning and development consulting. The first step in this process is educating managers about the value of strategic planning. As the capabilities, knowledge and appreciations of the owner-managers determine what the SMEs spend time on and what not (Ghobadian & Gallear 1997), and the strategic awareness of the owner-manager correlates with the probability of failure (Hannon & Atherton 1998; Berry 1998), getting the managers to recognize the value of strategic planning benefits the entire organization. The CEO, the chairman of the board and the accountant echo this notion; they all mentioned the lack of understanding of the value of planning and measurement as the main obstacle to proper strategic planning and performance measurement among their clients. The accountant concluded:

"Among our clientele, many are the Gyro Gearlooses of their business – very good at what they do, but lacking financial understanding. What they need is education about the value of strategic planning."

It is supposed that even the owner-managers of smallest companies have some kind of idea of where they want their business to go. What they need help with is translating this vision into concrete plans of action, implementing the plans and monitoring their results and, first and foremost, justification on why strategic planning is something to worth spending time on. More than theory, this service needs concrete, easily presentable examples that the management can relate to. The accountant went on:

"We should be able to talk the same language with them, so to speak, to really concretize the benefits of strategic planning and measurement, to make them understand its value. – That way, we could serve our customers better."

To successfully perform this service, knowledge of the customers' field of business, operations and critical success factors is needed. The case company should test this process first with a couple of eager customers, and based on the experiences from these projects develop a tool for recognizing critical success factors from the information their customers are able to provide. Considering the

amount of information case company has of its customers only based on the accounting information, this task should not prove impossible.

As a conclusion, a SME PMS product would consist of a comprehensive budgeting and forecasting tools and processes that allow for dynamic, comprehensive strategic and operational performance measurement. This could be complemented with proper set of KPI, forecasting tools and, if the customer experiences severe problems with their strategic planning, providing them with comprehensive strategy development consultation. The product operates in the software chosen by the case company that allows obtaining data directly from accounting information and building templates that, in turn, allow loading and updating the data relatively easily. The next section offers some guidance to productizing the SME PMS.

4.2.2 Productizing the PMS for SMEs

Chapter 2.2.2 presented the productization process of expert services. The process completed in this thesis corresponds to the first stage of the productization process, the recognition of product need or potential. After the initial recognition of need for proper PMS for SMEs, this research has outlined the theoretical requirements for the service, interviewed the clients and the providers of the service to reach a mutual understanding of the service contents and, lastly, outlined the initial design of the product. There are, however, four more stages to go through before the SME PMS can be say to be properly productized. This chapter summarizes the actions needed to complete the productization process.

In the next stage, the case company should blueprint the service with as much detail as possible (Ukko et al. 2011; Lehtinen & Niinimäki 2005). This involves outlining the internal processes for providing the service, describing the service contents and versions, investigating the market potential and the competitive situation for the service and coming up with a price and delivery time. To succeed, the case company should nominate a project leader to the productization process and engage both the employees and the key customers, most probably the companies that were interviewed in the recognition stage, to the project. In addition to that, the case company should carefully outline the product components either based on the suggestion made in the previous chapter or by some other modular structure. As the initial outlining of the service is based on the interviews conducted with

five customers, the recommendation is to, at first, design the service based on the needs and requests of these customers, and after the product has successfully been launched with them, to develop it further to suit to a wider customer base.

An important point to be kept in mind in this stage is the fact that the cost of the product should be kept as low as possible. Even though the products would bring considerable added value to the SMEs, it is of no use if they simply cannot afford the product. As both the CEO and the chairman of the board stated, ideally the product could be sold as an accessory to bookkeeping and other accounting services and therefore also the cost be faded in the midst of accounting costs. In connection with this is the providing of the service. As the CEO of the case company observed, it is critical that the processes for providing the service products are clear and functional, so that the service can really be produced with constant high quality and reasonable cost.

After the service product has been properly designed, the case company should pilot it with the customers that were engaged in this research. This piloting process should be carefully outlined to ensure that the information needed is really obtained. In addition to that, participating in the pilot project should provide some concrete and rather immediate benefits for the customers. If the product is initially designed to suits the needs of these particular five customers, the benefits should realize rather easily as the information needs of the managers are answered. Additionally, obtaining new and better software, a request made by multiple managers, should serve as a concrete and tangible benefit making up for the trouble of participating in the piloting process.

