

KATI KOUHIA-KUUSISTO

Management Accounting in Small Enterprises

Identifying and Overcoming the Challenges of
Using Management Accounting Information
Among Entrepreneurs

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ACADEMIC DISSERTATION

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Tampere University, Faculty of Management and Business
Finland

*Responsible
supervisor
and Custos* Professor
Teemu Laine
Tampere University
Finland

Supervisors Professor
Petri Suomala
Aalto University
Finland

Associate Professor
Tuomas Korhonen
Tampere University
Finland

Pre-examiners Associate Professor
Antonio Leotta
University of Catania
Italy

Associate Professor
Gudrun Baldvinsdottir
Gothenburg School of Economics
Sweden

Opponent Postdoctoral Research Fellow
Tiina Henttu-Aho
University of Oulu
Finland

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A middle-age crisis can lead to a variety of outcomes. For me, the need to challenge myself and get new insights into my work triggered a process, result of which is this dissertation. I embarked on a researcher's journey without fully understanding what kind of journey it would be, but at the end I can happily say that the journey was worth making. I have experienced and learned a lot, thanks to all those who have been there for me during this journey.

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ABSTRACT

Small enterprises play a significant role in global economies and has a remarkable potential in both creating jobs and restructuring economic life. Supporting small enterprises' growth and success is, therefore, essential for increasing economic growth. Previous research indicates that financial planning and controlling are important factors, forecasting success for small businesses. Despite significant economic contribution of small enterprises, academic literature indicates that quite little is known about the extent to which they make use of management accounting (MA) and management accounting information (MAI). In small enterprises, the entrepreneur is usually solely responsible for managerial work; therefore, the use of MAI is dependent on one's personal understanding of and attitude to this information.

This dissertation focuses on MAI needs from small-business entrepreneurs' point of view, aiming to understand the current and potential use of MAI in managerial work of small businesses. Furthermore, the study identifies challenges emerging from the gap between the ideal and current MAI utilisation, thus seeking to uncover areas of improvement in the provision of MA services to small companies.

The theoretical framework of this dissertation examines the subject from three perspectives. First, the usage, benefits, drivers, and challenges of MA in the context of small business are discussed. Second, as the literature often explains the use of MA systems in enterprises by elaborating on the overall stage of company development, enterprise life cycle theories will also be considered in this research. Thirdly, considering that accounting is a service function, and small-business entrepreneurs typically outsource accounting to external service providers (accountants), the literature overview also includes a discussion on the service quality and the service quality gap models, as well as their implementation in accounting services.

To meet its research objectives, this dissertation employs mixed methods. Research questions are approached through both quantitative and qualitative research methods. Two pieces of survey data collected in collaboration projects have been utilised to provide a comprehensive overall picture of MAI usage in small enterprises from a wider perspective. Apart from these two study projects involving

wide survey data, the dissertation presents a qualitative research section that aims to provide a deeper interpretation and understanding regarding entrepreneurs' insights on the role and importance of MAI in managerial work. This in-depth qualitative study phase includes narrative answers of entrepreneurs, group conversation with entrepreneurs and, to validate these opinions of entrepreneurs, a few interviews of accountants providing services to small businesses.

The findings of this dissertation correspond with the previous studies on the scarce use of MAI in small businesses. However, based on this study, entrepreneurs value MAI and recognise its importance for successful managerial work. The analysis of entrepreneur narratives revealed four different types of entrepreneurs using MAI: forward-looking beginners, demanding developers, profound analysts and discontent underachievers. In each of these categories, entrepreneurs have partially different opinion about the role of MAI in their managerial work. Depending on the entrepreneur category, the emphasis on the role of MAI varies from supporting development of the business to assisting in profitability analyses and the management in general. Studying the challenges related to MAI services uncovered a service quality gap with technical and functional quality issues. Moreover, entrepreneurs' and accountants' perception of one another has an impact on the delivered and perceived MAI service.

The dissertation contributes to MA literature in three ways. Firstly, the emphasis on entrepreneurs' perspective differs from that in the previous studies, and the categorisation of entrepreneurs reveals a new viewpoint to MAI utilisation in small enterprises. Secondly, connecting the service quality gap theory with the accountant providing and the entrepreneur using MA services expands the understanding of the peculiarities of this service relationship. Thirdly, combining entrepreneurs' perspectives and the service quality gap reveals both high importance and scarce use of MAI in small business management. This paradoxical finding indicates that part of the potential for growth and success is lost in small businesses, the entrepreneurs being unable to make optimal use of MAI. The study provides new insight about the possible ways to support small enterprise growth and development through the implementation of appropriate MAI. These findings can also have practical utility in the development of management accounting services and software systems, especially for the needs of the entrepreneurs or other decision-makers of small companies.

TIIVISTELMÄ

Pienillä yrityksillä on merkittävä kansantaloudellinen rooli sekä Suomessa että globaalisti kaikkialla maailmassa. Uusista työpaikoista suurin osa syntyy pieniin yrityksiin ja myös talouselämän uudistamisessa nämä yritykset ovat keskeisessä asemassa. Pienten yritysten kasvun ja menestyksen tukeminen on siksi oleellinen keino vaikuttaa talouskasvuun. Aiemmat tutkimukset osoittavat, että taloustiedon hyödyntämisellä on positiivinen vaikutus yritysten menestymiseen. Pienten yritysten merkittävästä kansantaloudellisesta kontribuutiosta ja taloustiedon hyödyllisyydestä huolimatta taloustiedon ja erityisesti johdon laskentatoimen tuottaman tiedon hyväksikäyttöä pienten yritysten johtamistyössä on tutkittu vain vähän. Pienissä yrityksissä yrittäjä on usein yksin vastuussa johtamisesta ja siksi taloustiedon käyttö johtamisen tukena on riippuvaista yrittäjän henkilökohtaisesta talousosaamisesta ja asenteista taloustietoa kohtaan.

Tämä väitöskirja keskittyy taloustiedon hyödyntämiseen ja tarpeisiin erityisesti yrittäjän näkökulmasta tuoden uutta tietoa sekä nykyisestä että toivottavasta taloustiedon hyödyntämisestä pienten yritysten johtamistyössä. Lisäksi työssä tarkastellaan nykyisen ja ideaalin taloustiedon hyväksikäytön välisiä haasteita pyrkien näin löytämään kehittämiskohteita pienille yrityksille tarjottavista talouspalveluista.

Väitöskirjan teoreettinen viitekehys tarkastelee aihetta kolmesta näkökulmasta. Aluksi käsitellään aiempaa tutkimustietoa johdon laskentatoimen tuottaman tiedon käytöstä, hyödyllisyydestä ja haasteista pienten yritysten kontekstissa. Koska johdon laskentatoimen tarpeita selitetään usein yrityksen kehitysvaiheiden ja elinkaaren kautta, kirjallisuuskatsauksen toisessa osassa tarkastellaan yrityksen elinkaari-teorioita ja niiden yhteyttä taloustiedon hyväksikäyttöön. Laskentatoimi on palvelufunktio, ja pienissä yrityksissä se tyypillisesti ulkoistetaan kirjanpitäjän tai tilitoimiston hoidettavaksi. Tämän palvelusuhteen merkitystä taloustiedon hyväksikäytössä ja palvelun laatua sekä siihen liittyviä tunnistettuja haasteita käsitellään teoreettisen viitekehyksen kolmantena näkökulmana.

Vastatakseen asetettuihin tavoitteisiin tämä väitöskirja hyödyntää monimenetelmätutkimusta. Tutkimuskysymyksiä lähestytään sekä määrällisten että laadullisten tutkimusmenetelmien kautta. Työssä hyödynnetään kahta yhteistyöprojekteissa kerättyä kyselytutkimuksen tietokantaa, joiden avulla tuotetaan kokonaisvaltaista yleiskuvaa pienten yritysten taloustiedon hyväksikäytöstä laajemmassa perspektiivissä. Näiden kyselytutkimusten tuottaman tiedon lisäksi väitöskirjaan sisältyy laadullisen tutkimuksen osuus, jonka avulla pyritään syvällisempään tulkintaan ja ymmärrykseen koskien yrittäjien näkemyksiä

taloustiedon roolista ja merkityksestä johtamistyössä. Tämä syvällisempi laadullinen tutkimusosuus koostuu yrittäjien narratiiveista, ryhmäkeskustelusta sekä näiden tulosten validoimiseksi myös muutamien, pienille yrityksille talouspalveluita tuottavan kirjanpitäjän haastatteluista.

Tutkimuksen tulokset ovat yhteneviä aikaisempien tutkimusten kanssa pienten yritysten vähäisen taloustiedon ja erityisesti johdon laskentatoimen tiedon hyödyntämisen osalta. Tämän väitöskirjan tutkimustulokset osoittavat kuitenkin selkeästi, että taloustiedon vähäisestä käytöstä huolimatta yrittäjät arvostavat ja pitävät taloustietoa tärkeänä menestyksellisen johtamistyön kannalta. Yrittäjien taloustiedon käyttöön ja tarpeisiin liittyvät narratiiviset vastaukset paljastivat neljä eri tavalla taloustietoon suhtautuvaa yrittäjätyyppiä: tulevaisuusorientoituneet aloittelevat yrittäjät, taloustietoa kehittämisen tueksi kaipaavat yrittäjät, analyttisesti taloustietoa hyödyntävät yrittäjät ja tyytymättömät, taloustiedon käyttäjinä alisuorittavat yrittäjät. Näissä eri kategorioissa yrittäjillä on ainakin osittain erilaiset näkemykset taloustiedon roolista omassa johtamistyössään. Yrittäjäkategoriasta riippuen, taloustiedon rooli vaihtelee yrityksen kehittämisen edistämisestä kannattavuuden analysoinnissa avustamiseen sekä kokonaisvaltaiseen johtamistyön tukemiseen. Talouspalveluiden hyödyntämisessä kohdattujen haasteiden tutkiminen paljasti palvelun laatuun liittyvän kuilun, johon liittyy sekä teknisiä että toiminnallisia haasteita palvelun tuottamisessa ja vastaanottamisessa. Myös talouspalveluita käyttävien yrittäjien ja näitä palveluita tuottavien kirjanpitäjien mielikuvat toisistaan vaikuttavat tuotettuun ja koettuun talouspalvelun laatuun.

Väitöskirjan kontribuutio muodostuu kolmesta löydöksestä. Ensinnäkin tutkimuksen keskittyminen yrittäjän näkökulmaan ja yrittäjien kategorisointi paljastivat uutta tietoa taloustiedon hyväksikäytöstä pienissä yrityksissä. Toiseksi palvelun laadun teorian soveltaminen lisäsi ymmärrystä talouspalveluita tuottavien kirjanpitäjien ja niitä hyödyntävien yrittäjien välisestä suhteesta. Kolmanneksi yhdistämällä yrittäjän näkökulman palvelun laadun teoriaan paljastuu taloustiedon käyttöön liittyvä kuilu taloustiedon tärkeyden ja vähäisen hyödyntämisen välillä. Tämä paradoksi osoittaa, että osa yritysten potentiaalista kasvaa ja menestyy todennäköisesti menetetään, kun yrittäjät eivät pysty hyödyntämään taloustietoa optimaalisesti yritystensä johtamisessa. Väitöskirjan tulokset tuovat uutta tietoa erityisesti pienten, yrittäjävetoisten yritysten johdon laskentatoimen tietotarpeista. Tutkimustulokset lisäävät ymmärrystä mahdollisuuksista tukea pienten yritysten kasvua ja kehitystä tarkoituksenmukaisella taloustiedolla. Tulokset ovat hyödyllisiä myös käytännössä kehitettäessä talouspalveluita sekä tietojärjestelmiä erityisesti yrittäjien ja muiden pienten yritysten päätöksentekijöiden tarpeisiin.

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ABBREVIATIONS

FA	Financial accounting
FI	Financial information
MA	Management accounting
MAI	Management accounting information
SME	Small and medium-sized enterprise

1 INTRODUCTION

1.1 Research environment and motivation

This dissertation deals with managing small enterprises and management accounting information (MAI) utilisation in such enterprises and elaborates on how small businesses, and especially the entrepreneurs involved in such businesses, can improve their managerial work with exploitation of MAI. Although management accounting information has played a minor role in small enterprises so far (López & Hiebl, 2015), it can contribute significantly to managing such businesses and fostering their success (Wijewardena et al., 2004; Lee et al., 2013; López & Hiebl, 2015; Shields & Shelleman, 2016; Pelz, 2019).

Management accounting information refers to any financial information used in management, decision-making and internal operations of enterprises and includes information produced by the management accounting (MA) function or any other financial information utilised in management and decision-making of small business management. As MA services, accountants producing these services and the use of different MA methods or systems are also related to exploitation of MAI, they are, therefore, included in this dissertation.

The choice of this dissertation topic is based on the remarkable role small enterprises play in economies and the growth and development potential they possess. Small and medium-sized enterprises (SMEs) are essential to global economic prosperity. They represent more than 95% of all companies registered in the world, provide more than 50% of employment, generate most of the new jobs, promote innovations and, in general, have a great potential for restructuring economic life (Alibhai et al., 2017; Ribeiro-Soriano, 2017; Eurostat, 2019). Enterprises are useful for public economies only if they succeed, pay taxes and employ, and as small enterprises are an essential part of economies, all possibilities to promote the financial situation of small enterprises are, therefore, economically very valuable. These observations necessitate research on how management and decision-making systems of SMEs can be improved to foster their success. Despite the economic significance of small businesses, there is scarce mention of them in

MA literature, and no clear overall picture of the specifics of MA in SMEs has been formed (López & Hiebl, 2015).

The fundamental purpose of the accounting function is to provide information that is useful for decision-makers of organisations (Franklin et al., 2019, p. 14). Accounting is a process and system for collecting, measuring, and transmitting financial information both for internal use in managing the company and for the stakeholders or authorities outside the company (Järvenpää et al., 2010, p. 19). Thus, accounting is a service function intended to help manage an enterprise, and exploring accounting as a service is essential to understand management accounting information utilisation. MAI can be defined as a service required to successfully manage a business, and MAI service providers should be able to meet the needs of the organisation. In large companies, separate personnel are usually hired to perform the financial function, while small enterprises are more likely to outsource accounting (buy services from an external accountant or accountancy to fulfil their financial information needs). In small companies, the owner (the entrepreneur) typically holds the main responsibility for management, and the use of MAI in decision-making is faint, with the financial function being limited to the statutory obligations (Mitchell & Reid, 2000; López & Hiebl, 2015; Shield & Shelleman, 2016; Pelz, 2019). Previous literature (e.g. Halabi et al., 2010 and Blackburn et al., 2018) and the empirical findings obtained during the research process reveal that the demand and supply of the accounting services in SMEs do not meet optimally: when small-business entrepreneurs outsource accounting function to external service providers, this service often includes only statutory accounting and reports for authorities, which, in most cases, is not what an entrepreneur would need for efficient managerial work.

According to European Commission (Commission Recommendation, 2003), ‘an SME is a company that employs less than 250 persons, that has a turnover maximum of 50 million euros and the balance sheet total maximum of 43 million euros and which conforms to the criterion of independence. Independent enterprises are those which are not owned as to 25% or more of the capital or the voting rights by one enterprise, or jointly by several enterprises, falling outside the definition of an SME or a small enterprise, whichever may apply’. The group of businesses belonging to SMEs can be divided further into medium-sized, small,¹ and micro-companies. A small enterprise is defined as ‘an enterprise with fewer than 50 employees and whose annual turnover is either not more than 10 million euros or balance sheet total is not more than 10 million euros, and which meets the criterion of independence’. A micro-enterprise is defined as ‘an enterprise with fewer than 10 employees and an

annual turnover or balance-sheet total not exceeding 2 million euros, and which conforms to the criterion of independence' (Commission Recommendation, 2003). Of all companies operating in Finland, 93% are micro-enterprises and 5.7% are small enterprises (Statistics Finland, 2019). This dissertation focuses on the management of the smallest enterprises mentioned in SME literature, which meet the criteria of small and micro- enterprises according to the above-mentioned definitions. In these small enterprises, the managerial work is typically carried out by the owner-managers, i.e. the entrepreneurs (Bridge et al., 2012). Hence, such entrepreneurs and their viewpoint on MAI are the primary objects of this dissertation.

Recent research interest in management accounting in the SME context mainly focuses on start-up companies due to their potential for a great and fast growth and success. However, start-ups represent a minority of all enterprises: their market share is 10.7% in Europe and 9.5% in Finland (Statistics Finland, 2019). Thus, concentrating on start-up companies can distort the overall view of the SME context. Moreover, because the strong growth targets of start-ups determine their MA needs, start-up studies cannot be directly applied to other small companies. A vast majority of companies do not aim for explosive growth but rather strive to succeed by growing more moderately. Deserving more attention of researchers, common companies comprise the object of this dissertation.

This dissertation discovers the current use of management accounting information in small enterprises as well as the ways how MAI utilisation can be improved to promote success of small businesses. Appropriate utilisation of MAI can play a significant role in improving the success of an enterprise. There are several studies suggesting a positive correlation between adoption and utilisation of MAI and small business performance (Wijewardena et al., 2004; Davila et al., 2010; Lee et al., 2013; Shields & Shelleman, 2016; Pelz, 2019). Despite MAI's benefit even for the smallest enterprises, existent MA research suggests that SMEs do not take adequate advantage of MAI (Mitchell & Reid, 2000; Nandan, 2010; López & Hiebl, 2015; Shield & Shelleman, 2016). However, quite little is known about the role and special needs of MA in SMEs and its contribution. Previous studies researched MA in SMEs only to a limited extent, and the literature on MAI and its use in the SME context is fragmented; therefore, the overall role of MA in SMEs remains unclear (López & Hiebl, 2015; Pelz, 2019). Moreover, there is a notable lack of research on MA in the smallest (small and micro-) enterprises (Shields & Shelleman, 2016). Existing literature does not recount what kind of MAI is essential from the point of view of enterprise management. Therefore, there is a need to conduct a comprehensive study

across businesses, acknowledging the significance of small businesses, and examine this subject in the context of the smallest enterprises.

Previous literature indicates that SME's needs and use of management accounting differ from those of bigger organisations (López & Hiebl, 2015; Pelz, 2019). In small enterprises, the resource base is scarce, and the owner is typically the primary person responsible for the management and development of the company. Because most MA literature lacks the perspective of the small business entrepreneur, it has been chosen as the key point of this dissertation. New research findings can support small business management and other practitioners, such as accounting service providers and system developers, to provide MAI tailored to the needs of small enterprises and improve their performance. Hence, a deeper understanding of the role of MAI in the small business context may not only benefit individual small companies but also be advantageous from a wider economical viewpoint.

The dynamics and complexity of entrepreneurial behaviour and management accounting in small businesses call for a wide-ranging innovative research methodology (Kyrö & Kansikas, 2005; Higgins et al., 2013). To understand how entrepreneurs, as individuals, act and think in the MA context, this dissertation employs mixed methods, exploring the research questions from different angles and composing a triangulation of methods and sources of both quantitative and qualitative data. The dissertation is based on several studies, including broader explorative survey studies employing both quantitative and qualitative research methods and in-depth qualitative research phases. The explorative survey studies have been carried out in collaboration with Aalto University and Lappeenranta-Lahti University of Technology and are utilised to provide a wider charting and the overall picture of management accounting information use in small enterprises. Thereafter, the dissertation presents in-depth qualitative research, seeking to interpret and understand the thoughts and opinions entrepreneurs have concerning MAI in their managerial work. In this dissertation, explorative studies containing broad quantitative data also provide generalised information on the subject. After that, qualitative studies and in-depth research of a limited group of small-business entrepreneurs and accountants is conducted to provide deeper understanding of the phenomenon. This study follows the convergent mixed method design (Creswell & Plano Clark, 2018), in which the results of the quantitative and qualitative data analyses are used to complement and validate the results of one another. In particular, the qualitative research presented in this study provides better understanding of how the factors at the individual level lead to the results of the quantitative research at the general level. Although both quantitative and qualitative

parts of the study are important in reaching the study objectives, the main emphasis is placed on the qualitative research. This combination of mixed research methods is aimed to produce a more comprehensive understanding of the subject matter.

This dissertation contributes to management accounting literature by providing further understanding on the management accounting information needs in small, entrepreneur-driven companies. Previous studies show that the use of financial information is scarce in small enterprises (López & Hiebl, 2015; Shields & Shelleman, 2016; Pelz, 2019), focusing mainly on reporting to external stakeholders, which entrepreneurs typically outsource to accountants (e.g. Halabi et al., 2010; Barbera & Hasso, 2013; Sjögrén et al., 2014). This limited use of MAI in the managerial work of small enterprises is justified by the peculiar characteristics of small businesses (López & Hiebl, 2015). Many studies have also investigated the use of typical MA planning and controlling methods and their link to the company's success, suggesting that it can be improved with the help of MAI (e.g. Granlund & Taipaleenmäki, 2005; Halabi et al., 2010; Lohr, 2012; Ruiz & Collazo, 2020).

The contribution of this dissertation consists of three main aspects. Firstly, this dissertation expands the existing research by offering entrepreneurs' perspective on MAI utilisation. Previous research focuses almost exclusively on studying companies and investigates the use of various MA methods and performance perspectives from the enterprises' point of view, and it lacks the perspective of entrepreneurs or owner-managers as MAI users. Secondly, this dissertation considers the service quality gap theory in relation to entrepreneurs and accountants, forging a deeper understanding of the specificities of MAI provision and needs. The third and the most significant contribution comes from combining the first two: considering entrepreneurs' perspective and the service quality gap together reveals the MAI potential that has been largely overlooked, and the service quality gap theory can provide an explanation why entrepreneurs are unable to utilise MAI despite being aware of its efficiency.

The chosen research strategy involving mixed methods aims to provide a comprehensive understanding of entrepreneurs' needs. Furthermore, the dissertation brings out new understanding about the possibilities to support small enterprise growth and development by appropriate MAI. From the practical viewpoint, this dissertation seeks to identify means to improve the utilisation and usability of MAI in small business management, which can further be applied when developing MA services, methods and software, especially for small enterprises and the decision-makers within them.

Business research, as well as MA research, is sometimes criticised for losing touch with the real-life organisational challenges (Otley, 2001; Bell et al., 2019, p. 6). For instance, Myers (2009, p. 13) discusses the rigour and relevance in business and management research and argues that the research of the field has become too rigorous: although it meets the scientific standards and requirements of journal publishers, its relevance to business practitioners has decreased. Thus, this dissertation aims to contribute new scientific knowledge while sustaining its practical relevance.

1.2 Objectives and scope

This dissertation seeks to increase the understanding of management accounting information use and the aspirations of small enterprises. Relying on previous literature and conducted research, this dissertation forms an overall picture of management accounting information utilisation in small enterprises, aims to understand entrepreneurs as MAI users and discusses how MAI can be utilised in small companies to allow them to make best use of it. **Thus, this dissertation aims to increase the understanding on the current and potential use of management accounting information among small business entrepreneurs.** The expected results of the research include enhanced understanding of the conceptions, expectations and demands entrepreneurs have regarding the possibilities of MAI to support management of their enterprises. The research questions are as follows:

- RQ1: How do entrepreneurs of small enterprises utilise management accounting information?
- RQ2: How can entrepreneurs of small enterprises potentially utilise management accounting information?
- RQ3: What are the main challenges in bridging the gap between the ideal and current management accounting information utilisation?

The study reveals how important management accounting information is in small-business entrepreneurs' managerial work, what kind of information these entrepreneurs need and what prevents optimal utilisation of management accounting information. To find the answers to the research questions, this dissertation seeks to enhance the understanding of entrepreneurs' current ways of using MAI as well as

their thoughts and attitudes towards this information. Furthermore, the study examines the views of MAI producers (typically accountants) on the demand and supply of MAI. With regard to research question 3, the dissertation does not assume that the ideal MAI utilisation would ever be achieved, but it is still useful to examine the role of MAI. This kind of contribution to MA literature may help in developing better MA systems and services in the future.

Overall, small enterprises have limited resources to develop the company, which constrains their ambitions to seek more and better services to support decision-making. Nevertheless, knowing the ultimate needs of entrepreneurs and the efficiency of the available MAI is essential to understand the needs entrepreneurs can have provided they can obtain all possible information. This knowledge also reveals the nature of the gap between MAI service suppliers (accountants) and MAI demands of entrepreneurs.

As mentioned before, research of MAI and its use in SMEs is fragmented and limited to several research fields (López & Hiebl, 2015). Relying on previous literature, we can, however, sum up an approximate overall picture of the current state of MAI use in small enterprises. Previous studies have examined typical characteristics of small businesses and their effect on MAI use (e.g. Davila, 2005; Davila & Foster, 2007, King et al., 2010) as well as the most typical MA methods used (e.g. Granlund & Taipaleenmäki, 2005; Halabi et al., 2010; Lohr, 2012; Ruiz & Collazo, 2020). In addition, there are several studies that discussed the challenges and obstacles of MAI utilisation (e.g. Alattar et al., 2009; Halabi et al., 2010; Shields & Shelleman, 2016). In small businesses, the accounting function is typically outsourced to external accountants, and the role of accountants has been another line of research during the past few decades. However, MA in SMEs can also be approached through other theories. In this dissertation, MAI use is also discussed in the firm life cycle context. Several studies mention briefly that the utilisation of MAI is dependent on the maturity and size of the enterprise (e.g. Auzair & Langfield-Smith, 2005; Granlund & Taipaleenmäki 2005; Davila & Foster, 2007; Su et al., 2013; Laureano et al., 2016). Therefore, it is useful to discuss the phenomenon of MA in SMEs from the perspective of the firm's life cycle. Finally, service quality models are employed in this dissertation to better understand the tensions and shortcomings between MA service suppliers: accountants and users (entrepreneurs). Accountants are used widely to fulfil the financial accounting needs of small enterprises and are also eager partners as MAI producers. However, previous studies indicate that entrepreneurs do not make the most of this opportunity (e.g. Halabi et al., 2010; Nandan, 2010). Thus, this study aims to understand this contradiction from the point

of view of service quality challenges. These research lines form a general view of the phenomenon of MA in SMEs and are examined in more detail in the literature overview of this dissertation. Figure 1 below illustrates the research focus of this dissertation.

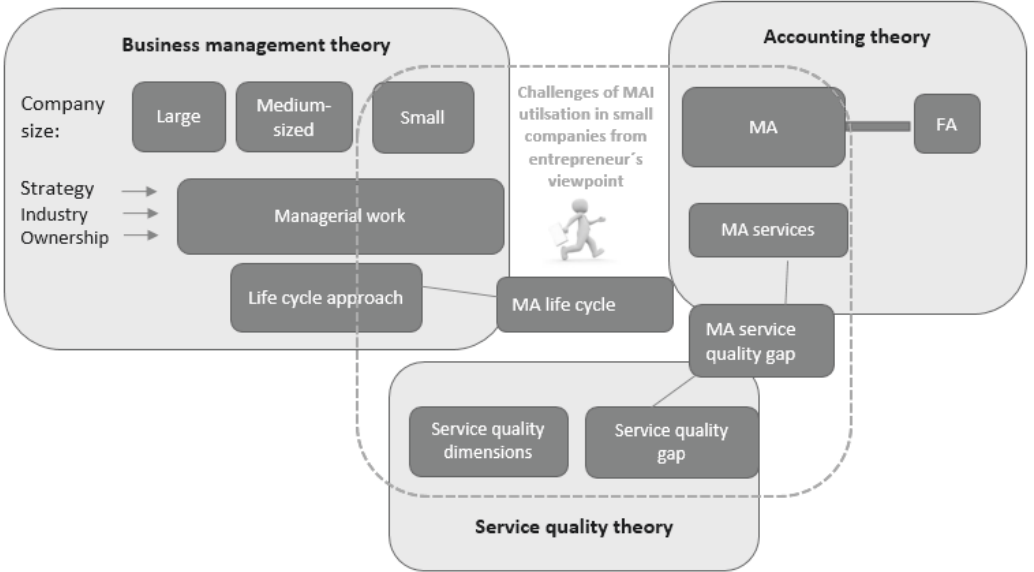


Figure 1. Research focus

The left part of the diagram highlights the areas that affect business management according to previous literature: most of all, the size of the company (Minzberg, 1973, p. 104), the strategy and industry (Floren, 2006), and the ownership base (Pelz, 2019). There are also other facts that can influence the management of an enterprise, including personal qualities of the manager. However, this dissertation does not focus on these areas; rather, it investigates how MAI affects the managerial work of small businesses and what accounting service is required in small enterprises. As mentioned before, based on previous literature (Auzair & Langfield-Smith, 2005; Granlund & Taipaleenmäki 2005; Dávila & Foster, 2007; Su et al., 2013; Laureano et al., 2016), the life cycle phase of the company also impacts the needs of MAI; therefore, life cycle theories are also considered in this context, especially focusing on the existing MA life cycle theory.

The right part of the diagram illustrates other theories relevant to this dissertation that seek to understand MAI utilisation by small enterprises. MA and the services producing MAI are the focus of this dissertation, and MA methods and services are discussed to the extent they are relevant for small enterprises. Moreover, financial accounting (FA) and MA are dependent on each other and cannot be completely separated; as statutory FA information and practices affect MAI utilisation especially in the small business context, they should, therefore, not be excluded from the research focus.

In small enterprises, MAI is usually provided as an outsourced service produced by an external accountant or accountancy. Based on previous literature and the findings obtained in this study, the demand and supply of accounting service businesses do not meet in the most efficient way. Therefore, the literature overview in this dissertation discusses the service quality gap models and their implementation in relation to accounting services.

In the existing MA in SME literature, the research subject is almost invariably the enterprise, so the phenomenon of MAI is examined from outside. The perspective of entrepreneurs as SME managers and MAI users is still unclear and forms a research gap that this dissertation intends to contribute to bridging. This dissertation also focuses on small enterprises, management accounting and entrepreneurs as utilisers of management accounting information. The entrepreneurship literature (Bridge & O'Neill, 2012; Kuratko, 2016), with the focus on entrepreneurship in general and the different roles of entrepreneurs in particular is not in the chosen focus of this dissertation.

This dissertation focuses on the smallest enterprises in the SME context. However, as literature on MA in SMEs is limited and the understanding of MA needs of the smallest enterprises is mostly lacking, the literature review of this dissertation consists of an overview of the current knowledge on MA in all SMEs. This expansion permits to forge an adequate overall picture of the subject. However, the empirical study focuses on MAI utilisation from the perspective of entrepreneurs of small businesses.

SMEs are almost solely privately owned and, most typically, family-owned enterprises (Bridge & O'Neill, 2012). According to the relevant literature, family firms comprise a separate business research field with a focus on the special characteristics of family-owned enterprises. Recently, MA researchers have also been showing a growing interest in family businesses (Rizza & Ruggeri, 2018), serving as a source of new information on MA. Nonetheless, in this dissertation, the enterprises

are not limited to their ownership base: the objects of this dissertation are all small enterprises, regardless of their ownership structure.

1.3 Dissertation outline

The structure of this dissertation is as follows. After introducing the topic and stating the research objective and questions in this chapter 1, the key concepts of the dissertation and a review of the related literature are presented in chapter 2. Chapter 3 introduces the philosophical and methodological choices and the research process of this study, as well as an analysis of each piece of data employed in the dissertation. Chapter 4 contains an analysis of each piece of data employed in the dissertation, the findings of this study and their comparison to previous literature. Chapter 5 covers the findings of this study and their comparison to previous literature. Finally, the discussion in chapter 6 provides answers to the research questions, and chapter 7 concludes this dissertation by outlining the study's contribution and limitations as well as recommendations for further research. Figure 2 represents the structure of this dissertation:

Chapter 1 introduces the topic of the dissertation and the motivation for the research project. The introduction then continues to frame the study, formulating the research objective and questions and narrowing down the scope of the dissertation. Chapter 2 begins with the definitions of the key concepts and the literary research process of the dissertation, then provides a theoretical framework for the study, covering management accounting in SMEs. The key studies on the subject and their main findings are presented, giving the reader an idea of what is known about the topic based on previous research and what the research gap is, which this study contributes to bridging. MA use and performance consequences are explored along with the typical challenges SMEs face when adopting MA. The role of external accountants as management accounting service providers is essential in the SME context; it is, therefore, also discussed in this chapter. As the utilisation of MA systems in enterprises is often explained in literature by the stage of the enterprise's development, this chapter also includes a review of life cycle theories in the MA context. Finally, based on previous literature and the empirical findings obtained during this research, the demand and supply of accounting services do not meet optimally: small-business entrepreneurs typically outsource the accounting function to external service providers, and this service often includes only statutory accounting and reports for authorities, which is mostly not what entrepreneurs

require for their managerial work. Therefore, the literature overview also discusses the service quality gap models and their implementation to accounting services.

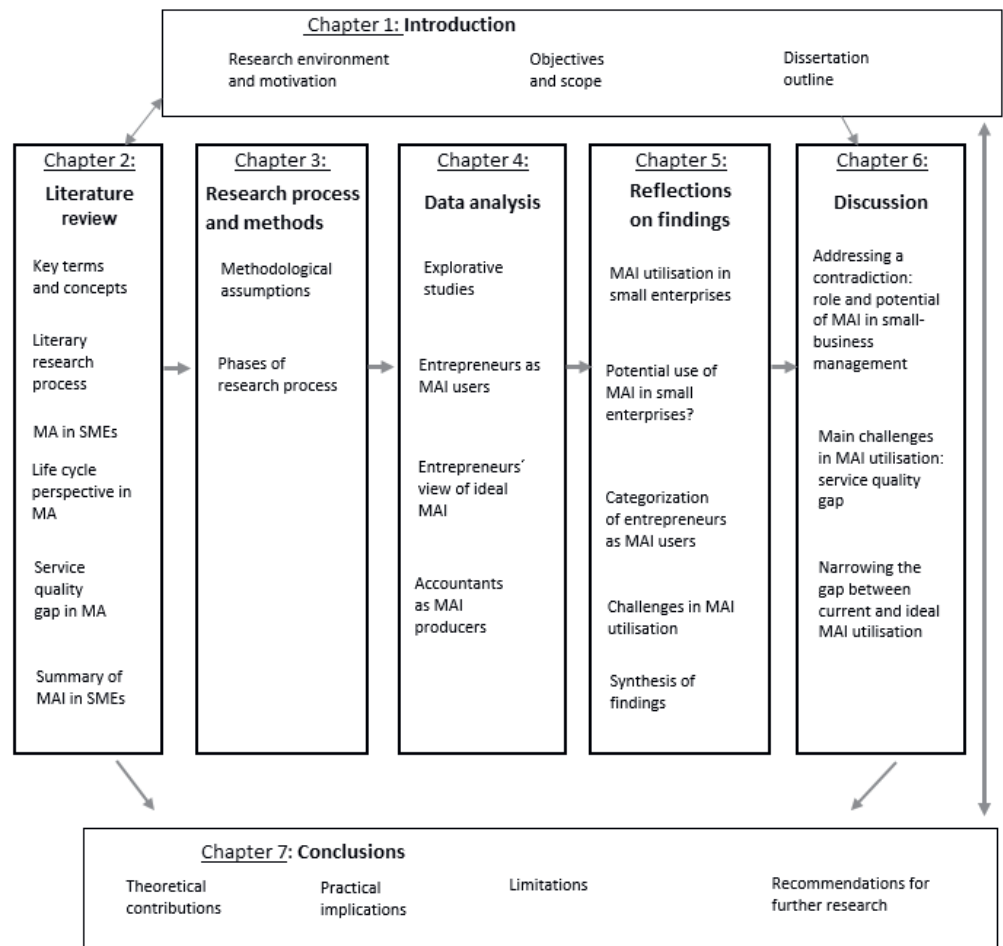


Figure 2. Dissertation outline

In chapter 3, the dissertation continues to explain the rationale behind the methodological choices and presents the research process and the research design employed in this study. Chapter 4 described implementation of the research phases, including both the main results of the explorative quantitative survey data employed and the content analysis of the qualitative data collected from entrepreneurs and accountants. Moreover, the chapter elaborates on the connection between the research questions and the phases of the research data collection.

Chapter 5 presents the findings of this research. The results presented in the previous chapter are here combined and analysed to further deepen the findings. The chapter concludes with a synthesis of the findings obtained in the course of this research. Chapter 6 draws conclusions from the findings, considering the analysis presented in the previous two chapters, and analyses them in comparison with previous literature, seeking to develop new concepts and insights in relation to the phenomenon of MAI. The research questions addressed in the introduction chapter are also discussed and answered in this chapter. Chapter 7 begins by highlighting the key findings related to theoretical contribution of the study and continues to present empirical implications. Thereafter, the limitations of the study are discussed, including the consideration of reliability and validity applicable to this study. The dissertation concludes with a discussion about the implications for further research and the application of management accounting concepts in practice.

2 LITERATURE REVIEW

The theoretical framework of this dissertation is based on the existing literature, examining the accounting function in SMEs from different standpoints and forming an overall view of MAI utilisation in small enterprises. To provide this overview, the literature review chapter is categorised based on three topics corresponding to the objectives of this study. Each topic approaches the phenomenon of MAI from a different perspective.

First, the key terms relevant to this dissertation are briefly examined to make the research context distinct. Thereafter, the literary research process is represented. Third subchapter represents objects of this study, that is, the small enterprises discussing the characteristics typical for small businesses and their influence in management accounting information usage in SMEs. Also, the most typical management accounting methods used in SMEs and the known challenges and obstacles for MAI utilisation are covered to background the research topic. In this connection, the role and viewpoint of accountants is also discussed as accountants are the essential entity from whom MAI is most typically requested in small companies.

Previous literature mentions briefly that the use of MAI is dependent on the maturity and size of the enterprise and some studies indicate that MA may evolve as the company grows. Thus, the theoretical framework of this dissertation also discusses the firm life cycle approach in the MA context, comparing different life cycle models and forming an overall view of the potential MA life cycle.

Finally, to achieve a deeper understanding of the shortages of management accounting information use in SMEs, MAI is also examined from the perspective of service quality theories. As MAI in small enterprises is typically provided by external accountants (Sjögren et al., 2014) and studies report much tension and shortage between accounting service providers and users (Randall & Horsman, 1998; Perren & Grant, 2000; Halabi et al., 2010; Barbera & Hasso, 2013), service quality models are discussed to increase the understanding of the nature of the challenging relationship between entrepreneurs and their accountants.

Lukka and Vinnari (2014) distinguish the roles of the theories in MA research as domain theories and method theories, the latter being the theoretical lens through

which the actual (domain) theory is examined. Therefore, literature related to MA in the SME context is discussed in subchapter 2.3, presenting the domain theory and addressing the literature this dissertation is contributing to. Life cycle and service quality theories serve as the method theories, bringing new insights and vocabulary adaptable to the main research subject (the phenomenon of MA in small businesses).

2.1 Key terms and concepts

The key concepts relevant to this dissertation are related to the managerial work and life cycle of small businesses, management accounting function and service quality aspects. Small enterprises are defined in the introduction (chapter 1.1), but the concepts of managerial work, enterprise life cycle, accounting function, especially management accounting, including MA systems, services, and service quality, are examined briefly here, prior to broader literature analyses. As this dissertation focuses strongly on the point of view of entrepreneurs in the small business context, it is also essential to define the notion of an entrepreneur. Other concepts included in this dissertation are defined by the research itself.

Organisation theorists have been studying and offering various definitions of **managerial work** for over a century. Traditionally, managerial work is divided into separate areas, such as behavioural versus institutional accounts (Willmott, 1987) or leadership (managing people) versus management (managing things) (e.g. Kotter, 1990, pp. 153–161). In later literature, these aspects are considered mixed and managerial work is seen as so multidimensional that it has become difficult to define it unambiguously (Carnall, 2003, pp. 52–55, 77–78, 146–147; Yukl, 2006, pp. 456–457). Hales (1999, p. 338) summarises managerial work as ‘short, interrupted and fragmented activities; a need to react to events, problems and requirements of others; a preoccupation with the exigent, ad hoc and unforeseen, rather than the planned; a tendency for activities to be embedded in others rather than undertaken separately; a high level of verbal interaction, often face-to-face; a degree of tension, pressure and conflict in seeking to juggle competing demands; and a degree of choice and negotiation over the nature and boundaries of the managerial job and how it is undertaken’.

Similar to the remarks of Hales, Floren (2006) described the characteristics and qualities of managerial work, especially in the small business context, as being unplanned, fragmented, reactive and hectic. Managing a small enterprise seems to be

down to reacting to unpremeditated actions rather than working systematically and consciously. Informal communication is used more than formal reports or management tools, and a small firm manager typically switches rapidly from one role to another, trying to retain the control of the business as a whole. Thus, managerial work is a set of actions and reactions of managers who are influenced by both external stimulus and personal characteristics. In this dissertation, managerial work refers to all actions and decisions that the manager, or the entrepreneur, takes or influences in the firm and for which the manager bears responsibility.

The enterprise **life cycle** refers in this dissertation to the stages through which the organisation grows and develops. Organisational behaviour and enterprises have traditionally described and examined the life cycle perspective using various life cycle models. In this context, development and growth of organisations are explained through several development phases and their certain peculiar characteristics. Applying life cycle concepts to MA research is appropriate as the life cycle phase can explain, at least to some extent, the use and needs of MAI in enterprises (Moore & Yuen, 2001).