When the results from the piloting process have been received and the product developed accordingly, attention should be turned into concretizing it. This involves collecting customer stories and references from the pilot projects, designing a brochure and coming up with a name for the product. Emphasis should from the beginning be placed in communicating the added value of the services to the customer. An easy way for the case company to obtain new customers would be turning the education of managers about the value of performance measurement into a "taster product" of the productized PMS. This education can be used both to make existing customers to see the value of performance measurement and as a gateway to obtain new customers, if the education is properly productized. The value of education as a gateway to obtaining new customers or deeper customer

relationships was reflected on by the CFO of company E in the context of their business. According to her, even small amount of education services, when it is about something relevant to the business, brings considerable amount of word-of-mouth recognition and name in the business and hence, new customers. If there are enough resources, the education can also later on be productized as a separate service. In the last stage of the productization the service should be developed further based on customer feedback, market situation and such.

Thus, successfully productizing a SME PMS would, in addition to the work done in this thesis, require that the case company further defines and specifies the service offering, pilots it with chosen customers and concretizes the product by naming it and giving it some physical appearance, such as a brochure. In addition to that, references and successful customer stories are needed to sell the product. The case company could also include education about the value of performance measurement into the product to serve as a gateway for new customers. The next section concludes the study.

5. Conclusion and Discussion

The objective of this study was to develop a framework that provides basis for productized performance measurement system for small and medium-sized organizations. More precisely, this study aimed to develop a set of requirements for successful PMS for SMEs by combining perspectives from the literature and verifying them with the empirical data, and to summarize these perspectives into a productizable entirety. Additionally, the research aimed to create roadmap for productizing this PMS service. This section summarizes the most important implications from this research, presents its limitations and offers some avenues for further research.

5.1 Research Implications

The most important contribution of this research is without question the outlining of the PMS product. Even though its modules are by no means novel or original, this research has based them firmly on theoretical and empirical considerations and offered reasonably credible evidence on the suitability of budget tool and the adhesive services of KPI development, forecasting tool and strategy development consultation for SME performance measurement. With the viewpoints presented in this research the case company is able to fully realize the potential of their new software whilst at the same time bettering the performance measurement among their clients. Hence, the product outlined in this thesis provides added value both for the case company and for their clients, and may with time solve the issues case company representatives identified in their clients' performance measurement. It is even possible that the PMS product presented here one day prevents a financial ruin of an otherwise successful SME or assists a start-up in growing to a market leader.

In addition to the product itself this thesis provides some new insights on several theoretical and managerial discussions. It is among the first academic researches concerning PMS productization, and even though this thesis only concentrated on the first stage of a productization process, the ideas presented here provide new insights on how a complex expert service such as PMS could be productized successfully. In addition to this, the productization process presented in this study can be applied to a wide range of expert service productization cases, thus offering help to managers with multiple expert service productization related issues. Before these ideas can be applied further, the process presented here obviously needs to be completed successfully. However, even in this stage the ideas presented here may offer new tools for thinking for managers and academics alike concerning expert service and especially PMS productization.

Lastly, this study contributes to the growing body of literature on SME performance measurement by specifying and verifying the requirements for SME PMS. Although these requirements are derived from previous literature, no other study so far has depicted the qualities of successful PMS alongside the characteristics of small and medium-sized companies, let alone derived explanations from these aforementioned characteristics for performance measurement practices observed in SMEs. The value of the theoretical model is furthered by the fact that it was justified with the empirical data, indicating that it also has practical value to SMEs. Quite obviously, these requirements need further research and some practical applications before they can be stated as universally applying to SME performance measurement. This research, however, has provided the theoretical discussion with further specification on PMS practices and requirements in SMEs and offered some concrete solutions to bettering it.

5.2 Limitations

It goes without saying that this study has some considerable limitations. First and foremost, this is a qualitative case study, which by definition means that the scope of this study is rather limited. Therefore, all results obtained from the study only depict the specific situation faced by the specific organizations in their specific business setting in specific time, and the results cannot as such be generalized beyond the scope of the case organization. However, since this study incorporates a small scale multi case study, the results obtained from the client interviews receive a wider approval than would be the case if all of the interviewed organizations had been researched as single cases. The fact that the results were similar in five different companies increases the validity and at the same time also the applicability of these results. Nevertheless, before these results can be applied beyond the researched organizations, further and larger scope research is needed on the topic.