Acknowledging the limitations of financial management in small enterprises, the term **management accounting information (MAI)** is used in this dissertation to cover any financial information that small enterprise entrepreneurs use or can use in their managerial work. MAI can be used either for planning or control purposes. This definition is based on the nature of accounting in the context of small businesses. The fundamental purpose of **accounting function** is to organise, analyse and communicate financial information to help organisations with decision-making (Franklin et al., 2019, p. 12). Thus, regardless of the size and nature of the organisation, accounting is a service function that provides useful information to support management. Although accounting service can be produced inside the organisation, it is typically outsourced to external accountants or accountancy firms, particularly in SMEs. Traditionally, in both practical and academic literature, the accounting phenomenon is divided into two separate functions: **financial accounting (FA)** and **management accounting (MA)**. FA signifies recording the business transactions of the organisation in accordance with the domestic legislation of the country and producing statutory reports and declarations (Franklin et al., 2019, p. 13). MA consists of systems and practices supporting management by providing useful information for business planning, control, and decision-making. The Institute of Management Accountants (IMA) defines MA as ‘partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist

management in the formulation and implementation of an organization's strategy'. Rikhardsson and Yigitbasioglu (2018) conceptualise MA as a combination of four elements. Firstly, the concept of MA includes the overall MA tasks, such as planning, control, performance measurement, transaction processing, reporting and decision support. Secondly, these tasks can be completed using specific MA techniques. Thirdly, MA covers organisational issues, including the role of management accountants and MA function in various organisational types, industries, and cultures. Finally, MA has certain generic effects on the organisational behaviour as it influences managers' opinions on MA issues. Based on these definitions, FA consists mainly of stewardship accounting, providing information to external stakeholders, such as investors, creditors and public regulators; whereas MA supports management by providing useful information for the strategic and operational management and decision-making of the company (Hemmer & Labro, 2008; Malmi & Brown, 2008; Suomala et al., 2011). However, recent research argues that the realm of accounting is not that polarised; rather, FA and MA are presented as dependent on each other. The development of information technology has enabled forward-looking FA, which intertwines with MA. Apportionment of accounting based on the concepts of FA and MA may no longer be valid as their ultimate purposes coincide (Hemmer & Labro, 2008; Taipaleenmäki & Ikäheimo, 2013). Thus, instead of separating FA and MA, Taipaleenmäki and Ikäheimo suggest using the concept of accounting information, or management control information. Based on these arguments, the term MAI becomes particularly appropriate to cover any FA or MA information utilised in the management of a small business.

This dissertation mainly contributes to MA literature, but as previously mentioned, drawing the line between financial and management accounting is somewhat inaccurate. Furthermore, entrepreneurs running small enterprises are typically not familiar with accounting concepts (Son et al., 2006; Halabi et al., 2010), and when collecting research data, it would be difficult to differentiate the terms financial and management accounting when interviewing entrepreneurs. Therefore, in the empirical studies, the use of all financial information related to the enterprise was examined without distinguishing between FA and MA information. However, the information FA provides is standardised and directed at external stakeholders, while the purpose of MAI (according to the definition of MA presented above) is to support the management of the company. Thus, studying financial information utilisation among small-business entrepreneurs implies studying MAI in the small business context. The ideas, wishes and needs the interviewed entrepreneurs revealed are solely related to the information that can support their managerial work,

i.e. MAI. Therefore, the empirical findings and results of this dissertation contribute almost exclusively to the role of MAI and the MA needs of small enterprises. The literature overview in this dissertation also discusses MA in SMEs, while in the empirical chapter 3, the study is focused on any financial information entrepreneurs utilise or would like to utilise in their managerial work. When discussing the findings of this study in chapters 4 and 5, as well as when drawing conclusions in chapter 6, this dissertation focuses on MAI in the managerial work of small businesses.

The terms **management accounting systems** and **management control systems** are sometimes used synonymously or interchangeably. Management control systems is a broader term that encompasses management accounting systems, but in addition to financial aspects, it also includes other controls, such as personnel management, production, and clan controls. Malmi and Brown (2008) defined management control systems as all devices and systems that businesses use ‘to ensure that the behaviors and decisions of their employees are consistent with the organization’s objectives and strategies’. Management accounting system is a subset of management control system, focusing on the financial perspective. Especially in small SMEs, the main function of management accounting systems is to assist managers in decision-making (Shields & Shelleman, 2016). In small companies, management accounting systems are typically the first and most widely used control categories (Davila & Forster, 2007). This dissertation concentrates on management accounting systems in SMEs, but in the literature overview, the term management control system is used in the manner it appears in the original studies, referring to MA-related systems.

Since there is no unanimous definition of the term service (e.g. Laine, 2009), accounting services provided to enterprises requires definition. To define accounting services for the purposes of this dissertation, it is necessary to consider both the content and the purpose of these services as well as the knowledge-intensive nature of service providers. In this dissertation, **accounting services** are thus defined as knowledge-intensive FA and MA services that are required to assist small enterprises in fulfilling their legal obligations and that can be utilised to support the management of the business. Laine’s (2009) service interpretation synthesis includes two aspects suitable for accounting service context: firstly, accounting services are solutions to customers problems; secondly, they can be perceived as application of specialised skills. Correspondingly, Nordenflycht (2010) studied professional service firms and described services as being based on the knowledge or expertise of the service-providing professional. Accounting services are typically knowledge-intensive tasks that are needed for management, which a small business entrepreneur or the

company's personnel, however, may not have adequate knowledge to perform. Accounting services of small businesses often include mandatory financial accounting and reporting duties that the management of the company is obliged to take care of; such services can utilise some aspects of MAI in management and decision-making. Enterprises need accounting services not only to fulfil their financial responsibilities but also to support their managerial work. A professional service provider, an accountant with specialised knowledge in accounting, also produces services that meet these needs.

The **quality of services** provided to customers is an essential factor for the success of any company and a much-discussed topic in management literature. As services are intangible performances that may vary from day to day, measuring the quality of services is more complicated than measuring the quality of a product. Researchers usually describe service quality as the extent to which customer experiences meet customer expectations as the result of a service delivery (Grönroos, 2007). The concept **service quality gap** refers to the difference between the customer's expectation and perception of a service. Grönroos (1984) defined the quality of services as a combination of technical quality (what service is provided) and functional quality (how the service is provided). Parasuraman et al. (1985) developed a more accurate concept of five quality gaps in the service process. Independent of the type of the service quality gap model applied, the key requirement in any service provision is that service providers must understand what their customers expect. Since small enterprises mostly acquire accounting services from external accountants or accountancy offices, the quality of these services and the challenges in accounting service provision are the key aspect of this dissertation.

SMEs are usually managed directly or indirectly by their owners, or **entrepreneurs**. Due to the small size of these enterprises, external executives, such as the chief executive officer and the financial officer, are normally not hired; rather, the decision-making and managership are performed by the same person. In this dissertation, the term entrepreneur refers to the person responsible for the managerial issues of the enterprise, regardless of the ownership type of the company.

2.2 Literature study process

The literature relevant to this dissertation was mostly studied using the EBSCOhost database; the Tampere University Library search service ANDOR and the Google Scholar service were used additionally to extend the literature search. As already

mentioned, this dissertation contributes mainly to management accounting in the SME context. Thus, the domain theory of this dissertation is management accounting limited to the context of SMEs. Life cycle theories, as well as service quality theories, serve as the method theories aiming to bring new insights regarding the domain subject. In fact, the literary research focused mainly to management accounting in small and medium-sized enterprises and entrepreneurs. I conducted multiple searches connecting the words ‘MA’, ‘MAS’, ‘management accounting’, ‘accounting’, ‘management’ and ‘managerial work’ with various expressions of small businesses or entrepreneurship: small enterprise*, small compan*, small business*, SME*, small firm*, small and medium-sized enterprise*, small and medium-sized firm*, family business*, family firm*, entrepreneur*, entrepreneurship*. I then scanned the sources returning by these searches to determine their relevance.

The most useful source found at the early stages of the research turned out to be a literature review by López and Hiebl (2015) that synthesises the existing knowledge on MA in SMEs. The authors reviewed and analysed 73 papers in 52 academic journals to summarise their findings on the methods, special characters and performance consequences of MA in SME context. Another very useful source of information was an editorial literature review by Quinn et al. (2018), categorising family firms and listing the key studies and findings concerning MA and control in family firms. The third useful material was a literature review by Pelz (2019), focusing on 67 empirical studies published in 25 journals and summarising the types, antecedents, and consequences of MA in young and small companies. In addition to containing useful knowledge and studies for further examination, these reviews revealed research gaps in the existing literature, encouraging me to produce this dissertation.

Table 1 below represents a complete overview of the publications that chapter 2.3, MA in SMEs, is based on. In this table, the papers are listed by the year of the publication and classified based on their main contributions to the MA literature in the SME context. The overview also includes information about the authors, publisher, and the main research methods of each study.

Table 1. Main topics and methods of management accounting research in SME context

MA in SME Journal Articles	Research method	Primary contribution area:					
		MA utilisation	MA benefits	MA drivers	MA obstacles	MA methods	Accountant's role
Randall & Horsman, 1998 in 21st ISBA National Small Firms Conference	Qual case study						X
Marriott & Marriott, 2000, in Management Accounting Research	Qual, interv.	X					
Mitchell & Reid, 2000, in Management Accounting Research	Editorial				X		
Perren & Grant, 2000, in Management Accounting Research	Qual case study				X		X
Moore & Yuen, 2001, in Accounting, Organizations and Society	Quan + qual		X				
Collis & Jarvis, 2002, in Journal of Small Business and Enterprise Developm.	Quan survey study					X	
Jay & Sharper, 2003, in Journal of Small Business and Enterprise Development	Quan survey study						X
Wijewardena et al., 2004, in Journal of Small Business Management	Quan survey study		X				
Davila, Foster & Li, 2005, in Accounting, Organizations and Society	Quan + qual	X					
Granlund & Taipaleenmäki, 2005, in Management Accounting Research	Qual methods	X			X	X	
Berry et al., 2006, in Journal of Small Business and Enterprise Development	Quan survey study		X		X		X
Davila & Forster, 2007, in The Accounting Review	Qual methods				X	X	
Garengo & Bernardi, 2007, in International Journal of Productivity and Performance Management	Quan retrospective study				X		
Malmi & Brown, 2008, in Management Accounting Research	Editorial		X				
Altartar et al., 2009, in Journal of Accounting & Organizational Change	Qual case studies			X	X		
Baldvinsdottir et al., 2009, in Accounting, Auditing & Accountability Journal	Qual discourse analysis						X
Davila, Foster & Li, 2009, in Accounting, Organizations and Society	Quan + qual		X				
Blackburn & Jarvis, 2010, Small and Med. Practices Paper, Int. Fed. of Account.	Lit. rev.+ interv.						X
Brinckmann, Grichnik & Kapsa, 2010, in Journal of Business Venturing	Literature review		X			X	
Halabi et al., 2010, in Qualitative Research in Accounting and Management	Qual interviews	X		X	X		X
Ilias, Razak & Yasoa, 2010, in Global Business and Management Research	Quan survey study	X				X	
King, Clarkson & Wallace, 2010, in Management Accounting Research	Quan survey study		X				
Marc et al., 2010, in Journal of applied business research	Quan survey study			X			
Nandan, 2010, in Journal of Applied Management Accounting Research	Literature review		X		X		X
Becker et al., 2011, in International Journal of Entrepreneurial Venturing	Mixed methods			X			
Durendez et al., 2011, in Innovar: revista de ciencias administrativas y sociales	Quan survey study		X				
Quinn, 2011, in Journal of Accounting & Organizational Change	Conceptualization		X				
Stone, 2011, in Accounting, Auditing, & Accountability Journal	Mixed methods						X
Lohr, 2012, in Journal of Small Business & Entrepreneurship	Qual case study	X		X	X	X	
Barbera & Hasso, 2013, in Family Business Review	Statistics analysis						X
Hiebl et al., 2013, in Journal of Accounting & Organizational Change	Quan survey study			X			
Lee & Cobia, 2013, in Management Accounting Quarterly	Qual case study		X				
Lucas, Prowle & Lowth, 2013, in CIMA / The Open University	Qual case studies			X	X	X	X
Taipaleenmäki & Ikaheimo, 2013, in International Journal of Acc. Inf. Systems	Conceptual framing & theorization						X
Broccardo, 2014, in Advances in Management and Applied Economics	Quan survey study		X				
Honig & Samuelsson, 2014, in Journal of Business Venturing Insights	Literature review		X				
Sjögren et al., 2014, in international Journal of Business Information Systems	Quan survey study		X				X
Lopez & Hiebl, 2015, in Journal of Management Accounting Research	Literature review	X		X	X		
Senftlechner & Hiebl, 2015, in Journal of Acc. & Organizational Change	Literature review			X			
Armitage et al., 2016, in Accounting Perspectives	Qual field interv.		X		X	X	
Carey & Tanewski, 2016, in Managerial Auditing Journal	Quan survey study						X
Durendez et al., 2016, in European Journal of Family Business	Quan survey study	X	X				
Messner, 2016, in Management Accounting Research	Literature review					X	
Shields & Shelleman, 2016, in Journal of Applied Management and Entrepren.	Quan survey study		X	X	X	X	
Leotta et al., 2017, in Qualitative Research in Accounting & Management	Qual case study			X			
El Masri et al., 2017, in Qualitative Research in Accounting & Management	Qual interviews			X			
Mitter & Hiebl, 2017, in Journal of Accounting & Organizational change	Qual interviews		X				
Blackburn et al., 2018, in Qualitative Research in Accounting & Management	Qual interviews						X
Heinicke, 2018, in Journal of Management Control	Literature review		X				
Rizza & Ruggeri, 2018, in Journal of management control	Qual case study			X			
Quinn et al., 2018, in Journal of Management Control	Literature review	X					
Casidy & Nyadzayo, 2019, in Industrial marketing management	Quan survey study						X
Moll & Yigitbasoglu, 2019, in The British Accounting Review	Literature review						X
Pelz, 2019, in International Journal of Management Reviews	Literature review		X	X		X	
Hertati et al., 2020, in Ilomata International Journal of Tax and Accounting	Quan survey study				X		
Le et al., 2020, in Cogent Business & Management	Quan survey study		X				
Ruiz & Collazo, 2020, in Qualitative Research in Accounting & Management	Qual interviews			X			
Maelah et al., 2021, in Asia-Pacific Management Accounting Journal	Quan survey study		X			X	

As shown in Table 1, the focus of the research in this field has been mostly the same for the past 20 years. Both quantitative and qualitative research methods have been used evenly, and several literature reviews have been written on the subject. There is no clear trend or research topic that has become more prominent recently. The most conducted studies focused on the benefit and role of accountants as MA information providers. However, over the past 10 years, research into the drivers of the exploitation of financial information has been more active, but the research related to obstacles has, on the other hand, decreased. In general, there has been little research concerning the utilisation of MA in the past, which proves the importance of this dissertation and reveals a research gap in MA in the SME context.

To find the literature related to the first method theory, the life cycle aspect reviewed in chapter 2.4, I used search terms ‘organisation’, ‘enterprise’, ‘company’ and ‘life cycle’, connecting then these findings with ‘management accounting’ (MA) and ‘management accounting systems’ (MAS). Finally, for the second method theory subject, I looked for literature related to services and the service quality theory and used search terms ‘service’ and ‘service quality’, also connecting them with ‘accounting’, ‘management accounting’, ‘financial’ and ‘financials’. These findings are connected and discussed in chapter 2.5.

In addition to the literature found in the mentioned databases, some useful articles were also found by examining the bibliography of the literature found using the mentioned search criteria. During the dissertation project, I have also followed the publishing activities of several journals relevant to the research subject to keep up to date with the latest literature on the topic.

2.3 Management accounting in SMEs

2.3.1 Characteristics of management accounting in SMEs

This chapter aims to formulate an approximate overall picture of the characteristics of management accounting in SMEs. There are several studies dealing with the relevance of MA use in small business context; at the same time, there are also differences with the MA procedures in bigger companies, which have also been studied to some extent.

The application of MAI in SMEs differs that in larger companies. SMEs mainly produce FA information for external needs (e.g. for the banks, stakeholders, or tax authorities) and do not use MAI for their internal needs (López & Hiebl, 2015). Although the fundamental purpose of MA is to support decision-making and planning, MA in SMEs seems to differ in this respect. In SMEs, the ownership base is typically narrow, and the owner-manager (the entrepreneur) has a strong influence and decision-making power in the company (Bridge et al., 2003). In such circumstances, the owner-managers' attitude and wishes towards MAI make a significant impact on MA utilisation (Halabi et al., 2010). Production and exploitation of MAI is voluntary, based only on the need for information experienced by the entrepreneur. Thus, if the entrepreneur does not find MAI useful, MAI may not be utilised due to their unawareness of or distrust to its efficiency.

When MA is used in SMEs, the emphasis seems to be placed more on the information related to control and intended for external use rather than decision-making (Marriott & Marriott, 2000; Halabi et al., 2010; López & Hiebl, 2015). For example, MAI can be used to analyse the ex-post figures rather than plan future activities. Similarly, Granlund & Taipaleenmäki (2005) noted that in small enterprises, external requirements for financial controls are taken more seriously than expectations from internal needs. These findings indicate that MAI is not always perceived in SMEs as being efficient for decision-making purposes. The reason for this discrepancy between SMEs and bigger companies is unclear, but literature names some characteristics of SMEs that may partly explain this phenomenon. For example, Ilias et al. (2010) point out knowledge constraints in the use of accounting systems. On the other hand, smaller businesses' ability to utilise produced information may also be inadequate.

The smaller size and limited resources of SMEs are obvious and typical features having a significant impact on MA usage. Granlund and Taipaleenmäki (2005) studied MA practices in new economy firms (NEFs), which are businesses aiming to grow fast and operate either in the information and communication technology sphere or the biotech industry. In all the NEFs studied, a lack of adequate resources for accounting functions is typical. However, Granlund and Taipaleenmäki argue that as the firm grows, the role of accounting changes and the need for management control arises. Similarly, Davila (2005) noted that the emergence of management accounting systems depended on the age and size of the enterprise. Regardless of these findings, the age of the enterprise does not always explain the patterns of MA use. According to Lohr (2012), in elder SMEs, decisions can be made based on the experience of the manager. Such businesses can have a long tradition in the market,

and if the performance of the enterprise is satisfactory, the need for MAI may not be recognised.

2.3.2 Benefits of management accounting information in SMEs

The existing literature argues that although management accounting information utilisation is in general scarce in SMEs, the use of management accounting systems seems to have a positive correlation with small businesses' performance (Wijewardena et al., 2004; Berry et al., 2006; Brinckmann et al., 2010; Lee et al., 2013; López & Hiebl, 2015; Shields & Shelleman, 2016; Heinicke, 2018; Pelz, 2019; Le et al., 2020 and Maelah et al., 2021). This conclusion comes mostly from the studies comparing the performance of the enterprises systematically using MA methods or services with their counterparts that use MA methods less or do not use them at all. For example, Berry et al. (2006) argue that the utilisation of external MA advice has a positive impact on the firm growth and Maelah et al. (2021) found a positive relationship between usefulness of MAI and successful decision-making of SME management. Correspondingly, Shields and Shelleman (2016) found that those micro enterprises that analyse the profitability of their products, services or customers have a higher profitability than those who do not. Furthermore, the studies by King et al. (2010) and Wijewardena et al. (2004) argue that the use of budgeting as a method of financial planning has a positive effect on the business's performance. Heinicke (2018) and Pelz (2019) executed systematic literature analyses covering the benefits of MA in SMEs. Heinicke (2018) studied the consequences of the performance measurement systems use in SMEs and suggested that implementing these systems could contribute to improvements in the quality of operations and performance of the enterprise. Pelz found that business planning and control were considered useful in most studies, supporting management of the narrow resources of small businesses. Finally, the studies of Broccardo (2014) and Mitter & Hiebl (2017) indicate that SMEs with advanced management accounting systems make more investments and succeed more in internationalisation unlike their counterparts, which do not use MA techniques as widely.

However, these studies indicate that in most cases, certain MA techniques are efficient for SMEs and lead to improved performance, but they do not necessarily relate to why and how this information is used in managerial work. The studies examining the performance consequences of certain MA methods can also be criticised. The purpose of MCS is to support managerial work. When companies are

different and have different needs for information, it cannot be unequivocally assumed that the use of a specific method, such as budgeting, will improve or reduce the company's performance. Instead, it appears to be more reasonable to investigate the use of MCS as an entity or package (Malmi & Brown, 2008), considering the overall combination of the financial controls used. The impact of such an MA package on the financial success of SMEs has been studied by Duréndez et al. (2011). The authors examined MCS utilisation in the family business context as a combination of three MA methods: cost accounting, cash-flow budgets, and the analysis of financial reports. They found MCS to be beneficial for family firms, fostering improved performance. Similarly, Sjögrén et al. (2014) studied the exploitation of MAI measured by several indicators and found there is a positive correlation between the company's turnover and MAI utilisation.

Another line of argumentation in favour of MA practices in small companies is their efficiency in fostering growth. According to Nandan (2010), MAI enables better resource management and allocation decisions, thus leading to improvement in the performance. Employing MA systems can help small business management coordinate growing organisations (Moore & Yuen, 2001; Davila et al, 2009; Pelz, 2019). Standardised, regular information can help keep the management up to date with the situation in the complex environment of the growing enterprise. Furthermore, explicit financial information is also needed in the procurement of funding, which a growing enterprise typically needs. However, to achieve these benefits of MAI, it is important to ensure the information generated is relevant and timely.

At the same time, some studies speak against the efficiency of MA in the small business context. The costs of financial planning and MAI preparation should be less than the benefits achieved with this information, which is not always the case (Granlund & Taipaleenmäki, 2005; Honig & Samuelsson, 2014). It can also be difficult to measure the benefits of the MAI available in practice. Moreover, it can be argued that besides MAI, there are other factors effecting higher performance of small enterprises that are ignored in many studies. For example, personal qualities of entrepreneurs, such as analyticity and accuracy, can also impact the company's performance. Therefore, improved performance of the enterprise may be partly related to a higher MA usage, but it is mostly dependent on the personality of the entrepreneur.

Although the benefits of MA seem likely, they may be unclear to small-business entrepreneurs. The overall use of MA practices or systems is often limited in small businesses, and the literature recounts multiple reasons for that. The way MA is

utilised is typically less advanced in SMEs than in larger companies, and small enterprises may not use MA information at all (Quinn, 2011; Armitage et al., 2016). The factors obstructing the use and reasons for not using MAI are discussed in more detail in chapter 2.2.4.

2.3.3 Drivers for management accounting information usage

As management accounting information use is in general scarce and the literature argues whether MAI benefits small enterprises, an interesting question arises about the factors affecting the use of MAI in SMEs. In what companies and under what circumstances is MA usually adopted and utilised? Based on the previous studies, some typical drivers for MA adoption have been found.

Firstly, several internal factors affect management accounting utilisation. The overall situation of the enterprise is likely to have an impact on MA usage. In the research articles reviewed by López and Hiebl (2015), the common agreement was that the size of the company has a strong effect on MA usage: ‘The smaller the business, the less they use management accounting systems’. Also, the phase of the development and overall performance seem to explain MA usage : in stable, successful companies, MAI may not necessarily be used, but significant changes in circumstances typically effect a demand for more detailed accounting information (Lohr, 2012). Situations, such as strong business competition and high environmental uncertainty, can increase MA systems use (Alattar et al., 2009; Marc et al., 2010). It is also the case when a new director takes over management but does not yet have the intuition to understand the economics of the enterprise (Lohr, 2012). Similarly, in the family business context MA tools seem to institutionalise when a new generation of family members (Leotta et al., 2017) or non-family members (Rizza & Ruggeri, 2018) replace the family in charge of the management and when family firms aim to foster rationality and reduce familial affectivity (El Masri et al., 2017). Furthermore, the extent of management accounting intensity seems to be dependent on the financial situation of the enterprise. According to Lucas et al. (2013), MA is used most in the SMEs with a great extent of financial constraint and less in the companies that are more successful. This finding is interesting and slightly in contradiction with the performance discussion presented above. Based on several studies, MA use should improve performance (e.g. López & Hiebl, 2015; Shields & Shelleman, 2016). Typically, MA is unlikely to be adopted

to allow the company to survive a financial crisis, but MAI can help companies avoid financial difficulties.

Pelz (2019) found three categories of drivers for MA use: organisational characteristics, professional characteristics, and external investments. Organisational characteristics explaining MA adoption include internal factors, such as the company size and age and the organisational life cycle stage. Organisational issues and business factors seem to influence the use of MA in SMEs: the more complex the organisational structure is, the more MA systems are used (Becker et al., 2011). In small enterprises, the organisation is often light and the management centres around one or a few persons, usually the owners of the company. As the enterprise grows, the organisation tends to expand and decision-making tends to disband. Thus, the company growth and life cycle development seem to be obvious drivers for MA adoption. The life cycle perspective on MA use will be discussed in more detail in chapter 2.3 as part of this literature overview.

Professional characteristics, including education and managerial experience and other work experience of entrepreneurs or managers, are the second largest group of drivers for MA. In SMEs, the impact of the owner (the entrepreneur) is crucial for decision-making, and the actions in the firm typically reflect the owner's mindset and capacity (Halabi et al., 2010). Therefore, the perspective of entrepreneurs as the MA information users is essential in understanding MA use in SMEs. This section of MA in SMEs remains unexplored and is related to the research objectives of this study.

Finally, Pelz (2019) found several studies pointing out the influence of the ownership base, particularly the existence of external investors, in adoption of MA. In companies with external owners, the demand for detailed MAI comes from external parties and financiers or funding granters, who are likely to be aware of the importance of financial information and experienced in using this kind of information. At the same time, in family firms, MA use seems to be at an especially low level (Alattar et al., 2009; Duréndez et al., 2016; Hiebl et al., 2015; Ruiz & Collazzo, 2020), while during the transition from a family business to a non-family business, the need for MA and MCS increase (Hiebl et al., 2013). Lower need for MAI can be explained by the financial independence of family firms and established centralized practices of decision-making (Senftlechner & Hiebl, 2015). In addition, for small-business entrepreneurs, it can sometimes be important to pursue non-economic goals, such as the welfare of one's own family or community, rather than financial success (Ruiz & Collazzo, 2020). In this context, the optimal use of MAI is not essential.

2.3.4 Management accounting methods used in SMEs

A relatively small number of studies has examined the use of specific management accounting practices or tools in SMEs. However, since 2000, there has been some research attention, mainly focusing on young enterprises, enterprises in a specific industry or MA use in certain geographic areas. MA practices are researched mainly through in-depth case studies or surveys. These studies aim to find out what MA techniques or practices are used in the studied enterprises.

In small young companies, the first and most widely used management accounting systems tend to relate to financial planning. Business planning in general is advantageous in small, and especially new, companies and predicts their performance (Brinckmann et al., 2010). Thus, MAI-supporting planning is helpful and essential in building a successful business. In their study of 36 Mexican small and micro-firms, Ruiz and Collazzo (2020) found that planning and target setting was typical for these companies, although actual budgeting was rare, and the undertaken planning may be informal and not in writing. According to Lohr (2012), companies that belong to a group structure use budgeting, while smaller companies do not see detailed planning, such as budgets, as useful. According to the diverse case studies conducted by Davila and Foster (2007), most frequent systems adopted in start-up companies are budgeting, cash flow projections and sales projections. After the third to the fifth year since their founding, many companies start adopting a routine analysis of their financial performance, comparing it against the target. Similarly, a wide survey study made by Collis and Jarvis (2002) reveals that small-enterprise managers rely heavily on cash flows and bank statements and often follow basic financial reports produced by their accountants. Shields and Shelleman (2016) studied MA systems in micro-enterprises in the USA and concluded that MAI was typically used to facilitate decision-making both for the control and planning purposes. Most frequently, control-related methods focused on the product or customer profitability, comparison of the actual vs budgeted performance and assessing the customer acquisition costs. As a planning function, budgeting was the main method used, accompanied by computing break-even and general target setting.

Apart from the business maturity, the industry may matter in MA usage. Messner (2016) points out that the industry context may influence both MA tools use and the challenges faced in producing MAI. However, Messner does not discuss the influence of the industry, especially in the SME-context, but offers a more general viewpoint on MA use. In the case study of new economy firms (fast growing SMEs

in the information technology business and the biotech industry) by Granlund and Taipaleenmäki (2005), the most vital tasks that are performed as a minimum were budgeting and speedy basic reporting activities, such as the research and development (R&D) project control. Unexpectedly, typical MA practices, such as cost accounting and performance measurement, were not seen important, which was most probably due to the position of these companies: as they are growing fast amidst high uncertainty, long-term planning may seem pointless.

Based on the previous literature, there tends to be little or no geographic discrepancy between MA practices in the SMEs on different continents. Lucas et al. (2013) studied MA practices of seven small and four medium-sized enterprises in the United Kingdom. All the enterprises in their case study had existed for more than five years and considered the product- or service-cost analysis, working capital measures and cost-volume-profit analysis to be the most important aspects of financial information. Additionally, the budgeting and customer profitability analyses were widely used, although mostly in the companies facing financial challenges; these methods were less of a priority in the companies with a solid financial standing. Similarly, according to Lohr (2012), the most used MA instruments in industrial SMEs in Germany are cost-accounting systems. Some key performance indicators (KPIs) were used in most cases, but the systematic balanced scorecard (BSC) was implemented only in one of the researched companies. Also, in the study by Ruiz and Collazzo (2020), in addition to financial planning, costing systems were widely used in Mexican small enterprises. In the study by Armitage et al. (2016), 22 SMEs in Canada and Australia were examined, using in-depth field interviews. This study indicates that manufacturing companies are most likely to use diverse MA techniques, such as costing systems, operating budgets and variance analysis. Ilias et al. (2010) explored MA practices in Asian SMEs in a survey study and found that in SMEs, accounting information is mostly used for making pricing decisions, planning, and budgeting and the decisions concerning cost control or cost allocation. Table 2 summarises the overall picture of the current MA methods used in SMEs based on the previous literature.

Table 2. Summary of common management accounting methods used in SMEs

Financial planning methods: Simple planning or target setting (Ruiz & Collazzo, 2020) Budgeting (Davila & Foster, 2007; Granlund & Taipaleenmäki, 2005; Lohr, 2012; Ilias et al., 2010) Cash flow projections (Davila&Foster, 2007; Collins & Jarvis 2002; Ilias et al., 2010) Sales projections (Davila & Foster, 2007)
Financial control methods: Cost control (Ilias et al., 2010; Lohr 2012; Lucas et al., 2013; Armitage et al., 2016; Ruiz & Collazzo, 2020) Product/service/customer/project cost analysis (Granlund & Taipaleenmäki, 2005; Lucas et al., 2013) Financial performance against targets (Collis & Jarvis, 2002; Davila & Foster, 2007; Armitage et al., 2016) Working capital measures (Lucas et al., 2013) Performance indicators (Lohr, 2012)

For the future needs, Pelz (2019) calls for the utilisation of flexible management control concepts that can support internal decision-making of small companies better than the traditional MA methods. This concept includes a unique range of performance indicators relevant for each business context; the founders and managers of small companies can decide which financial or non-financial measures are most relevant to their business concerned. Pelz also argues that this so-called freestyle MA could be especially useful in the start-up context, giving the company management flexibility in deciding what measurements are efficient to keep track of each business.

2.3.5 Obstacles to management accounting in SMEs

Management accounting can have untapped potential in SMEs, and the literature offers several grounds for this. The obvious reasons arise from the resource constraints of SMEs, but there also seems to be a serious lack of practical utility in the available management accounting information. Furthermore, some personal characteristics of SME owner-managers may also explain scarce management accounting information use.

SMEs typically have sparse resources (funds, workforce, etc.) available for accounting function, and under such circumstances, they cannot afford investing in MAI production (Mitchell & Reid, 2000; Granlund & Taipaleenmäki, 2005; Garengo & Bernardi, 2007; Lohr, 2012; López & Hiebl, 2015). Instead, only necessary

statutory FA services are procured, typically from external accountants, which meets the minimum requirements for financial management but does not include MA components that support the managerial work of the company.

Financial knowledge constraints are also typical for SMEs. Literature often represents SME entrepreneurs as unskilled to be able to fully understand financial information (Mitchell & Reid, 2000; 2006; Alattar et al., 2009; Halabi et al., 2010; Shields & Shelleman, 2016) and inadequately committed to management accounting information systems (Hertati et al, 2020). Based on the inadequate knowledge about financial terms and concepts, entrepreneurs are not able to take advantage of this information. Instead, MAI can be provided only to fulfil the needs of external institutions, such as banks, and in such circumstances some of the potential of MA becomes lost (Lobez & Hiebl, 2015). Thus, improving entrepreneurs' knowledge of accounting and finance is likely to increase the chance of better use of MA as well as commitment to management, which can benefit the financial success of the companies.

In addition to the resource and knowledge constraints, there are also other obstacles in MA utilisation. The most significant of such obstacles is the vague efficiency of the available MAI. Lohr's (2012) studies of German SMEs in the industrial sector indicate that MAI may not at all be perceived as useful. Similarly, Armitage et al. (2016) find decision efficiency to be the major reason for sparing use of MA practices in SMEs. Many entrepreneurs find their business quite simple; therefore, complex MA techniques are not required. MA literature seems to lack appropriate MA practices and services suited especially to the needs of SMEs. In other words, the utilisation and needs of MAI among small-business entrepreneurs remain unclear in the existing literature.

Secondly, the fact that most small firms are managed by owner-managers explains the lesser need for MA. When all information is related to one person, there is less need for information transfer and formal reporting (Granlund & Taipaleenmäki, 2005). When the owner-manager is replaced with a non-founder CEO, the need for MAI increases significantly (Davila & Forster, 2007). At the same time, the nature of the business can also influence the MA needs. Lucas et al. (2013) point out that in decision-making situations in SMEs, there are few options available; therefore, MAI is not particularly important or efficient. Managers are expected to choose the option that is feasible in the current situation, and it is not reasonable to spend the scarce resources on special MAI production if the decisions to be made are not dependent on this information.

Finally, the psychological aspect should be also considered. Many entrepreneurs are impulsive and tend to act instinctively rather than rely on a careful analysis or consideration of financial reports (Lucas et al., 2013). As MAI provision is voluntary for small businesses, entrepreneurs' opinion on the need for MA is crucial. The accounting function is often outsourced to external accountants, whose main task is to prepare statutory reporting for the authorities and other external stakeholders (Berry et al., 2006; Halabi et al., 2010). According to Nandan (2010), there can also be a gap between small accounting practitioners and the owner-managers of SMEs in terms of how they see and understand each other. Owner-managers find it difficult to understand accounting reports. They require MA information, but they do not have the skills or time to prepare reports. Furthermore, small-business entrepreneurs often want to keep all decision-making power and control over their enterprise in their own hands. Perren and Grant (2000) describe this phenomenon as a micro-world that the entrepreneur builds around their enterprise. This micro-world is solely controlled by the entrepreneur, who acts as the autocrat in governing the enterprise. In such situations, MA information, regardless of its usefulness, needs to meet the world, terms, and language of the entrepreneur to be accepted as support in their managerial work; otherwise, the situation can easily result in ignorance of the information.

2.3.6 Accountants as management accounting service providers

Small SMEs do not have sufficient resources to hire their own in-house accounting personnel; instead, they most commonly use external accountants for financial accounting purposes (Sjögrén et al., 2014). The role and use of external accountants in SMEs have been a subject of research over the past few decades, especially in Australia. Numerous studies about the roles of accountants and the relationship between entrepreneurs and accountants have been reported, using both quantitative and qualitative research methods. The most typical responsibility of external accountants is to fulfil the regulatory requirements, such as preparing financial statements and taxation reports. This corresponds to the general expectations of small-business entrepreneurs from their accountants (Halabi et al., 2010). However, over the recent decades, external accountants have expanded their services and tend to more often present themselves as business advisors (Berry et al., 2006; Blackburn & Jarvis, 2010), partially due to the information technology development, which has

automatised several traditional statutory accounting tasks and stimulated accountants to expand their services to include financial advice and consultation.

According to previous research, in many SMEs, accountants are the most used source of advice (e.g. Jay & Schaper, 2003, Carey & Tanewski, 2016) and are among the most trusted advisors (Blackburn et al., 2018). The accounting profession, in addition to its traditional focus on statutory accounting, increasingly presents accountants as business experts (Berry et al., 2006). There is also some research-based evidence that the use of external accountants as advisors has a positive impact on firms' performance (Barbera & Hasso, 2013). However, SME entrepreneurs may not make the most of their accountants as business advisors. Halabi et al. (2010) interviewed the owners of 10 small firms and found that accountants were not able to translate the information in financial reports in a form that would help their clients run their businesses: the interviewed owner-managers did not find the accounting reports produced by their accountants useful (they either did not understand the reports at all or felt that the reports did not reflect the reality of the business); instead, they relied on the bank balance to indicate the actual performance. In the study conducted by Lucas et al. (2013), a remarkable finding was that if MA was implemented in a small enterprise, the actor was usually the entrepreneur himself rather than an accountant. Accountants were not seen as appropriate business advisors; instead, entrepreneurs preferred to control sensitive information themselves.

The entrepreneurs in SMEs may not consider asking for MAI cost-wise reasonable. Using qualified accountants for business advice causes costs, and for MAI to be profitable, the outcome the advice returns should exceed the direct expenses. Randall and Horsman (1998) also pointed out that the commercial relationship between external accountants and SME owner-managers causes a significant problem: when in a poor financial standing, SMEs need MAI the most, but this information is neither requested nor provided due to the business's incapability to pay for it.

Secondly, the image of accountants may also influence MAI use. Nandan (2010) argues that external accountants are often seen and may also see themselves as only bookkeepers, and they are often unskilled to profile themselves as management accounting experts. The main task of accountants in most SMEs is to produce statutory financial reports (e.g. Berry et al., 2006, Halabi et al., 2010) that entrepreneurs are not able to utilise (Halabi et al., 2010). Baldvinsdottir et al. (2009) studied the image of management accountants by analysing accounting software adverts over four decades. Based on these analyses, the image of accountants has

changed from supporting rational decision-making towards adventurous or hedonistic exploiter of the accounting software. In any case, the essential role of accountants should be to serve as advisors or translators, explaining the content of formal financial reports to entrepreneurs in an understandable and usable mode (Perren & Grant, 2000). Similarly, the findings of Preston (1986), Hall (2010) and Stone (2011) indicate that managers value verbal communication and informal interaction more than written financial reports if they are to fully utilise MAI in their managerial work. However, in the small business context, financial reports are a form of MAI that is typically produced as part of accounting services (Halabi et al., 2010).

Moreover, financial consulting is seldom asked from accountants. Literature names several reasons for this, some of which are related to entrepreneurs, while others have to do with accountants. In addition, a lack of confidence is a serious obstacle effected by both parties. Entrepreneurs may find it difficult to ask for financial advice due to their lack of knowledge or understanding (Halabi et al., 2010). At the same time, external accountants may not have sufficient understanding of their customers' business field; therefore, it may be difficult, or even impossible, for them to act as business advisors or consultants (Blackburn et al., 2018). The interaction skills of accountants have a significant impact on this co-operation. Accounting practitioners should have a deeper understanding of their clients' businesses and upgrade their image as management accounting experts. Furthermore, to be beneficial, the relationship between accountants and entrepreneurs should be confidential. Accountants should act as embedded advisors for enterprises, and entrepreneurs should rely on the expertise and loyalty of their accountants (Barbera & Hasso, 2013). Casidy and Nyadzayo (2019) studied the relationship quality in professional service firms, such as accountancies, and found that trust, loyalty, and benevolence are important factors for developing a beneficial relationship between SME owner-managers and professional service providers. If there is mistrust between entrepreneurs and accountants, advice is not easily asked for or offered. Such misgivings are challenging to rectify. Developing and maintaining a long-term relationship is often needed to ensure confidence between accountants and entrepreneurs (Randall & Horsman, 1998).

The accounting profession and the working environment of accountants have changed and will continue changing rapidly in the future due to the developing information technologies affecting accounting duties. These developing technologies can boost, motivate, and enable the development of FA and MA (Taipaleenmäki & Ikäheimo, 2013). For instance, data analytics, big data, robotic process automation (RPA), artificial intelligence (AI) and blockchain technologies

enable dramatic changes in the accounting industry and the role of accountants. However, Moll & Yigitbasioglu (2019) argue that these changes do not imply that accountants would become redundant or that the profession is likely to fade away. Instead, accountants can still be needed: for example, to ensure the validity of the automatically processed data and observe the governance modes. Nevertheless, new technologies expand accountants' skill requirements to a completely new area of expertise. Thus, accountants and accounting firms are subject to a wide range of requirements, and the industry is undergoing major changes in their business environment. These changes can be seen as both a threat and an opportunity for the accounting profession and accounting firms to conduct business.

2.4 Life cycle perspective in management accounting

2.4.1 Enterprise life cycle theories

As discussed in the previous chapter, MA literature presents life cycle development as one of the main drivers for MA adoption in SMEs. This sub-chapter considers the phenomenon of MA life cycle in more detail. To understand the impact of life cycle on the use of MAI, it is necessary to briefly examine the general enterprise life cycle theories. The most common enterprise life cycle models are presented first, before proceeding to discuss the life cycle in the MA context.

Although enterprises vary widely in size and their capacity for growth, they have similar phases of development and experience common problems in their evolution. Numerous multistage models have been developed to define the phases of an enterprise evolution. In these models, the number of the enterprise life cycle phases range from three stages (e.g. Smith et al., 1985) to ten (Adizes, 1979). However, the consensus among these models is that enterprises have different organisational characteristics in different phases of development. The events which each enterprise undergoes and the organisational changes it faces follow approximately the same predictable pattern. Each enterprise typically starts, then grows facing various challenges and crises and finally matures and declines.

Churchill and Lewis (1983) have developed a life cycle model that is relevant to most enterprises, including SMEs. As shown in Figure 3, they delineated five stages of development: 1) existence, 2) survival, 3) success (disengagement or growth), 4) take-off and 5) resource maturity. Each stage is characterised by the size of the

organisation, its diversity and complexity as well as the management style, organisational structure, the scope of formal systems, strategic objectives and the ownership involvement. Enterprises do not always follow such linear models: they can grow, stagnate, and decline in a different order. The authors suggest that the growth of an organisation is a result of many discrete efforts.



Figure 3. Stages of SME growth (Churchill and Lewis, 1983)

Similarly, Miller and Friesen (1984) developed and longitudinally tested a five-step life cycle model for enterprise evolution. This model is widely applied in management accounting research (e.g. Moores & Yuen, 2001, Davila, 2005, Silvola, 2008). Miller and Friesen delineate the following steps: 1) birth, 2) growth, 3) maturity, 4) revival and 5) decline (Figure 4). The strategy, decision-making style and organization structure of the enterprise change and develop as an enterprise goes through these steps. Each step is followed by a critical period, where the functions of the organization must change. As well as Churchill and Lewis, Miller and Friesen have noted that an enterprise does not necessarily go straightforward through all stages in same order. Additionally, the time spent in each stage may vary considerably.