Additionally, due to the time and resource constraints all of the interviewees represented managerial level in their respective companies. Even though they quite often were the main or sole operators of the PMS, the results from the study might differ considerably if the same questions had been posed to lower level employee – or a member of the board learning to operate the PMS. Moreover, apart from the case company there only was one interviewee from each company. Even though these interviewees were the ones that probably best could answer questions about the performance measurement in their respective companies and exercised so great an influence over the systems that

they had no reason to lie, the picture obtained from the interviews inevitably only presents one person's impression of the company's performance measurement. Furthermore, the SMEs interviewed all represented the larger end of SME scope and had some performance measurement practices in place. Had the interviewees been managers of smaller companies with no current performance measurement, the requirements derived from the interviews for SME PMS might have differed considerably. Even though the interviewees from the case company were able to provide some insight also on the PM practices of the smaller companies, these were at best generalizations.

Thus, to be able to fully validate the results from this study and to generalize them beyond the setting of this specific case, further and larger scope research on the topic is needed. This need encompasses both more in-depth studies of the case organizations, validating that the practices they present really function as stated in the interviews. In addition, similar studies are needed on other SMEs operating in different fields of business and geographical regions, and especially on SMEs that are not as well established or big as the companies interviewed in this study.

5.3 Conclusion and Avenues for Further Research

Despite the limitations, this study is not without theoretical and practical value. It contributes to the academic discussion by providing a newly organized set of requirements for SME performance measurement that is validated both by theoretical and empirical considerations. In addition to this, this thesis provides the case company a suggestion for SME PMS product and guidelines to productizing it. Last but not least, this thesis provides SME managers with theoretically validated concrete tools for updating their PMS.

The obvious topic for further research would be completing the productization process of the suggested product. That way the validity of the solutions presented here, both concerning the contents of the product and the productization process, could really be evaluated. In addition to that, performing this same study on a larger scope with wider range of SMEs both in terms of size, field of business or geographical location could provide interesting results. An altogether different field of research would be studying the performance measurement and accounting software and how it is and could be employed in SMEs. All of these topics, however, are well beyond the scope of this research.

6. References

Books:

Andrews, Kenneth 1997. *The Concept of Corporate Strategy*: Nikolai J. Foss 1997: *Resources, Firms, and Strategies: A Reader in the Resource-based Perspective*. Oxford University Press, Oxford.

Artz, P.; Van De Weerd, I.; Brinkkemper, S., 2010. *Productization: The process of transforming from customer-specific software development to product software development*. Department of Information and Computing Sciences Utrecht University, Utrecht, The Netherlands.

Chandler, Alfred 1962. *Strategy and Structure: Chapters in the History of the Industrial Enterprise*. Massachusetts Institute of Technology Press, Massachusetts.

Flick, U. 1998. *An introduction to qualitative research*. Sage, London.

Grönroos, C. 1998. *Nyt kilpaillaan palveluilla*. WSOY, Porvoo.

Jaakkola, E.; Orava, M.; Varjonen, V. 2009. *Palvelujen tuotteistamisesta kilpailuetua*. Tekes, Helsinki.

Kotler, P. 1984. *Marketing Management Analysis, Planning and Control*. Prentice-Hall, Englewood Cliffs.

Laitinen, E. 1996. *Framework for small business performance measurement: towards integrated PM systems*. Vaasan yliopiston julkaisuja, Vaasa.

Lehtinen, U.; Niinimäki, S. 2005. *Asiantuntijapalvelut: tuotteistamisen ja markkinoinnin suunnittelu*. WSOY, Helsinki.

Lynch, R.; Cross, K. 1991. *Measure Up – The Essential Guide to Measuring Business Performance*. Mandarin, London

Miles, M.; Huberman, A. 1994. *Qualitative data analysis: An expanded sourcebook*. Sage, London.

Neely, A., Mills, J., Gregory, M. Richards, H., Platts, K. and Bourne, M. 1996. *Getting the Measure of Your Business*. Cambridge University Press, Cambridge.

Neely, A.; Adams, C.; Kennerley, M. 2002. *The performance prism: The scorecard for measuring and managing business success*. Prentice Hall Financial Times, London.

Ryen, A., 2010. *Ethics and Qualitative Research*: Silverman, D. 2011 *Qualitative research*. Sage, London.

Silverman, D. 2016. *Qualitative research*. Sage, London.