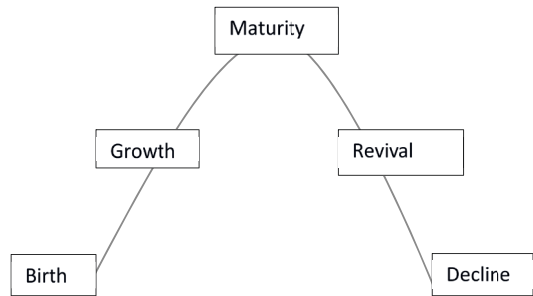


Figure 4. Enterprise life cycle model (Miller and Friesen, 1983)

Lester et al. (2003) examined the relationships between the organisational life cycle, competitive strategy, and performance. They used the theory of Miller and Friesen with a slightly different five-step-model: 1) existence, 2) survival, 3) success, 4) renewal and 5) decline. They argued that top managers could utilise the knowledge of the organisation's life cycle stage in their managerial work to promote the development of the company.

Jones (2011) describes SME development with four life cycle phases, each phase followed by a plateau and a potential or an actual crisis. The phases are: 1) start-up, 2) steadying the ship, 3) business consolidation and 4) business for the long haul. Jones believes that challenges and crises are unavoidable stages in the development of each enterprise. For a SME to develop, every phase needs to be carefully managed to ensure the enterprise is ready for its next growth period. These phases or crises pose both a challenge and an opportunity for the company. The phases and plateaus elaborated by Jones are depicted in Figure 5.

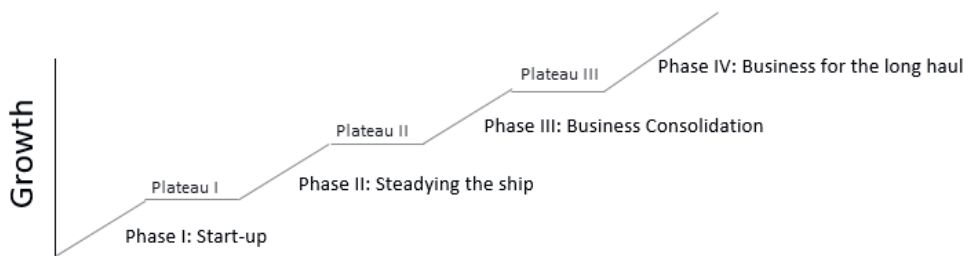


Figure 5. SME growth-time graph with phases and life cycle plateaus (Jones, 2011)

Organisational life cycle theories have also been questioned by many researchers. Organisations do not necessarily pass from one stage to the next, so a life cycle is not as distinctly deterministic as evolution. Instead, a life cycle stage of an organisation can be determined as a set of organisational activities and structures (Quinn & Cameron, 1983; Dodge et al., 1994). Understanding how these activities and structures change over time can be considered either as a type of life cycle evolution or an alternative to life cycle theories.

2.4.2 Applying life cycle perspective in management accounting

According to previous literature, the organisational life cycle can have an impact on the design of management accounting systems in an enterprise (Auzair & Langfield-Smith, 2005). Nevertheless, the life cycle perspective has been quite rarely a researched topic in the MA literature. However, during the first decades of the twenty-first century several studies examined management accounting systems used during different stages of enterprise development (Moore & Yuen, 2001; Auzair & Langfield-Smith, 2005; Davila & Foster, 2005 and 2007; Kallunki & Silvola, 2008; Silvola, 2008; Su et al., 2013) and the steps or categories in management accounting systems and management control systems adoption (Granlund & Taipaleenmäki 2005; Davila & Foster, 2007; Sandino, 2007; Laureano et al., 2016). Literature also indicates that the same signs that describe the life cycle stage of the company, such as the enterprise age and size, also are the drivers of the emergence of MCS (Davila, 2005). In their literature review, López and Hiebl (2015) found a significant correlation between the company size and the use of management accounting systems. The smallest businesses use these systems the least, and as small firms grow, their management accounting system use seems to increase accordingly. Similarly, Sjögrén et al. (2014) studied 216 SMEs in Finland and found a positive correlation between the size of the company and the importance of MA practices.

Auzair and Langfield-Smith (2005) studied the effect of life cycle stages on MCS in Australian service organisations, using a survey method. Their results suggest that the life cycle stage has a significant effect on the MCS use. Davila and Foster (2007) examined adoption of management control systems in young start-up companies and argued that there can be a two-way effect between the enterprise life cycle and management control system use: the enterprise growth and the adoption of management control systems may reinforce each other, especially during the crisis phases of the enterprise development. Similarly, Granlund and Taipaleenmäki (2005) noted that the general development of management control systems was not solely the result of the development in the life cycle. On the contrary, development of these systems can help companies rise to the next life cycle stage.

Moore and Yuen (2001) compared the use of management accounting systems in the clothing and footwear industry in Australia. They studied 49 firms at different stages of their life cycle, using both survey data and field interviews. Using the five-step life cycle model developed by Miller and Friesen, they found out that there are common patterns of management accounting system use during each life cycle stage. The use of MA systems can change the organisation and help it move to the next

life cycle stage; thus, there can be a longitudinal development path of management accounting systems.

Using a survey data from Australian manufacturing organisations, Su et al. (2013) examined how the use of management controls differs between organisations during different life cycle stages. Using Miller and Friesen's (1984) life cycle model, they also found some differences in the types of controls between organisations during different life cycle stages. According to their findings, the organisations undergoing the growth and revival stages operate amidst higher environmental uncertainty and, therefore, can use MCS more interactively than the organisations undergoing other stages. However, this contrast was generally rather small.

2.4.3 Management accounting during different stages of enterprise life cycle

During the first years of a new micro-enterprise, the owner-manager (the entrepreneur) is usually responsible for managing the company and can use mostly informal information and control for the management purposes. Management accounting information use is very limited (e.g. Perren et al., 1998, Armitage et al., 2016). Furthermore, the controls focusing on staff recruitment and operational activities are used to a greater extent, while the output controls related to the performance are not yet seen as important (Su et al., 2013).

As a small company grows, the complexity of its operations increases and the need to move information to the right decision-maker becomes more and more important. During this phase, the demand for more formal communication becomes vital, so first MCS are usually implemented (Nayak & Greenfield, 1995; Davila & Foster, 2007; Su et al., 2013). Moores and Yuen (2001) point out that especially when a young enterprise is transitioning from the starting step to the growth phase, MCS gains importance. In addition, growing firms are likely to be the most willing to develop their MCS.

Sandino (2007) studied management control and management accounting systems in the early-stage firms in the USA, using the data from 40 field interviews and 97 responses to a survey directed at early-stage store-based retailers. She found four categories of initial MCS:

1. Basic MCS for planning and establishing basic operations (budgets, pricing systems, inventory controls);

2. Cost MCS for achieving efficiency and cost minimisation (cost and quality controls);
3. MCS related to revenues, aiming to improve growth and learning (marketing databases, sales productivity systems);
4. MCS related to risk management, aiming to reduce risks and protect assets (controls for loss prevention, internal auditing processes, transaction tracking processes, checks and balances, credit controls, policy rules and procedures).

Furthermore, Sandino's study indicates that the strategy and structure of the enterprise affect the choice of management control systems and if the enterprise manages to choose the right systems suited to its strategy, its performance is likely to improve.

If a newly founded company utilises management accounting or management control systems, it tends to focus on financial planning rather than financial control. According to Davila and Forster (2007), financial planning tends to be the first and most widely adopted management control systems during the early-stage start-up companies. Similarly, Granlund and Taipaleenmäki (2005) report that during the first stages of a new economy firms, planning is prioritised over control.

Companies in the mature stage (i.e. what Lester et al. (2003) call the success stage) are typically established and have a formalised organisation and strictly controlled functions (Quinn & Cameron, 1983). As the enterprise grows and moves towards the mature phase, more resources can be allocated to financial controls instead of financial planning (Davila & Foster, 2005; Granlund & Taipaleenmäki, 2005). In mature firms, top managers typically concentrate on strategic management (planning), while operational management and control are taken care of by middle managers (Daft & Weick, 1984). In such situations, there is an emphasis on the need for control-related information. Reporting as a control tool becomes important, and reporting relationships become hierarchical (Lester et al., 2003).

As organisations switch from the mature to the revival stage, they typically move towards collaboration and teamwork to promote creativity and innovativeness (Miller & Friesen, 1984; Lester et al., 2003). In this need to return to a leaner time, information produced by management accounting and control systems can again become vital and as important as during the growth stage (Silvola, 2008). Moores and Yuen (2001) find that if the organisation ends up its declining stage, MA system formality further decreases. The time lag in receiving financial information expands in declining firms, and they can lack cash control and capital budgeting, which can

be important for the company's survival in a critical situation. Similarly, according to the findings of Su et al. (2013), all types of management control systems are used to a greater extent in mature and revival organisations than in those undergoing the birth or growth stages. Organisations in the mature stage may rely most on operational controls, while during the revival stage, all types of control are considered equally important.

2.4.4 Development path of management accounting

Granlund and Taipaleenmäki (2005) studied MA systems in new economy firms (NEFs), where NEFs are businesses aiming to grow fast and operate in the information and communication technology businesses or the biotech industry. These firms typically pursue rapid overall corporate development in an unstable operating environment, which emphasises the rapidly changing needs related to management control systems. According to their study, the progressiveness of the organisation and the resources for financial controlling tend to increase as companies proceed along the life cycle continuums. However, even in more mature and larger NEFs, resources for financial control are exiguous. Moreover, Granlund and Taipaleenmäki (2005) present an evolutionary development trend of MA systems. According to their findings, the typical MA development path in a new economy firm is the following:

0. Non-existent MA;
1. Very limited budgeting and reporting;
2. Basics of budgeting and cost accounting;
3. Product and customer profitability analyses;
4. Well-developed cost accounting to support the analyses;
5. Established control tasks and advanced management accounting techniques.

This presentation partially corresponds to the findings of Davila and Forster (2007), suggesting that the complexity of MA affects its implementation. Simple MA methods, such as operating budgets and financial performance comparison against the targets, are typically adopted earlier in the company development, whereas more complicated MA systems, such as product or customer profitability analyses and customer acquisition cost calculations, are adopted later.

In their study, Granlund and Taipaleenmäki also note that there tends to be future-based orientation in the financial control functions of new companies, especially during their growth phase. However, along the development path, the future orientation is not seen clearly as the focus seems to be mainly on the control functions.

Contrary to similar studies, Granlund and Taipaleenmäki did not specify MA systems related to solvency in their MA development path. According to the studies conducted by Moores and Yuen (2001) and Davila and Forster (2007), small enterprises rely heavily on cash control and cash budgeting. Cash estimates or cash budgeting may have been included in steps 1 or 2 of the presented development path, but it remains unclear in the study.

Laureano et al. (2016) studied 58 industrial SMEs in Portugal and, based on this data, developed a management accounting maturity stage model. However, as this model aims solely to classify firms based on their cost accounting progressiveness, it may be called a cost accounting maturity model. In this model, companies in maturity stage 1 do not have proper methods to allocate their indirect costs, while in stage 4, firms evaluate and allocate their costs using multiple advanced costing methods. The company size seemed to correspond well with its development stage: the smallest surveyed companies were associated with maturity stage 1, and the largest ones were often associated with stage 4.

2.4.5 Summary: management accounting life cycle in SMEs

Literature suggests that during different life cycle stages, enterprises use different management control and accounting systems. Furthermore, the utilisation of management accounting information is likely to evolve in the course of firms' life cycle. The summary of this evolution is presented in Figure 6 below. In newly founded enterprises, MA system use is typically very limited and unstructured. The need for MAI increases significantly as the firm moves from the birth to the growth level and formalises as the firm reaches its maturity. In the early stages of the company's life cycle, financial planning is more important than control, but when the company approaches the maturity stage, the significance of financial control increases. At the mature stage, MA systems can become too rigid and prevent the enterprise from adapting to the fluid environment. To revive, the company should abandon formal MA systems to address new challenges. Without successfully

managing the revival stage, the rigidity of MA systems can contribute to the decline of the business.

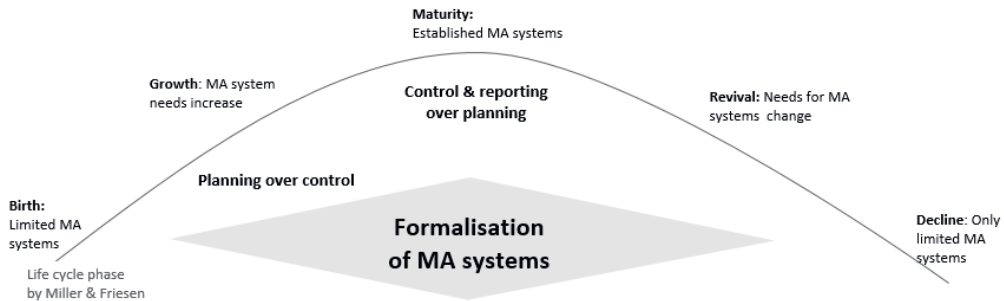


Figure 6. Summary of management accounting systems of firms during different life cycle stages

In addition to the assumed MA development shown in Figure 6, it is possible to consider in this context how MA can develop in new-economy firms, based on the path developed by Granlund and Taipaleenmäki (2005). They present MA system development starting from non-existence, continuing through basic budgeting and cost accounting to advanced control and techniques. The development of MA systems is synchronised with the development of the enterprise from its birth to maturity, as shown above. However, their studies concentrated on young new-economy firms, so this evolution path does not extend to the revival or decline stages.

2.5 Service quality gap in management accounting services

2.5.1 Quality of accounting services

As described in chapter 2.2.4, in SMEs, accounting services are typically outsourced to external accountants or accounting offices, but the relationship between service-providing accountants and the service-utilising SME owner-managers can be problematic. MAI use is typically scarce in SMEs, and many manager-owners are not particularly satisfied with the services of their accountants. At the same time, accountants are eager to offer more and better services to their customers. This observation indicates that accounting as a service function has not been successful

and raises the question about a mismatch in accounting service provision. When the produced service does not fulfil the customer's expectations, there appears a gap between service needs and service production. To explore the peculiarities of the relationship between SME managers and their accountants, service quality theories are presented below and studied in the accounting service context.

As measuring quality in service trade is overall challenging, one of the most researched areas of service since the 1980s focuses particularly on the marketing service context. Services in general and in accounting signify performances rather than objects, and the quality of services occurs during their performance process. Furthermore, services may differ each time they are performed due to the differences among the individuals providing services and the customers receiving services. Even when the person providing and the customer receiving a service remain the same, the quality may vary from day to day. Thus, the quality of a service is far more difficult to control and measure than the quality of a tangible product. However, high service quality is important to maintain satisfactory customer relationships and, therefore, have an impact on the profitability of service-providing companies (Thompson et al., 1985; Ittner & Larcker, 1998). The measure of service quality is a comparison between customers' expectations and the ultimate delivery of the service supplier (Zeithaml et al., 1988).

2.5.2 Service quality dimensions

First theories about the service quality dimension were developed in Scandinavia. Lehtinen and Lehtinen (1982) defined service quality as a combination of three qualities: physical, interactive, and corporate. In their model, physical quality concerns the concrete tangible aspect of a service; interactive quality covers the interaction and co-operation between the service provider and the customer receiving a service; and corporate quality refers to the image potential customers have about their service provider.

Two years after the presented by Lehtinen and Lehtinen, Grönroos (1984) developed and tested a theory and model for measuring service quality. He separated two aspects of service quality: the technical dimension (the nature of the service provided) and the functional dimension (how the service is provided, including the interaction between the service receiver and the service provider). Grönroos argued that when it is difficult for customers to evaluate the technical quality of a service, they tend to evaluate mainly the functionality of the service. Sometimes, customers

may ignore temporary problems with the technical quality if they are satisfied with the functional quality. Moreover, similar to Lehtinen and Lehtinen (1982), the theory of Grönroos (1984) considers the service provider's image as the third dimension of service quality. Typically, service providers and customers interact directly during service provision and the image of the service providing company works as a filter or mediator of the technical and functional qualities of the service (Figure 7). The individuals involved in this provision affect the perceptions of the service quality. Later, Kang and James (2004) found that the functional quality of services influences the image customers have about service-providing organisations more than the technical quality. Therefore, they suggest that the interaction between customers and representatives of service-providing organisations have a remarkable influence on the customers' image of service providers.

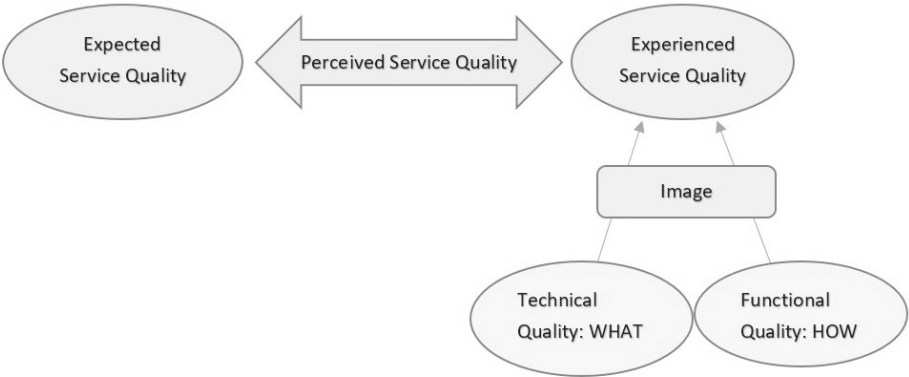


Figure 7. Service quality model, adapted from Grönroos (1984)

Lehtinen and Lehtinen (1991) also defined a two-dimensional approach, considering service quality from customers' point of view. In this model, **process quality** is customers' evaluation of the quality of the service production process, and **output quality** is customers' evaluation of the resultant quality of service production. This two-dimensional classification can be related to Grönroos's model featuring technical and functional dimensions.

2.5.3 Service quality gap model

Soon after the studies by Lehtinen and Lehtinen (1982) and Grönroos (1984), Parasuraman et al. (1985) published their research in the USA, presenting a service quality gap model. This model defines service quality as a distinction between customer expectations and perceptions. According to this model, there are four divergent gaps reasoning why customer's perception of service quality may differ from what service provider expects to offer:

1. Customer's expectations differ from the perceptions that management of service providing company has about consumer expectations.
2. Service quality specifications differ from the perceptions that management of service providing company have about customer expectations.
3. Service actually delivered differs from service quality specifications.
4. Service delivery differs from what is communicated about the service to customer.

Based on this theory, the role of the service-providing company is significant for the success of the service, as the above gaps, or reasons, for unsatisfying service quality relate solely to the management and organisation of the service provider. However, in addition to these four reasons, or gaps, this model also has the fifth gap, namely the difference between customers' expectations and perceptions of the provided service. This gap depends on the first four gaps and is the most significant one in terms of customers' service experience. The service customers expect to get is influenced by their spoken communication with the service provider, personal needs, and past experiences. Customers' service perception consists of the service delivery process as well as the external communication between customers and service providers. Figure 8 illustrates the service quality model of Parasuraman et al. (1985) and its dimensions.