Sipilä, J. 1996. *Asiantuntijapalvelujen tuotteistaminen*. WSOY, Helsinki.

Strauss, A.1987. *Qualitative analysis for social scientists*. Cambridge University Press, Cambridge.

Tuominen, T., Järvi, K., Lehtonen, M.H., Valtanen, J. &Martinsuo, M. 2015. *Palvelujen tuotteistamisen käsikirja - Osallistavia menetelmiä palvelujen kehittämiseen*. Aalto University, Helsinki.

Yin, R. 1994. *Case study research: Design and methods*. Beverly Hills.

Articles:

Atkinson, A.; Waterhouse, J.; Wells, R. 1997. A stakeholder approach to strategic performance measurement. *Sloan Management Review*. Volume 38, issue 3, pages 25-37.

Ardley, B.; Quinn, L. 2014. Practitioner accounts and knowledge production An analysis of three marketing discourses. *Marketing Theories*. Volume 14, issue 1, pages 97-118.

Artto, K.; Wikström, K.; Hellström, M.; Kujala, J. 2008. Impact of services on project business. *International Journal of Project Management*. Volume 26, issue 5, pages 497-508.

Bititci, U. 1994. Measuring your way to profit. *Management decision*. Volume 32, issue 6, pages 16-24.

Bititci, U.; Turner, T.; Ball, P. 1999. The viable business structure for managing agility. *International Journal of Agile Management Systems*. Volume 1, issue 3, pages 190-199.

Bititci, U.; Turner, T.; Begemann, C. 2000. Dynamics of performance measurement systems. *International Journal of Operations & Production Management* Volume 20, issue 6, pages 692-704.

Bourne, M.; Mills, J.; Wilcox, M.; Neely, A.; Platts, K. 2000, Designing, implementing and updating performance measurement systems. *International Journal of Operations and Product Management*. Volume 20, issue 7, pages 754-771.

Brouthers, K.; Andriessen, F.; Nicolaes, I. 1998. Driving blind: strategic decision-making in small companies. *Long Range Planning*. Volume 31, issue 1, pages 130-138.

Chiarvesio, M.; Maria, E.; and Micelli, S.2004. From local networks of SMEs to virtual districts? Evidence from recent trends in Italy. *Research Policy*, Volume 33, issue 10, pages 1509-1528.

Cocca, P.; Albertini, M. 2010. A framework to assess performance measurement systems in SMEs. *International Journal of Productivity and Performance Management*. Volume 59, issue 2, pages 186-200.

Corbett, L.; Campbell-Hunt, C. 2002. Grappling with a gusher! Manufacturing's response to business success in small and medium enterprises. *Journal of Operations Management* Volume 20, issue 5, pages 495-517.

Cross, K.; Lynch, R.,1989. Accounting for competitive performance. *Journal of Cost Management*. Volume 3, issue 1, pages 20-28.

Deloof, M. 2003. Does working capital management affect profitability of Belgian firms? *Journal of business finance & Accounting*. Volume 30, issue 3-4, pages 573-588.

Dossi, A.; Patelli, L. 2008. The decision-influencing use of performance measurement systems in relationships between headquarters and subsidiaries. *Management Accounting Research*. Volume 19, Issue 2, pages 126–148.

Docters, R.; Reopel, M.; Sun, J-M.; Tanny, S. 2004. Capturing the unique value of services: why pricing of services is different. *Journal of Business Strategy*, Volume 25, issue 2, pages 23–28.

Eisenhardt, K.1989. Building theories from case study research. *Academy of management review*. Volume 14, issue 4, pages 532-550.

Feurer, R.; Chaharbaghi, K. 1995. Strategy development: past, present and future. *Management decision*. Volume 33, issue 6, pages 11-21.

Fitzgerald L.; Brignall, T.; Johnston, R.; Silvestro, R. 1991 Performance measurement in service businesses. *Management Accounting*. Volume 69, issue 10, pages 34-36.

Freeman, E.; Wicks, A.; Parmar, B. 2004. Stakeholder Theory and "the Corporate Objective Revisited". *Organization Science*. Volume 15, issue 3, pages 364-369.

Funk, K., 2003. Sustainability and performance. *MIT Sloan Management Review*. Volume 44, issue 2, page 65.