CONSUMER
= Service user

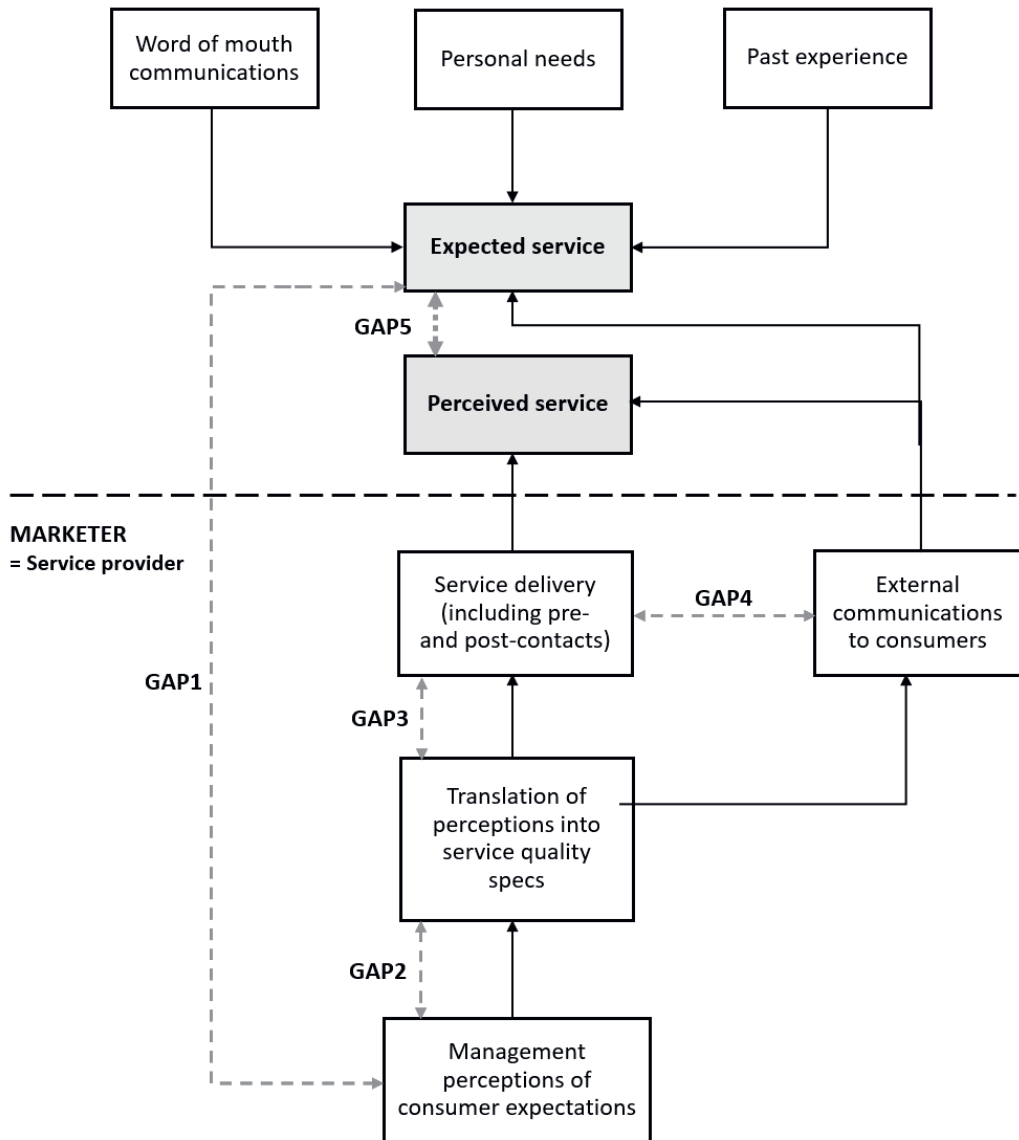


Figure 8. Conceptual model of service quality, adapted from Parasuraman et al. (1985)

In their extended study (1988), Zeithaml, Berry and Parasuraman investigated the factors affecting the magnitude and direction of these service quality gaps. They used a SERVQUAL method to measure service quality and noted that most factors were associated with either communication or control processes. Gap 1, the difference between customers' expectations and how managers see their expectations, is a function of marketing research orientation, upward communication, and the number of management layers. In gap 2, service quality specifications, the main factors affecting the size of the gap are the management's commitment to service quality, goal setting for service quality, standardisation of tasks and the management's perception of the feasibility of customers' expectations. Gap 3, service performance, is related to employees and their ability or willingness to perform services for customers. This gap is affected by several factors, such as the extent of the teamwork, employee–job fit, appropriateness of the technology used by employees, control systems, the extent of control perceived by employees and the extent of role conflicts and role ambiguity. Finally, in gap 4, differences in communication, the extent of the problem is related either to communication problems between different departments of service-providing organisations or possible overpromising to customers.

This traditional service quality model (Parasuraman et al., 1985) and the extended model (Zeithaml et al., 1988) have been applied widely and studied in different areas of business over the past few decades. Candino & Morris (2000) enlarged the classification to 14 service quality gaps and combined this model with the strategy process, highlighting the effect of service quality gaps on the strategy creation and implementation. Urban (2009) investigated internal service quality gaps in the service industry in Poland, using both survey and case study methods. He pointed out that service specification formulation (gap 2) was the main problem causing quality loss and argued that external communication (gap 4) was also an important factor affecting service quality.

2.5.4 Applying service quality models to accounting services

As mentioned before, in SMEs, accounting services are usually the most typical service acquired from external service providers. However, research about the quality of these services is quite limited. Accounting services also diverge from many other services (IT, marketing, etc.) acquired by enterprises. Regulation, standards, special terminology, and the overall technical nature of accounting make this field of services unique (Fleischman et al., 2017).

Aldhizer et al. (2002), Walker et al. (2012) and Fleischman et al. (2017) studied MA as an internal service in various big organisations in the USA, using the service quality gap model. While Aldhizer et al. (2002) used only part of the SERVQUAL method of Parasuraman et al. (1985) to measure MA service quality from the service user's perspective, Walker et al. (2012) investigated the gaps of MA services both from the user's and the provider's viewpoints. Walker et al. argue that the gap between service providers and customers is the biggest in gap 4, suggesting that communication tended to be the weakest aspect of MA service quality and improvements in communication skills of MA professionals could be improved.

Fleischman et al. (2017) used the service quality dimensions of Grönroos (1984) to study the quality of internal MA services. According to their study, the three-dimensional model (functional, technical and image quality) fits accounting services well. Furthermore, MA services users considered technical quality more important than functional quality. This finding differs from the previous theory about services in general, as Grönroos (1984) suggested that if customers did not have sufficient knowledge to evaluate the technical quality of the provided service, they tend to evaluate the functionality of the provided service. Furthermore, Fleischman et al. (2017) suggest that although the perceived image quality affects the other two dimensions, it is the most difficult dimension to measure in practice. Walker et al. (2018) tested Grönroos's model (1984) in their survey of MA service users and pointed out that the three dimensions (functional, technical and image quality) could explain the external accounting service quality, as perceived by customers. However, similar to the findings of Fleischman et al. (2017), technical quality is emphasised when explaining the perceived MA service quality. These results indicate that the functionality of services is not as important as their technical quality, which is surprising, considering the information technology development and automatisation of routine accounting.

Aldhizer, Fleischman and Walker studied MA services as an internal function in relatively big organisations. In the SME context, accounting services are mainly purchased from external accountants rather than provided internally. Furthermore, in SMEs, MA services cannot be examined separately from FA services, as all accounting services in small enterprises are typically purchased from the same service provider. Based on the few existing studies on the quality of external accounting services of SMEs, there is a vague understanding of the quality of MAI service delivery and perceptions. The service providers, accountants and accounting offices are mostly not sufficiently aware of their customers' quality perceptions and, therefore, unable to improve their services (Waldmann & Raghavan, 2002; Aga &

Safakli, 2007). In general, it can be assumed that external MAI service provision can have the same quality dimensions as internal service provision. Furthermore, the reputation and image of service providers seem to play an important role in rationalising how the overall financial service quality is perceived. Figure 9 summarises the expected MAI service quality dimensions and factors.

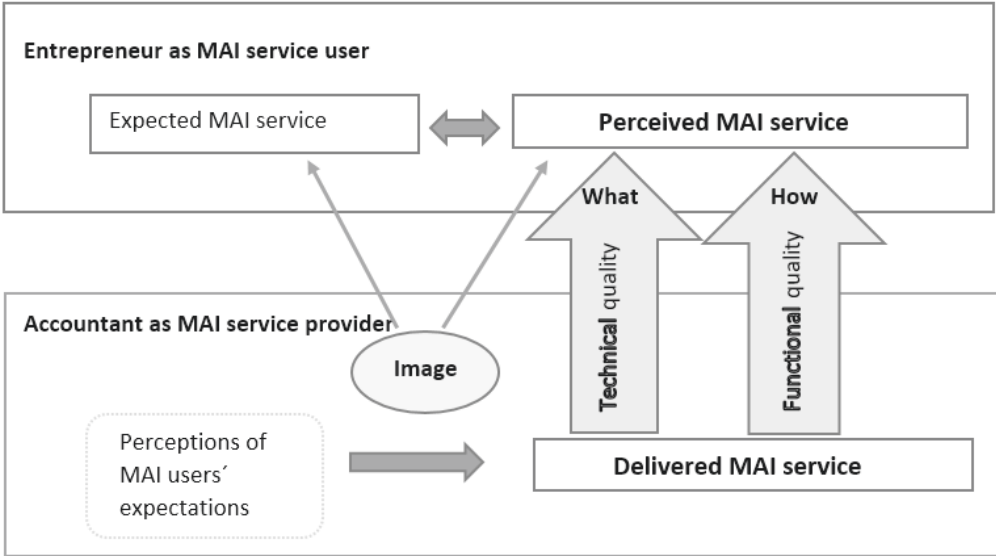


Figure 9. Summary of management accounting information service quality dimensions

The perceptions of MAI users' expectations are mostly uncharted, which is illustrated in Figure 9 with a yellow dashed line. There is a gap between delivered and perceived services, but the perceived service is affected by the technical quality (the content of the service) and the functional quality (the way the service is delivered and the interactions between service users and providers). In addition, the image of the service provider has a remarkable effect on both expected and perceived services.

2.6 Summary of management accounting information in SMEs

Based on the discussed literature, management accounting information is not used widely in SMEs, although there is much evidence suggesting that MAI could bring notable benefits to small enterprises. In addition, management accounting system used

in SMEs can be underdeveloped or unsuited for the needs of small enterprise managers. Literature gives several rational reasons for scarce use of MA, such as resource constraints, vague efficiency of the available MAI and entrepreneurs' personal traits. However, little is known about the means to ameliorate the situation. There is no easy way to offer SMEs more resources to develop MA systems or train entrepreneurs in financial management. Attitudes are, perhaps, even more complicated to alter. Nevertheless, there should be possibilities to increase entrepreneurs' understanding of the advantages of MAI utilisation. If small-business entrepreneurs find MAI useless or not efficient enough to justify the resources required to produce that information, it can be because the quality, or type, of information is erroneous or the service provided does not meet the need. Thus, the content of MAI provided to entrepreneurs should be possible to improve. Moreover, a deeper understanding of the use and demands for better usability of MAI in the small business context can help accountants to fulfil entrepreneurs' needs.

Previous studies offer a general view on the most typical MA systems or MA practices used in SMEs. However, as part of the research need underlying this study, it is unclear what types of information produced as the result of these practices are used in small enterprises. For instance, enforcing product-cost accounting does not guarantee that the information this procedure returns is utilised in the daily management of the enterprise. Only the pieces of MA information that entrepreneurs or decision-makers find useful and take advantage of are serviceable. Therefore, to expand the knowledge on the needs and wishes of SME decision-makers, it is important to study the mindset of entrepreneurs as MAI users or potential users.

Literature outlines evolutionary development of management accounting- or management control systems linking it to the life cycle development of the company. Although this development can seem rational, it is debatable whether this common evolution path is consistent in all enterprises, including the smallest enterprises, whether MAI use can at all evolve, and whether enterprises apply appropriate financial planning and control systems based on their resource capacity, changing these systems when needed. It is also important to analyse whether a valid evolutionary MA development path exists and whether this development can be expedited to improve enterprises' profitability and growth. Secondly, there seem to exist typical drivers for MA development, such as ownership structure and financial difficulties, and these factors may be related to enterprises' life cycle development, but in former studies, these two viewpoints on the potential explanatory factors are not discussed together.

As MAI in SMEs is mainly produced by external accountants, their role and relationship with customers have a significant effect on MAI utilisation. Based on several previous studies, the relationship between small-business entrepreneurs and their accounting service providers tends to be inconsistent. Accountants are eager to offer their SME customers additional MAI, but they can be unaware of what information their customers wish for. At the same time, entrepreneurs may not understand the information their accountants provide and can often feel that accountants do not understand their business deep enough to help them in their managerial decisions. There definitely seems to be a large gap, or mismatch, in this service–provider relationship, and this gap calls for a deeper understanding. Notably, most previous studies mainly examined MA and MAI use from the objective viewpoint outside the enterprise. Thus, very little is known about the thoughts, needs and attitudes entrepreneurs or managers themselves have regarding MAI utilisation. Figure 10 represents the tentative framework of this dissertation.

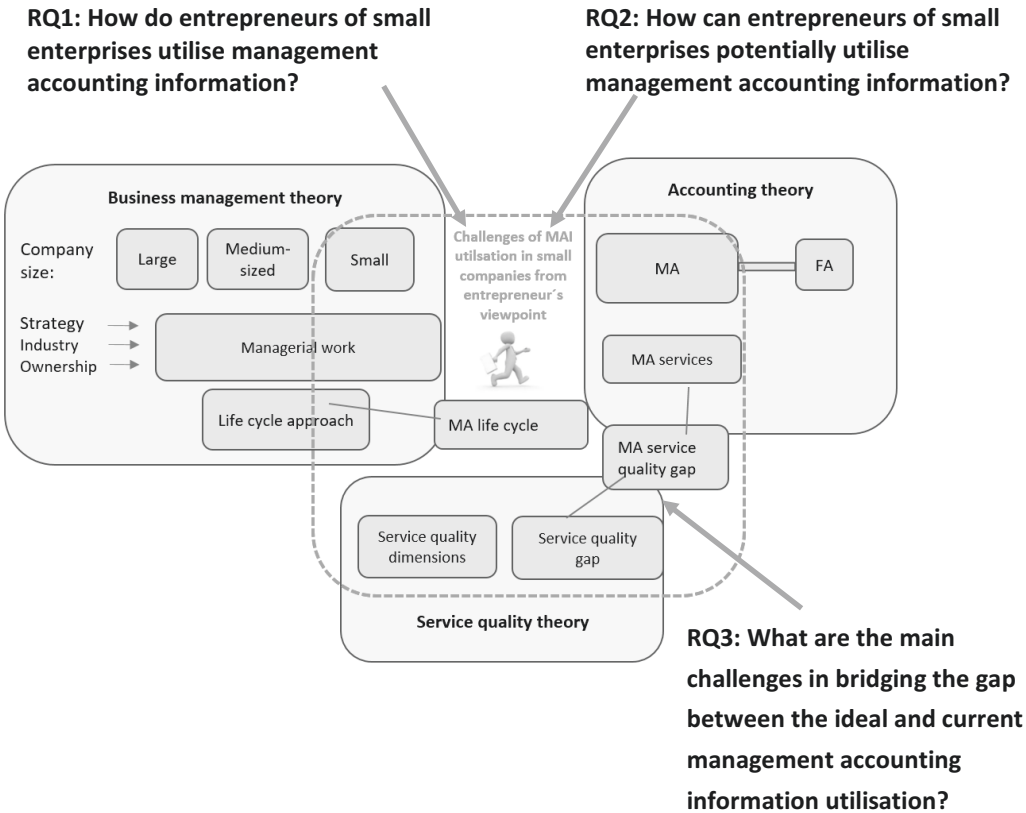


Figure 10. Framework of the research

The study is related to the managerial work of small-enterprise entrepreneurs. Management accounting (MA) refers to a tool of managerial work, and the life cycle approach and service quality theories are discussed as potential explanations for the use or scarce use of MAI. The study focuses on how management accounting information as a service is exploited in small companies and what the challenges of this exploitation are. These themes are examined from the viewpoint of small-business entrepreneurs.

3 RESEARCH PROCESS AND METHODS

This chapter presents the research strategy and process of this study. It also contains the context and process of this dissertation as well as the empirical data and methods employed herein. The chapter begins with the discussion about the research methodology and methodological assumptions underlying this study, followed by the explanation of the research methods employed. As the empirical (quantitative and qualitative) data of this dissertation was collected during several phases, these phases, their connection to the research questions and the content of data are also reported.

3.1 Methodological assumptions

One of the first and most important questions for every academic researcher is to consider the paradigm, or the worldview, of the research project. A paradigm describes the researcher's views on the reality and nature of knowledge (Boeije, 2010, p. 6). These perceptions influence the research design as the researcher formulates the questions of the study and chooses research methods based on their viewpoint on the nature of reality and truth (Morgan, 2007). The question of paradigms implies philosophical concepts of ontology and epistemology. **This dissertation follows subjective, constructive ontology and the interpretative epistemological approach.** These choices and the underlying assumptions are presented below.

Ontology is related to the basic question of existence and is compartmentalised in philosophy to choices between objectivism and subjectivism. Objectivism 'asserts that social phenomena and their meanings have an existence that is independent of social actors' (Bell et al., 2019, p. 26). On the other hand, in subjectivism, phenomena are seen as dependent on the actors involved in them (Cunliffe, 2011). Subjectivism underlines personal experiences and interpretations about reality that affect the individual's construction of the world. The term constructionism can be used instead of subjectivism to emphasise the social nature of reality (Eriksson & Kovalainen, 2008, p. 14; Bell et al., 2019 p. 27). MA research as a social science research stream stems from both subjectivist and objectivist research concepts. This research follows

the subjectivist, constructive approach, recognising the impact of personal experiences in interpreting the phenomenon under study.

Epistemological assumptions are related to the nature of knowledge and how it can be produced and argued for. There are three main philosophical positions underlying epistemological choices: positivism, subjectivism, and substantialism (Eriksson & Kovalainen, 2008, p. 15). Positivism is the most traditional and widely used philosophy of science, in which the researcher seeks to objectively establish measurable facts, based on which it is possible to form universal causal laws (Robson, 2002, p. 20; Myers, 2009, p. 37). Subjectivism sees reality as socially constructed, i.e. that it can only be obtained through social actors, whereas substantialism assumes that people interpret the material world differently at different times and in different contexts. Positivism is associated with the epistemological direction called empiricism, or logical empiricism; subjectivism relates to the epistemological position of interpretivism, or hermeneutics; and substantialism is linked with the epistemological view called critical realism (Eriksson & Kovalainen, 2008, p. 15). The chosen ontological perspectives guide epistemological choices, which then direct the research strategy and methods. While this study follows subjective, constructive ontology, the interpretative epistemological approach is a natural assumption for this research, aiming to understand the use and needs of MA among small-business entrepreneurs. This study relies heavily on the interpretation of individual experiences and attitudes of the informants, and these interpretations are also dependent on the experiences of the researcher. Furthermore, the meanings of the studied phenomenon are intertwined and emerge as the qualities that individual entrepreneurs, their actions and cultural events have.

The methodology can be defined in different ways. Raunio (1999, p. 24-25) states that in a broader sense, the methodology addresses the starting point of the knowledge of reality, the basic scientific view and the worldview. One of the most common ways of classifying research methods is to distinguish between quantitative and qualitative research. Various combinations can be used in addition to these two basic approaches. In this dissertation, broader quantitative data provides the direction for the research results, but a deeper understanding of the phenomenon is obtained using qualitative methods. The aim of this study is to chart and broaden the understanding of MAI use in the small business context. The primary target of the research is small-business entrepreneurs and their scheme of things in the MA context. To achieve the research objective, mixed methods involving both extensive quantitative research data and more in-depth qualitative research were employed.

The quantitative studies were utilised to provide wider charting and the overall picture of management accounting use in small enterprises. The state of and the challenges in the use of MA among entrepreneurs on a larger scale are presented based on these studies. Qualitative research, in turn, seeks to produce a deeper understanding and interpretation about a specific topic (Davies, 2007, p. 26, 191). Thus, in this dissertation, a deeper understanding of the thoughts and opinions entrepreneurs have as individuals is obtained through qualitative analyses. In particular, the qualitative research in this study provides a better understanding of the reasons existing at the individual level and leading to the results of the quantitative research at the general level.

Aiming to produce generic objective information about the studied phenomenon, quantitative research focuses on numeric data, which is typically analysed using statistical techniques (Myers, 2009; p. 8–9). The challenge in studying questions related to social sciences using quantitative research methods is that to be able to collect and analyse numeric research data, the research objects need to be operationalised and structured (Vilkka, 2007). Furthermore, it is difficult to study the social or cultural factors underlying the studied phenomena using quantitative methods, which can produce more superficial research results (Myers, 2009, p. 9). On the other hand, qualitative research of a relatively small sample size is typically a record of what research objects say about the studied phenomenon, and when studying social and cultural aspects of human behaviour, it is the qualitative research approach that is generally recommended, although it is often impossible to generalise the findings of such studies (Myers, 2009, p. 9).

In mixed methods research, both quantitative and qualitative approaches are used to illustrate a more complete understanding of the studied phenomenon (Mertens & Hesse-Biber, 2012). Mixed method research has become more common in business-related research over the past decades (Bryman, 2009; Bell et al., 2019, p. 569). This study follows the design that Creswell and Plano Clark (2018) define as a convergent mixed-method design, so the results of the quantitative and qualitative data analyses are used to complement and validate each other. In this research design, databases are combined and compared to achieve versatile research results. In this dissertation, both quantitative and qualitative parts of the study are important to reach the study objectives; yet, the emphasis is placed on qualitative explanatory research phases to gain an in-depth understanding of the entrepreneurs' perspective on the use of MAI. The purpose of the two quantitative datasets is to outline the general background of the researched phenomenon. Thus, actual statistical analyses are not performed. Three types of qualitative data (entrepreneur narratives, entrepreneurs' group

conversation and accountant interviews) are employed to warrant a profound examination and deep understanding of the phenomenon.

The narrative research method was employed in the first qualitative research phase because it enabled an in-depth analysis and novel insight to the mindset of entrepreneurs. Many entrepreneurs in SMEs do not feel comfortable with accounting subjects or concepts and may mostly see the accounting function as a statutory obligation (e.g. Nandan, 2010, Lucas et al., 2013). When studying financial aspects in the managerial work of small-business entrepreneurs, this weak interest of entrepreneurs in the research subject can pose a challenge; thus, in this dissertation, the narrative data collection method aimed to make the subject more approachable for the informants. To complement the derived narrative data and test interpretations, the study continued with a group conversation, involving the same entrepreneurs. This conversation began with the conclusions made from the narrative data. The entrepreneurs were asked to discuss these conclusions, particularly their views on the ideal MAI. Based on the analysis of this group discussion, it became apparent that accountants and accounting firms as MAI producers of small businesses could play a remarkable role in the experiences of entrepreneurs. To thoroughly understand this theme, the study expanded to include data from the viewpoint of accountants. Three accountants participated in semi-structured in-depth interviews covering MAI utilisation from their viewpoint. The aim of these interviews was to find out accountants' opinions and experiences and reveal the ideological differences entrepreneurs and their accountants have concerning the content and usage of MAI. These three different pieces of data (entrepreneur narratives, group conversation of entrepreneurs and accountant interviews) from two opposite viewpoints formed a triangulation of qualitative research material, through which the research topic was studied.