Garengo, P.; Biazzo, S.; Bititci, U. 2005. Performance measurement systems in SMEs: A review for a research agenda. *International Journal of Management Reviews*. Volume 7, Issue 1, pages 25-47.

Ghobadian, A.; Gallear, D. 1997. TQM and organization size. *International journal of operations & production management*. Volume 17, issue 2, pages 121-163.

Globerson, S. 1985. Issues in developing a performance criteria system for an organization. *International Journal of production research* Volume 23, issue 4, pages 639-646.

Gomezelj Omerzel, D.; Antončič, B., 2008. Critical entrepreneur knowledge dimensions for the SME performance. *Industrial Management & Data Systems*. Volume 108, issue 9, pages 1182-1199.

Grady, M. 1991. Performance measurement: Implementing strategy. *Management Accounting*. Volume 72, issue 12, pages 49.

Hakes, J. 2001. Can measuring results produce results: one manager's view. *Evaluation and program planning*. Volume 24, issue pages 319-327.

Hannon, P.; Atherton, A. 1998. Small firm success and the art of orienteering: the value of plans, planning, and strategic awareness in the competitive small firm. *Journal of Small Business and Enterprise Development*. Volume 5, issue 2, pages 102-119.

Harris, L.; Ogbonna, E. 1999. The strategic legacy of company founders. *Long Range Planning*. Volume 32, issue 3, pages 333-343.

Hong, P.; Jeong, J. 2006. Supply chain management practices of SMEs: from a business growth perspective. *Journal of Enterprise Information Management*. Volume 19, issue 3, pages 292-302.

Hudson, M.; Smart, A.; Bourne, M. 2001. Theory and practice in SME performance measurement systems. *International Journal of Operations & Production Management*. Volume 21, issue 8, pages 1096-1115.

Ittner, C.; Larcker, D. 1998. Innovations in performance measurement: Trends and research implications. *Journal of Management Accounting Research*. Volume 10, pages 205-238.

Ittner, C.; Larcker, D. 2001. Assessing empirical research in managerial accounting: a value-based management perspective. *Journal of Accounting and Economics*. Volume 32, issue 1, pages 349-410.

Ittner, C.; Larcker, D.; Randall, T. 2003, Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*. Volume 28, issue 7–8, pages 715-741.

Jaakkola, E. 2011. Unraveling the practices of “productization” in professional service firms. *Scandinavian Journal of Management*. Volume 27, issue 2, pages 221-230.

Jones, S.; Buerkle, M.; Hall, A.; Rupp, L.; Matt, G. 1993. Work group performance measurement and feedback. *Group and Organization Management Journal*. Volume 18, issue 3, 269-291.

Kaplan, R.; Norton, D. 1992. The balanced scorecard: the measures that drive performance. *Harvard Business Review*.

Kaplan, R.; Norton, D. 1996. The balanced scorecard: translating strategy into action. *Harvard Business Press*.

Kaplan, R.; Norton, D. 2004. The strategy map: guide to aligning intangible assets. *Strategy & Leadership*. Volume 32, issue 5, pages 10-17.

Kargar, J.; Blumenthal, R. 1994. Successful implementation of strategic decisions in small community banks. *Journal of small business management*. Volume 32, issue 2, pages 1-10.

Keating, P. 1995. A framework for classifying and evaluating the theoretical contributions of case research in management accounting. *Journal of management accounting research*. Volume 7, page 66.

Keegan, D.; Eiler, R.; Jones, C. 1989. Are your performance measures obsolete? *Management Accounting*. Volume 70, issue 12, pages 45.

Kellen, V.; Wolf, B.,2003. Business performance measurement. *Information Visualization*. Volume 1, issue 312, pages 1-36.

King, R.; Clarkson, P.; Wallace, S. 2010 Budgeting practices and performance in small healthcare businesses. *Management Accounting Research*. Volume 21, issue 1, pages 40-55.

Lagacé, D.; Bourgault, M. 2003. Linking manufacturing improvement programs to the competitive priorities of Canadian SMEs. *Technovation* Volume 23, issue 8, pages 705-715.

Laitinen, E. 2002. A dynamic performance measurement system: evidence from small Finnish technology companies. *Scandinavian Journal of Management*. Volume 18, issue 1, pages 65-99.

Maskell, B.1989. Performance measurement for world-class manufacturing. *Management Accounting*, Volume 67, issue 5, pages 3-32.

Moon, P.; Fitzgerald, L. 1996. Delivering the goods at TNT: the role of the performance measurement system. *Management Accounting Research* Volume 7, issue 4, pages 431-457.

Muller, E.; Doloreux, D. 2009. What we should know about knowledge-intensive business services. *Technology in Society*. Volume 31, issue 1, pages 64–72.

Nagy, S. 2013. Service pyramid concept of knowledge intensive business services in the small and medium sized enterprises sector. *International Journal of Advanced Computer Science Applied*. Volume 4, issue 11, pages 103-108.

Neely, A.; Gregory, M.; Platts, K. 1995. Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*. Volume 15, issue 4, pages 88-116.

Neely, A.; Mills, J.; Platts, K.; Richards, H.; Gregory, M.; Bourne, M.; Kennerley, M. 2000. Performance measurement system design: developing and testing a process-based approach. *International Journal of Operations & Production Management*. Volume 20, issue 10, pages 1119-1145.

Oakes, I.; Lee, G. 1999. Between a rock and a hard place: Some dilemmas for smaller component suppliers. *International Journal of Quality and Reliability Management*, Volume 16, issue 3, pages 252-262.

O'Neill, H.; Duker, J. 1986. Survival and failure in small business. *Journal of Small Business Management*. Volume 24, issue 1, pages 30-37.

Padachi, K. 2006. Trends in working capital management and its impact on firm's performance: an analysis of Mauritanian small manufacturing firms. *International Review of Business Research Papers*. Volume 2, issue 2, pages 45-58.

Pansiri, J.; Temtime, Z. 2008. Assessing managerial skills in SMEs for capacity building. *Journal of management development*. Volume 27, issue 2, pages 251-260.

Rahman, S. 2001. A comparative study of TQM practice and organizational performance of SMEs with and without ISO 9000 certification. *International Journal of Quality & Reliability Management*. Volume 18, issue 1, pages 35-49.

Ropega, J. 2011. Reasons and symptoms of failure in SME. *International Advances in Economic Research*. Volume 17, issue 4, pages 476–483.

Scapens, R.1990. Researching management accounting practice: the role of case study methods. *The British Accounting Review*. Volume 22, issue 3, pages 259-281.

Shin, H.; Soenen, L. 1998. Efficiency of working capital management and corporate profitability. *Financial practice and education*. Volume 8, pages 37-45.

Simons, R. 1991. Strategic orientation and top management attention to control systems. *Strategic Management Journal*. Volume 12, pages 49–62.

Sinclair, D.; Zairi, M. 2000. Performance measurement: a critical analysis of the literature with respect to total quality management. *International Journal of Management Reviews* Volume 2, issue 2, pages 145-168.

Singh, R.; Garg, S.; Deshmukh, S. 2008. Strategy development by SMEs for competitiveness: a review. *Benchmarking: An International Journal*. Volume 15 issue 5, pages 525-547.

Smith, M.; Smith, D. 2007. Implementing strategically aligned performance measurement in small firms. *International Journal of Production Economics*. Volume 106, issue 2, pages 393-408.

Suwignjo, P., Bititci, U.S. & Carrie, A.S. 2000. Quantitative models for performance measurement system. *International Journal of Production Economics*. Volume 64, issue 1–3, pages 231-241.

Suwignjo, P.; Bititci, U.; Carrie A. 2000. Quantitative models for performance measurement systems. *International Journal of Production Economics*. Volume 64, issue 1, pages 231-241.

Taticchi, P.; Balachandran, K. 2008. Forward performance measurement and management integrated frameworks. *International Journal of Accounting & Information Management*. Volume 16, issue 2, pages 140-154.

Ukko, J.; Pekkola, S.; Valtonen, J.; Saunila, M.; Rantanen, H. 2011. Productising expert services of performance management. *International Journal of Business Excellence*. Volume 4, issue 2, pages 125-141.

Vaivio, J., 2008. Qualitative management accounting research: rationale, pitfalls and potential. *Qualitative Research in Accounting & Management*. Volume 5, issue 1, pages 64-86.

Valminen, K.; Toivonen, M. 2012. Seeking efficiency through productisation: a case study of small KIBS participating in a productisation project. *Service Industries Journal*. Volume 32, issue 2, pages 273–289.

Vinten, G. 1999. Corporate Communication in Small and Medium-Sized Enterprises. *Industrial and Commercial Training*. Volume 31, issue 3, pages 112-119.