Generally, new knowledge resulting from a research process can be built on various reasoning logic. Deductive reasoning, which is typical in the quantitative research tradition, starts from the existing theory. Hypotheses are drawn from the theory and are tested during the research process, aiming to validate or reject them. On the other hand, inductive reasoning, which aims to generalise observations, suits this dissertation better. Inductive reasoning refers to a phenomenon being explored without presupposition, aiming to find empirical patterns that can be utilised to formulate the blanks of a new theory. Once the patterns are discerned, generalisations are made based on the observations. In qualitative research, inductive thinking is generally primary. However, in practice, this division into quantitative research with deductive thinking and qualitative research with inductive reasoning is

not so unambiguous (Boeije, 2010 p. 5). The third standpoint regarding reasoning is the logic of abduction. Abductive reasoning utilises the above-mentioned types of logic and is based on making and testing the hypotheses in interaction. This kind of reasoning is employed in this dissertation and is generally becoming more popular among business researchers. This theory emerges from data collection and analyses all available information. Theoretical explanations are searched using all existing empirical and theoretical knowledge from the studied phenomenon (Davies, 2007, p. 233, 235, 238; Eriksson & Kovalainen, 2008, p. 21–23; Bell et al., 2019, p. 22–24). Morgan (2014) advocates a pragmatic approach to research the methodology of social science. This pragmatic approach, often linked to mixed method research, relies on a version of abductive reasoning that moves back and forth between various inductive and deductive approaches to theory and data. Although the results of quantitative research aim to be generalised and the findings in qualitative research are seen more context-dependent, in the pragmatic approach, Morgan (2014) calls for transferability. It means that to find out whether the findings of a certain study are valid in other contexts, it is necessary to investigate the factors affecting the original study and consider whether the results are transferable to other settings. This is also the case in this dissertation.

The phases of this dissertation follow partly inductive and mostly abductive and pragmatic logic, connecting the existing literature and study objectives with data collection, analysis, and interpretation. This formulates a triangulation and a hermeneutic circle between reality, research data and theory, where the existing knowledge is formed and developed based on the acquisition and interpretation of the research data (Syrjälä et al., 1994, p. 125). This combination of several research methods produces a more comprehensive understanding of the phenomenon than what using only one research strategy could yield. Instead of effecting generalisability of the research results, this dissertation aims to ensure their transferability.

3.2 Phases of research process

The objective of the dissertation includes studying the use of MAI in small enterprises from the point of view of entrepreneurs. As described in chapter 2, relatively little research on the subject is found in previous literature. Thus, to study the subject comprehensively and thoroughly, the phenomenon was to be viewed from several perspectives. This dissertation utilises two types of survey data collected during collaboration projects with other researchers to provide a comprehensive

overall picture of MAI use in SME. These two explorative studies underpin the MA phenomenon and produce overall information that was then deepened by qualitative methods.

The extensive survey study employed in this dissertation examines the use and significance of MAI in small business management from a wider perspective. This survey data was collected during an ongoing research collaboration project between Aalto University and Tampere University. In total, 290 small-business entrepreneurs took part in this study and produced data about their MAI use and needs. This quantitative survey data is hereinafter referred to as the **utilisation study**. Furthermore, this dissertation also approaches the topic using another set of survey data, which identified the main obstacles and benefits of MA use in small businesses. This survey (Ylä-Kujala et al, 2022) examined the challenges and performance consequences of MA and MA system adoption and was based on a survey data involving 502 responses of small-enterprise managers in Finland. This survey data was collected in Lappeenranta-Lahti University of Technology and the open text responses were qualitatively analysed in collaboration with Tampere University by Teemu Laine and me. The study employed mixed methods by combining the qualitative content analysis of an open-ended question with quantitative analyses of the survey data. In this dissertation, this study is referred to as the **challenge study**. The inclusion of this research data supports the objectives of the dissertation by providing new understanding regarding the challenges and obstacles small businesses face when using MAI.

In addition to these two studies including extensive survey data, to gain a deeper understanding of how entrepreneurs see the topic, the study continued with more in-depth qualitative research phases. Studying entrepreneurs' opinions and needs with regard to MAI offered a deeper perspective on their personal thoughts. These opinions played the key role in this dissertation. The entrepreneurs were asked about their utilisation of financial information (FI), which is a more understandable term for respondents than MAI; however, all the FI that entrepreneurs use to support their managerial work is based on the definition of MAI made in the introduction of this dissertation. Thus, the questions entrepreneurs were asked considering their use of FI provided answers to the research questions related to entrepreneurs' use of MAI.

The qualitative research process of this dissertation consisted of an interplay between collecting and analysing qualitative data. The starting point for the data collection was a group of entrepreneurs, who are owner-managers of small Finnish companies undertaking the Master's programme in entrepreneurship at Tampere

University of Applied Sciences. First, these entrepreneurs gave wide answers about their MAI use in written form, and the collection of these **entrepreneur narratives** was carried out in December 2017.

Narratives, being stories that individuals formulate from their experiences (Moen, 2006), help us understand and make sense of the world surrounding us. For most people, the narrative form is a natural solution to ordering their experiences (Moen, 2006). The narrative analysis has been used in business and management research for several decades (e.g. Czarniawska, 1997, Boje, 2001), but it has rarely been used in management accounting (MA) research. In management research, the narrative analysis can clarify cultural aspects and contrasting attitudes or impressions persons from different organisations have (Bell et al., 2019, p. 490). In this study, narratives serve as a bridge between the MA phenomenon and the practical experiences and impressions of entrepreneurs. For the informants of this study, written answers or narratives were a way to make sense of and understand their own attitudes towards accounting information. Asking for narratives in addition to exact questions allowed the informants to provide concrete answers and use their own vocabulary to explain their thoughts. This approach allowed to improve the internal validity of the data (Elliott, 2005; Paavilainen-Mäntymäki & Aarikka-Stenroos, 2013).

The analysis of the entrepreneur narratives shaped the next stage of data collection: the opinions and needs of the informants were deeper examined by conducting a group conversation with the same group of entrepreneurs. At the beginning of this conversation, the analyses of the narrative data were briefly represented; thereafter, the entrepreneurs discussed the ideal MAI content and availability. These viewpoints were only partially included in their narrative answers; therefore, at this stage, it was appropriate to focus on the optimal MAI topic, especially with regards to the second research question. This **entrepreneur' group conversation** took place in March 2018.

Group interviews and discussions have gained popularity in qualitative research, especially when studying human behaviours, feelings, and attitudes (Rabiee, 2004). Bell et al. (2019, p. 463) talk about the focus-group method and define a focus-group interview as a situation in which an interview is not conducted with several informants simultaneously (primarily to save time); rather, the researcher is specifically interested in how the interviewees discuss a particular topic as a group. Moreover, in a group interview, the focus is on a specific topic that is rather strictly limited in advance. Likewise, in the group interview of this study, the focus was rather limited to the predetermined topic of the discussion. According to Frey and Fontana (1991), group interviews or discussions can complement other data

collection methodologies. In particular, as also in this study, a group conversation enables an indefinite triangulation: participants can express their thoughts freely, opinions can bounce back and forth and be modified by the group and the group forms a common opinion about the discussed questions (Frey & Fontana, 1991).

During the analysis of the group conversation data, it became clear that the role of FI service providers was significant and had a significant effect on the utilisation of MAI in small enterprises. Especially when discussing the ideal use and availability of FI, entrepreneurs expressed many expectations and wishes regarding the role of their financial service provider (accountant). Therefore, although the point of view of accountants has been discussed extensively in previous literature, it was useful to hear and compare the opinion of financial service providers on the perceptions of entrepreneurs. Thus, the third stage of the qualitative research was to supplement the data with the viewpoints of a few accountants. Three in-depth **accountant interviews** were conducted in October 2018.

An interview is a very common methodological tool in qualitative research, and it can be conducted using multiple structures and patterns (Bell et al., 2019, p. 434). Interviews can be highly structured events, following an exact plan and statements. On the other hand, interviews can be very flexible, loosely structured talks on broad themes. Semi-structured interviews are situated between these extremes, following a predetermined framework but allowing for changes in the questions, based on the intuition of the interviewer or interviewee (Alvesson, 2012). Interviews are always personal and subjective by nature, and in-depth interviews can be particularly useful for exploring the perspectives of a small number of selected respondents on an idea, programme, or situation (Boyce & Neale, 2006). In this study, the interviews of three accountants were conducted as semi-structured in-depth interviews.

The research design and data collection methods were formed during the qualitative research process. During the early stages of the qualitative part of the study, only the first stage was planned precisely. Thereafter, the study continued using the most appropriate methods, based on the obtained results. Figure 11 represents the whole research process. The findings of two wider datasets (the utilisation study with 290 responses and the challenge study with 502 response) are compared with those of the three qualitative study phases striving to find similarities and differences, conduct a versatile examination of the researched phenomena and produce reliable research results.

Explorative studies:

Utilisation study: Use and significance of MAI (survey, n = 290)
Challenge study: Challenges and performance consequences of MA (survey, n = 502)

Summary of MAI utilization &
Qualitative content analysis of the challenges

Qualitative in-depth research phases:

1. Entrepreneur narratives
MAI in managerial work: Individual perceptions of small business entrepreneurs

Analysis and interpretation of the narratives

2. Entrepreneurs' group conversation
Deepening the content and ensuring the interpretations of data 1

The summary and analysis of the shared ideas in group conversation. The role of the accountants emerges.

3. Accountant interviews
Viewpoint of accountants as MA service providers

Analysis and interpretation of the interviews

Figure 11. Research process

3.2.1 Explorative studies

To study the general MAI use in small businesses, a survey is an appropriate data collection method. In this dissertation, two types of survey data were utilised to investigate the MAI use and needs of entrepreneurs (the utilisation study) and the challenges small enterprises face in the MA system and service adoption (the challenge study). These parts of empirical data were collected in connection with other research projects, but the information they contain is relevant to this research. In this dissertation, these surveys are meant to background the researched phenomenon in more detail using qualitative methods, so the empirical data presents the overall situation, as revealed by the explorative studies. Consequently, the results of these two studies are presented as a series of answers; no actual statistical analyses were carried out.

Utilisation study:

Firstly, this dissertation represents results of a quantitative survey study including data about MAI use and importance of small businesses entrepreneurs. This survey data was collected as a part of larger research project examining whether financial knowledge of entrepreneurs increases the success of small businesses. This long-term project aims to develop ways to increase financial skills of small-business entrepreneurs and to find out whether increasing financial skills of entrepreneurs is beneficial for the performance of the business. This is a collaboration between Aalto University, IPAG (University of Lisbon, Portugal) and Tampere University, in which I participate as a researcher. In this research cooperation, I have been responsible for implementing the survey and interviews. In addition, my role included preparing training materials and arranging pilot trainings for entrepreneurs. This is also a larger research project, of which I had a change to formulate certain questions to requirements of this dissertation study. Thus, only the results suitable for needs of this study are presented in this dissertation report.

All entrepreneurs in the registers of Finnish business advise association were invited to participate in the research. Especially we encouraged the entrepreneurs to take part in the training that was provided after they had answered the survey. Responding was voluntary for entrepreneurs and thus we managed to collect a diverse data on insights of entrepreneurs operating in different parts of Finland. However, the data does not statistically represent the entire Finnish entrepreneur population. As a first phase of the training, the entrepreneurs were asked about their use of MAI and their views on the importance of this information. This research was first implemented as interviews, in which the questions were asked from the entrepreneurs on the phone and at the same time filled in the answers to the questionnaire. The responses of 59 entrepreneurs were collected by this method during December 2019 and January 2020. The study was then continued by sending a link to an electronic questionnaire to the rest of entrepreneurs enrolled, and these entrepreneurs were able to give their answers independently. Altogether 231 entrepreneurs answered to the online questionnaire, of which the last responses were received in April 2020. The complete questionnaire is shown in appendix 1. The interview questions and the electronic questionnaire had the same content and after compliance check, the responses have been analysed together as one survey data with total sample size of 290 entrepreneurs.

All respondents represented SMEs, and based on their personnel, 282 respondents were entrepreneurs of micro-enterprises with fewer than 10 employees.

Thus, micro-enterprises accounted for 95.5% of the data. In addition, seven respondents represented a small enterprise, and only one represented a medium-sized enterprise, which exceeded the definition of a small enterprise. The majority of the respondents were sole entrepreneurs: 198 entrepreneurs in the data represented a one-person company. The represented companies were mainly young: 103 (35.8%) of the respondents' enterprises were established during the past two years, and 236 enterprises (81.9%) were maximum 10 years old. The age and the number of personnel of the enterprises in this data are represented in Table 3. In summary, the utilisation study data represents the views of entrepreneurs in relatively young and very small companies.

Table 3. Enterprises in utilisation study data

Age of the enterprise			Number of personnel		
> 10 years	52	18.1%	> 10	8	2.8%
5–10 years	36	12.5%	4–9	21	7.2%
2–4 years	97	33.7%	2–3	63	21.7%
< 2 years	103	35.8%	1	198	68.3%
blank	2	0.1%			
total	290		total	290	

The following questions from the survey questionnaire are relevant to this study and will be analysed in this dissertation. Questions B10 and B11 addressed the use and significance of MA and FI methods; question B14 dealt with the FI needs of entrepreneurs; and question B15 discovered entrepreneurs' aspirations for the best provision of FI.

B10: Does your organisation use the following methods of financial management?

B11: I consider this method important for managing my company.

The survey included a list of six financial planning methods (numbers 1–6) and ten financial monitoring or controlling methods (numbers 7–16). The respondents were first asked to say whether they used those methods in their organisation and if they did, how often (B10). Then, they were asked to evaluate how important each method was for them with regards to managing their company (B11). The methods named were:

1. Planning and forecasting sales or sales budgets

2. Profit and loss budgets
3. Choosing/modifying pricing principles
4. Cash-flow analyses or cash-flow plans/cash budgets
5. Planning of financing
6. Investment calculations / capital budgeting
7. Monitoring the realisation of sales
8. Monitoring financial statements (income statement and balance sheet)
9. Comparing realised income statements to the budget or previous year
10. Monitoring accounts receivable
11. Monitoring stock value/inventory turnover
12. Monitoring costs (variable and fixed costs in general)
13. Monitoring the profitability of the goods/services sold
14. Monitoring customer profitability
15. Monitoring employment costs
16. Inspecting the accuracy of pricing

Most of the listed methods are typical methods of the MA function, but some of the financial monitoring methods (numbers 7, 8, 11 and 12) can be seen as part of financial accounting.

B14: What further financial information would you need to better support your management?

B15: In what form would you prefer to receive this financial information?

Question B14 sought to find out whether the respondents needed additional support in financial planning or monitoring and analysing of the financials and whether they needed anything beyond that. Finally, question B15 dealt with the use and form of FI, clarifying entrepreneurs' demands for personal consultancy as opposed to information systems acting as the FI provider.

Condensed analyses of questions B10 and B11 provide important basic information on the use of MAI in small enterprises and provide a background for the qualitative in-depth analyses. Questions B14 and B15 were included in the questionnaire to clarify the needs and wishes of entrepreneurs as MAI users. These aspects are further examined in the qualitative study phases of this dissertation.

Challenge study:

As part of a research collaboration project with Lappeenranta-Lahti University of Technology and Tampere University, we examined the challenges and performance consequences of MA and MA system adoption in small Finnish enterprises. The aim of this examination was to increase the understanding of the fundamental obstacles in the MA system or service adoption as well as the effects of MA adoption on the organisational performance. To achieve these objectives, we employed mixed methods, utilising both qualitative and quantitative analyses of extensive and diverse survey data that was collected earlier. My personal role in this study was primarily related to the qualitative content analysis of open answers, which I carried out in collaboration with another researcher. In addition, I was responsible for the literature section of the study in collaboration with another author, bringing my knowledge of previous literature and studies on the subject to assist this collaboration.

The survey study was conducted and analysed in Lappeenranta-Lahti University of Technology. The original data consisted of 1,507 organizations of different sizes and from different industries. The smallest (micro-) enterprises were originally excluded from the survey population. The data was collected in late 2014 by conducting structured telephone interviews with corporative executives, mainly senior managers, or entrepreneurs in their respective organisations. The initial contacted population was about 3,500, and the response rate of this survey was 43.1%. The questionnaire comprised 27 questions (mainly multiple-choice questions, complemented by a few open-ended questions). From the original survey data, two prior research papers have been published, investigating other research questions and various parts of the dataset (Ylä-Kujala et al., 2017, 2018). From the wide survey data collected, one open-ended question, Q26, addressing the obstacles in the acquisition and use of MA systems or services had not been analysed:

Q26: What are the greatest challenges and/or obstacles to the acquisition, building and maintaining of an effective management accounting system?

The answers small business executives gave to this question formed the basis of this collaboration study. The smallest (micro-) enterprises were excluded from the original survey, so for purpose of this research cooperation, the sample was further delimited to concentrate on small businesses employing 10–50 people, with a turnover of 2–9.9 million euros. This sub-sample of small businesses consisted of 502 organisations.

To analyse and interpret the answers to the open-ended question Q26 of the survey concerning the challenges in MA adoption, we read the answers carefully and categorised them using the qualitative content analysis and thematic analysis methods. To avoid misunderstandings or wrong interpretations, the analyse was conducted by myself and another researcher by reviewing all answers first separately and then in collaboration, classifying them under six categories. Next, we continued the study by examining the influence these challenges have on MA adoption and whether MA adoption had an impact on the organisational performance of small businesses.

3.2.2 Qualitative studies

To deepen the understanding of MA utilisation in the small business context, the dissertation next continues with a chapter on qualitative research. The qualitative study consists of three phases, which were carried out in the following order: collecting and analysing the entrepreneur narrative data, implementing entrepreneurs' group conversation, and conducting semi-structured accountant interviews.

Entrepreneur narratives:

To gain a deeper understanding of MAI use by entrepreneurs, I first collected data about small-business entrepreneurs' current MAI use and their thoughts and wishes for better MAI exploitation. This data was collected as free-style written answers. This narrative data formulated the starting point and basis for the qualitative studies. To minimise the impact of the researcher on collecting the data, I asked the entrepreneurs to write the answers in their own time and deliver them via a learning platform. The purpose of this procedure was to ensure the informants felt free to write their answers without any presuppositions or criticism. According to Elliott (2005), this kind of open, free answering can improve the objectivity of the collected data. For the informants, this assignment was a mandatory part of studies and was given to the entrepreneurs on 1 December 2017. To background the research and explain the questions, I prepared a video presentation that was available for the students until the deadline of the assignment on 31 December 2017. The video presentation intended to motivate the entrepreneurs to express themselves honestly and freely. It was emphasized to the respondents that the responses will be treated

anonymously and reported in such a way that individual responses cannot be linked to the respondent. In addition, it should be noted that the data was collected before the introduction of the current GDPR regulations.

In total, 18 entrepreneurs answered the first part of the qualitative study: two of them were partners in the same enterprise giving one mutual answer, and two more were partners in another enterprise answering separately. In addition, the data included one answer that was given as an employee of a medium-sized enterprise. As this study is concentrating on the entrepreneurs of small enterprises, that answer was omitted from the analyses. Thus, the total number of informants in this study was 17 entrepreneurs from 15 small Finnish enterprises. The informants of this study and their enterprises are represented in Table 4 below.

Table 4. Informants and their enterprises in narrative data

Informant number	Age of enterprise (years)	Experience as entrepreneur (years)
1	> 5	< 1
2	4	4
3	4	4
4	10	10
5	4	4
6	1.5	1.6
7	< 1	< 1
8	3	3
9	7	7
10	12	12
11	< 1	< 1
12	< 1	< 1
13	5	5
14	40	5– 10
15	3.5	3.5
16	7	7

Three of the enterprises represented by the informants were recently established; the others had operated between 1 and 40 years. As mentioned before, all of the entrepreneurs were undergoing the Master’s programme in entrepreneurship in Tampere University of Applied Sciences.

The informants were asked to write about the following subjects:

1. Describe shortly (just a few sentences) the business idea and the basis of success in your enterprise.
2. Where do you obtain financial information about your enterprise? What information do you obtain?
3. How is financial information used in your enterprise? Who is it used by? How? You may share examples of the situations when:
 - a) financial information was useful for managerial work
 - b) you did not receive the financial information you required or the received information was not useful.
4. What kind of financial information would you like to get for your managerial work? (Don't mind whether the information is expensive or not available, think about the ideal situation; think about this question in the contexts of both long-term and short-term management.)
 - a) what kind of financial information would you like to have for the strategic management?
 - b) what kind of financial information would you need for the daily operational management?
5. How important is financial information for the success of your enterprise? (Scale it from 1 = 'not important at all' to 4 = 'very important'.)
(You may give reasons for your answer if you like.)
6. Has the importance of financial information changed during the past five years? (You may give reasons for your answer if you like.)
7. Is there anything else you would like to say for the researchers of the subject?