Vinten, G., 2000. Training in small-and medium-sized enterprises. *Industrial and Commercial Training*. Volume 32, issue 1, pages 9-14.

Waalewijn, P.; Segar, P. 1993. Strategic management: The key to profitability in small companies. *Long Range Planning*. Volume 26, issue 2, pages 24-30.

Other:

Argument, L.; Harrison, D.; Wainwright, C. (1997, “*Manufacturing strategy within the SME sector*”, 13th National Conference of Manufacturing (Proceedings). Glasgow Caledonian University, Glasgow, pages 6-10.

Barnes, M.; Dickinson, T.; Coulton, L.; Dransfield S.; Field, J.; Saunders, I.; Shaw, D. 1998. A new approach to performance measurement for small and medium enterprises. *Proceedings of the performance measurement – theory and practice conference Cambridge, July 14-17*.

Chennell, A.; Dransfield, S.; Field, J.; Fisher, N.; Saunders, I.; Shaw, D. 2000. OPM: a system for organisational performance measurement. *In Proceedings of the Performance Measurement – Past, Present and Future Conference Cambridge, 19–21 July.*

Dixon, J. 1990. *The new performance challenge: Measuring operations for world-class competition.* Irwin Professional Pub.

European Commission 2016. *What is an SME?* Webpage. <http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/> Visited. 13.12.2016

Ewing, P.; Lundahl, L. 1996. The balanced scorecard at ABB Sweden—the EVITA Project. *In The International Workshop on Cost Management.* Pages 27-9.

Greatbanks, R.; Boaden, R. 1998. Can SMEs afford to measure performance? *Conference Proceedings Performance Measurement—Theory and Practice.*

Hudson, M. 2001. Introducing integrated performance measurement into small and medium sized enterprises. *PhD thesis, University of Plymouth, Plymouth.*

Hvolby, H.; Thorstenson, A. 2000. Performance measurement in small and medium-sized enterprises. *Proceedings Ed. by Tb Fox and D. Steeple.*

Storey, D. 1994. Understanding the small business sector. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.*

Tenhunen, J.; Rantanen, H.; Ukko, J. 2001. SME-oriented implementation of a performance measurement system. *Lahti, Finland: Department of Industrial Engineering and Management, Lappeenranta University of Technology.*

7. Appendices

7.1. Appendix 1. The Interview Questions

For the customers:

1. What is your role in your organization? What kind of tasks do you perform?/Tell me a bit about your company, what it does, in which field of business you operate, what are your tasks in there?
2. Can you identify some critical success factors for your organization?
3. Do you have a strategy written down? What are your most important strategic objectives? Have you used any tools, such as Balanced Scorecard, in your strategy work?
4. How do you measure your performance?
5. How, in your opinion, these measures assist in monitoring the implementation and realization of the strategic objectives?
6. How about in the monitoring and measuring of the critical success factors?
7. Are there, in your opinion, any challenges in your current performance measurement system?
8. What are the questions that the performance measurement system should absolutely be able to answer?
9. What, in your opinion, is a successful performance measurement system like?
10. If there were tools to solve these problems that could be integrated into your current accounting systems, would you use them?
11. How much would you be willing to pay for such a solution?

Inside the case company:

1. What is your role in the organization? What are your main tasks?
2. What, in your opinion, is a successful performance measurement system for SME like?

3. Which, in your opinion, are the most central issues the customers have with their performance measurement?
4. Have you solved these issues? How did you solve them?
5. How would you have solved the issues if you had proper tools or enough time at your disposal?
6. If you had had these kind of tools at your disposal, would you have been able to solve the issues better? Do you think that these solutions would be valuable in future customer projects?
7. How much, in your opinion, a service product of this kind would cost to produce by your company?

7.2 Appendix 2. The Interview Times and Durations

The case company:

CEO, on 12.10.2016, duration 27 minutes

Team leader, on 12.10.2016, duration 25 minutes

Accountant, on 12.10.2016, duration 23 minutes

Chairman of the board, on 18.11.2016, duration 26 minutes.

Company A: CFO, on 21.10.2016, duration 45 minutes

Company B: CFO, on 24.10.2016, duration 37 minutes

Company C: CEO, on 27.10.2016, duration 31 minutes

Company D: COO, on 4.11.2016, duration 42 minutes

Company E: CFO, on 15.11.2016, duration 43 minutes