The purpose of question 1 was to get to know the type of business the informant represents. The target of quantitative question 5 was to get a measurable clear picture of the importance of financial information in the managerial work of the informants.

There is no single right way to analyse this kind of narrative data: as the answers are spontaneous and of variable quality, the data can be analysed in multiply ways. The focus can be on the categorisation of the variables in the answers, the narrative itself or on generating new synthetic narration(s). The best analysis method depends on the target of the research and on the intended audience of the research (Elliott, 2005; Paavilainen-Mäntymäki & Aarikka-Steenroos, 2013). I carried out the analysis of entrepreneurs' narratives following Miles and Huberman's (1994) description of the data-driven inductive analysis process. First, I first wrote out the narrative data,

then reduced, classified, and encoded it, concentrating on the content relevant to the research questions. Second, I clustered the data into categories, focusing on similarities or differences and grouping similar contents under common classes. I also analysed the answers searching for identical answers, descriptions or terms, especially concerning the use of and the needs for FI. Third, I categorised the answers by the type of approach the informants had to FI. The material was also quantified in some respects by examining the number of times identical points appeared in the answers of the entrepreneurs. In this context, the quantification did not conflict with the processing of the material that was collected and analysed using qualitative methods; rather, it can add value to the interpretation of the data (Patton, 1990; Bell et al., 2019, p. 564). Finally, I made some abstraction based on the interpreted data, conceptualising the findings to form theoretical concepts. The analysis was based on interpretation and reasoning. During all stages of the analysis, the aim was to investigate the viewpoints of entrepreneurs, striving to understand what mattered to them.

Entrepreneurs' group conversation:

To interpret the narrative data and deepen the understanding of the needs of MAI, I invited the entrepreneurs to a group discussion, where they had a conversation about the ideal financial information content and availability. This discussion (the group conversation data) took place in March 2018. One of the original informants participating in the narrative data gathering was not present at the group conversation. In addition, there was one new member in the group who had not answered the original questions. Thus, a total of 17 informants participated in the conversation, which lasted 1.5 hours. At first, I shortly presented the participants with a summary and some primary results of their narrative answers. After that, two further questions were raised for discussion:

1. What would financial information be like at its best? How can it support the entrepreneur in the best possible way without taking too much time required for other managerial tasks?
2. How can this situation be reached?

I made an audio recording of the discussion to conduct a deeper analysis and interpretation afterwards. Following the recommendations of Bohnsack (2004), to minimise the influence of the researcher, I addressed the questions to the whole group rather than individuals to initiate a discussion without setting any framework

to the conversation. The second question was asked when the discussion of the first question had come to its natural end. As the informants were acquainted with each other and were used to group work and discussions, the situation was unrestrained and straightforward. All entrepreneurs participated in the discussion, although some were more active.

During the discussion, entrepreneurs effervescently described their wishes for FI. Although they had many similar thoughts, their differences as managers emerged during the conversation. Some of the entrepreneurs spoke about re-analysed FI as a trigger for their managerial decisions; others expressed their hope to have all possible information available in real time. Furthermore, the role of accountants emerged strongly during this conversation. Many entrepreneurs had high expectations of their accountants, and slight dissatisfaction with the current accountants was expressed in various comments. Analysing the data, I wrote down all opinions and comments expressed during the conversation and classified the contributions to discover different categories of attitudes and perceptions of the entrepreneurs. I also picked up the most relevant quotations from the discussion to be presented and further analysed in chapter 4 of this dissertation. Analysing the data, it was neither possible nor attempted to identify the speakers and link them with their previous narrative answers. Instead, the discussion analysis sought to highlight both different and common views of the entrepreneurs on the ideal MAI.

Accountant interviews:

During the analysis of narrative data, especially the group conversation data, it emerged that the role of accountants is often crucial for entrepreneurs, as it is suggested in literature. Thus, in addition to the point of views of the entrepreneurs, I found it important to include in the study the perspective of the accountants as MAI providers for small businesses. This perspective offers an understanding of the practices and limitations related to the use of FI in small enterprises. To this end, I invited three accountants from different accountancy firms to participate in semi-structured interviews. To obtain various views, I selected accountants from different sizes of accountancies. Furthermore, I aimed to contact accountants with different experience. Some of the invited accountants had an extensive work experience in the field; while others were quite new to the industry. The interviews were conducted by email and as personal interviews at the accounting firms' premises in October 2018.

It was also emphasized to the interviewees that the answers will be processed anonymously

All three accounting professionals came from accountancy firms that provide accounting services for small enterprises. The first informant had started her accounting firm a year ago and worked as a solo entrepreneur. Before that, she gained experience working as a financial officer in bigger companies. The second informant was a partner in a middle-sized accounting company. She had over 20 years of experience working as an accountant and entrepreneur in her accounting company, serving mainly small enterprises. The third informant was a leading specialist in one of the biggest accounting companies in Finland. She did not work as an accountant herself but was a superior, supporting several accountants serving small enterprises. The informants and the accounting companies are represented in Table 5 below.

Table 5. Informants and accountancies of accountant interviews

Informant	Position in company	Experience in accounting/as accountant	Age of the accountancy	Number of personnel in accountancy
A	Owner	1 year as accountant + long experience as CFO	1–2 years	1
B	Partner	> 20 years as accountant and manager in accountancy	> 20 years	20–30
C	Leading specialist /superior of accountants	3 years as superior / 15 years in accounting field	> 20 years	> 500

The following questions were asked during all interviews:

1. What kind of finance-related support or help do you offer to your small-enterprise customers? (What kind of support related to FI in general, without limiting it to FA or MA information.)
2. Who usually shows initiative in the situations requiring support or help: you or your customer?
3. What financial information is provided to customers on a regular basis and on request?
4. What financial information do customers hope for (if any)?

5. If the entrepreneurs (customers) don't find the provided financial information useful, what do you think is the reason?
6. What prevents financial information from being utilised or provided?
7. What service/information is provided to entrepreneurs (customers) to support their managerial work?
8. Do entrepreneurs (customers) speak about managerial issues with accountants?

Unlike the two previous steps of the research data collection, the impact of the researcher in these interviews could not be avoided. The reciprocity of the interview event, i.e. the interplay between the interviewer and interviewee, is a fundamental feature of any interview situation (Galletta, 2013). As the interviewer, the researcher aims to ensure uniformity in interviews, but the personal traits of interviewees and the interplay between the interviewees and interviewers is unique in each interview situation. However, in this study, I considered the questions in each interview, so the content of all three interviews covered the same themes. All three accountants talked openly about their impressions related to the raised questions. Each interview lasted from one to two hours. I also made audio recordings of these interviews for a deeper analysis afterwards.

To analyse the accountant interview data, I first wrote down the detailed answers of each accounting specialist, interpreted the answers searching for frequent expressions or opinions and, finally, wrote a summary of the answers to each question, including both common opinions shared by all accountants and specific individual comments. The results were then further compared with the results of data 1 and 2 to search for the common traits and discrepancies in the perceptions and experiences of entrepreneurs and accountants.

Table 6 summarises the data collected during the different phases of qualitative research of this dissertation and briefly outlines the main content and analysis methods used in each of the three study phases.

Table 6. Summary of in-depth study phases

In-depth study data:	Content:	Analysis methods:
1. Entrepreneur narratives (17 entrepreneurs)	Written answers about FI in managerial work; individual perceptions of small business entrepreneurs.	data-driven inductive analysis
2. Entrepreneurs' group conversation (17 entrepreneurs)	FI in ideal situation and how this can be reached; group conversation of entrepreneurs	thematic analysis
3. Accountant interviews (3 accounting specialists)	Current FI utilization of small business entrepreneurs; viewpoint of accountants as MA service providers	content analysis & thematic analysis

A more detailed description of the analysis methods used for the data is given in chapter 4 below, which presents the findings.

4 DATA ANALYSES AND FINDINGS

To study MAI use and needs among small-business entrepreneurs, this dissertation takes advantage of several types of data, and each research question is approached through both quantitative and qualitative methods. This chapter presents the analyses of the datasets. The results of the two explorative studies (the utilisation study and the challenge study) indicate the general extent, importance and challenges of MAI usability among a wide range of small-business entrepreneurs. However, as the primary goal of this dissertation is to understand small-business entrepreneurs' point of view on MAI and its efficiency in managerial work, quantitative surveys do not generally provide sufficiently extensive data to answer the research questions. Thus, this dissertation also includes several qualitative research components and in-depth interpretation of the qualitative data.

The chapter begins by first presenting the main results of the quantitative data analyses of explorative studies. The two surveys carried out involving wide samples of enterprises provides an overview of the researched phenomenon: How do small-business entrepreneurs generally perceive the use and importance of MAI in their enterprises? What are the main obstacles hindering the optimal use of this information? The utilisation study includes information on the importance, current utilisation and needs of MAI in small businesses, whereas the challenge study concentrates on bringing more knowledge on the obstacles and challenges small enterprises face in MA adoption. After that, the chapter continues to further analyse the qualitative datasets. The richest qualitative data (the entrepreneur narratives) consists of personal stories or answers of entrepreneurs as financial information users. These answers are categorised, summarised and interpreted to form the overall view of entrepreneurs' insight about MAI in their managerial work. To complement and deepen the information of these narratives, same entrepreneurs also participated to a group conversation. The content of the group conversation forms the second part of the qualitative dataset in this study. Finally, to validate the qualitative data collected from entrepreneurs, the study was further supplemented by three semi-structured interviews of accountants serving SMEs. These interviews were conducted to acknowledge the perspective of accountants on the FI services offered

to SME entrepreneurs. Table 7 illustrates the overall research design of this dissertation, linking the data collection with the research questions.

Table 7. Research design

Research Questions:	Explorative studies:		In-depth studies:		
	Utilisation study	Challenge study	Entrepreneur narratives	Entrepreneurs' group conversation	Accountant interviews
RQ1: How do entrepreneurs of small enterprises utilise management accounting information?	Survey questions B10 & B11		Narrative questions 2, 3, 5, 6		Interview questions 1-8
RQ2: How can entrepreneurs of small enterprises potentially utilise management accounting information?	Survey questions B14 & B15		Narrative question 4	Conversation question 1	
RQ3: What are the main challenges in bridging the gap between ideal and current management accounting information utilisation?		Qualitative content analysis of survey Q26		Conversation question 2	Interview questions 5-6

The richest qualitative data (entrepreneur narratives) affords answers to RQ1 by introducing the mindset of entrepreneurs concerning MAI in their managerial work. These narratives also include partial answers to RQ2, but the demand for MAI is more precisely covered in entrepreneurs' group conversation. RQ3, the main challenges in bridging the gap that prevents ideal utilisation of MAI, expands the challenge study, and was researched based on the group conversation. Finally, accountant interviews diversify this theme by providing a different point of view on the raised question.

4.1 Explorative studies

In this subchapter, the results of both explorative studies (the utilisation and challenge studies) are presented, providing a background to the phenomenon of MAI and serving as the basis for the analysis of the qualitative contribution. At a later stage of the dissertation, these results will be compared with the results of the qualitative research phases. The qualitative data analysis aims to gain a deeper understanding of the results of these two studies.

4.1.1 Utilisation study

As discussed in chapter 3.2.1, the use of MAI by entrepreneurs and their views on its efficiency were initially studied as part of a larger research project. In this context, the results of this utilisation study are presented only insofar as they are related to the objectives of this research and are agreed by all parties in the cooperation project. The questions concerning the current use of financial planning and financial control methods and entrepreneurs' view on the importance of these methods for management are analysed to formulate the overall picture of MAI utilisation in the small business context. These responses provide a detailed description of the current state of MAI use and its significance in small enterprises, addressing RQ1.

First, the surveyed entrepreneurs were asked to share what FA or MA methods they used in their management and how often. The most typical methods were named and classified under two categories: financial planning and financial monitoring, or controlling, methods. There were six answer options, varying from 0 = 'not used at all', 1 = 'used once a year at best', 2 = 'used a few times a year', 3 = 'used monthly', 4 = 'used weekly' and 5 = 'used almost daily'. Secondly, the respondents were asked about the importance of each method, replying to the statement 'I consider this method important for managing my company'. The answer contained 5 options: 1 = 'strongly disagree', 2 = 'disagree to some extent', 3 = 'do not agree or disagree', 4 = 'agree to some extent' and 5 = 'strongly agree'. The average use and the perceived average importance of financial planning methods are presented in Figure 12, and the same aspects related to financial monitoring, or controlling, methods are conveyed in Figure 13. Both figures suggest that financial planning methods tend to be used less than financial monitoring methods. Financial planning methods are used on average once or, at the most, a few times a year, whereas some financial monitoring methods can be used a few times a year or monthly. Thus, small businesses tend to utilise MAI more for the control purposes rather than for business planning.

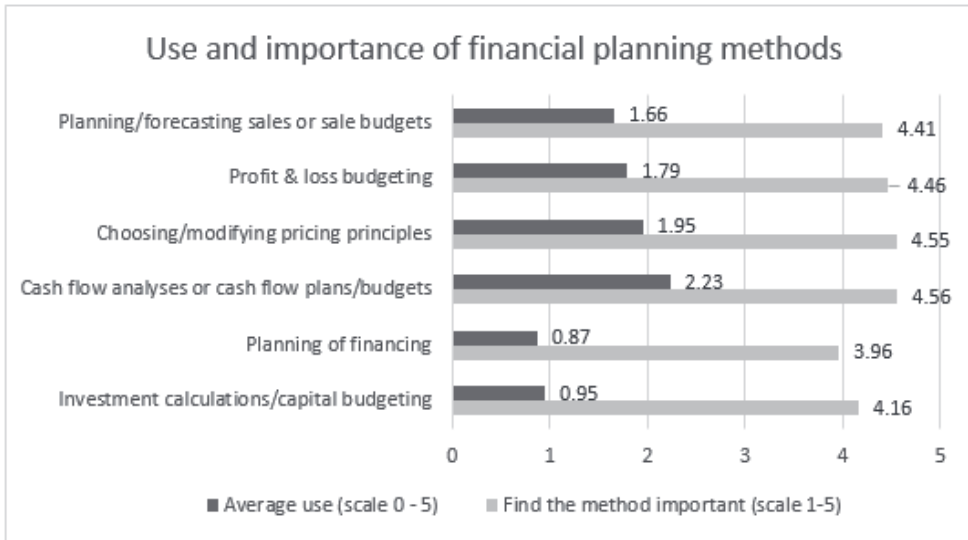


Figure 12. Financial planning methods used and their perceived importance

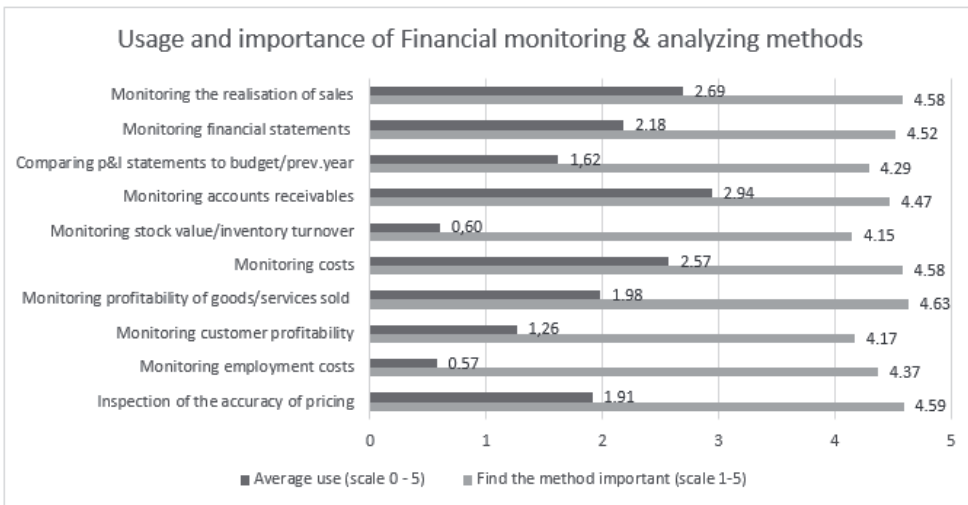


Figure 13. Financial controlling methods used and their perceived importance

Adequate liquidity is essential for all companies, especially for small businesses; therefore, it can be understood clearly that cash-flow planning is the most common method of financial planning that is used on average little more often than a few times a year, whereas other planning methods are used less frequently. In financial

monitoring, or controlling, section, the most common methods were monitoring accounts receivables, followed by monitoring the realisation of sales and costs. Moreover, monitoring financial statements, such as profit and loss statements, was done on average a little more often than a few times a year. Scarce monitoring of employment costs can be due to the small size of the studied companies. For instance, if the entrepreneur is the only person working in the company, there is not much need for controlling payroll costs. Additionally, stock-value monitoring was rare, which is probably due to not only the small size of the companies but also the fact that many of the companies operate in the businesses with no or few stocks.

Figures 12 and 13 also show that entrepreneurs consider all financial planning and monitoring methods important. Despite the scarce use of these methods, the entrepreneurs quite strongly agreed on the importance of this kind of information in the management of their companies. For all financial planning and controlling methods, the average answers to the question about their importance was between four ('agree to some extent') and five ('strongly agree'). Therefore, it can be concluded that entrepreneurs hope for more MAI and there seems to be a significant gap between the current use of MAI and the demand for this information. Analysing the results based on the age of the enterprises did not bring out significant differences in the use or importance of FI as the responses were similar across all age groups.

In question B14 the respondents were asked about their wishes for MAI: in particular, what kind of financial information they would need to better support their management. This question was formulated to elaborate on RQ2 related to the potential MAI utilisation. In question B14, there were five answer options: a) information to support financial planning (e.g. help with budgeting, setting targets); b) information to help monitor and analyse finances (e.g. to analyse and improve the financial situation); c) other information (what?); d) I don't need additional information; and e) I don't know. The distribution of the answers is presented in Figure 14 below.



Figure 14. Management accounting information needs of entrepreneurs

Based on the results, entrepreneurs mostly hope for MAI to support the financial planning of their company (180 responses), although information supporting financial control was also perceived as important (193 responses). When considering the answers to question B14, it should be noted that the respondents could choose from several options. Many respondents chose both option (a) and option (b) and sometimes also option (c). Thus, it is not reasonable to provide the percentages of the responses to this question. In option (c) ‘other information’, the most common answers (20 responses) were related to FA needs, such as information about taxation or accounting practicalities, pricing advice (10 responses) and general financial advice or mentoring (7 responses). It is also worth noting that option (d) ‘I don’t need additional information’ was chosen only by 12 respondents, while 28 entrepreneurs did not know what information they would need to support their managerial work.

A further analysis of the distribution of the results (Figure 14) revealed interesting observations. First, keeping in mind the MA life cycle perspective of this dissertation and the findings from previous studies (especially López & Hiebl, 2015), it is reasonable to consider the results of Figure 14 in relation to the age and size of the enterprises, which exposes some discrepancy between the MAI needs of companies of different age categories. Table 8 presents the detailed total distribution of the responses in the first row and for each enterprise age category below. The results show the total number of responses for each age category, followed by the

percentage of the results compared to the total number of the enterprises in the category.

Table 8. Management accounting information needs of entrepreneurs with enterprise age categorisation

Kind of MAI needed more:	Financial planning	Financial controlling	Something else	More MAI not required	Don't know
Responses in total (N = 290)	180	193	62	12	28
Number and % of responses in each enterprise age category:					
over 10 years (n = 52)	33 (63%)	38 (73%)	10 (19%)	2 (4%)	6 (12%)
5-10 years (n = 36)	22 (61%)	24 (67%)	10 (28%)	1 (3%)	5 (14%)
2-4 years (n = 97)	66 (68%)	64 (66%)	24 (25%)	7 (7%)	7 (7%)
under 2 years (n = 103)	57 (55%)	66 (64%)	17 (17%)	2 (2%)	10 (10%)
(unknown age)	2	1	1		

Observing table 8, it should be recalled that the respondents could choose more than one option in their answers. The percentages presented describe how many respondents in each age group chose the option (how typical each response was in a particular age category). These percentages can be compared between the age categories to examine whether the needs for more MAI differed in the companies of different ages.

Although MAI related to both financial planning and controlling tends to be much needed, in the youngest enterprises that had been operating under two years, the need for more MAI was less recognised than in other age categories. In all three options, financial planning, financial controlling, and something else, the percentage of MAI needs mentioned is the smallest in the companies under two years of age. For example, only 55 % of the youngest enterprises hoped for MAI to support their financial planning, while in all other age categories, the percentage is higher (up to 68%) in the age category between two and four years. Thus, while the results indicate the lowest need for MAI supporting financial planning among the youngest enterprises, those companies that have operated a little longer seem to need this kind of support much more. Presumably, during the first couple of years a new company establishes its operations, but after this period, the entrepreneur experiences an increasing need to develop and grow the company's operations; therefore, better MAI becomes needed to support this development. At the same time, option (d) 'I don't need more information' was rare but more typical for the entrepreneurs running two-to-four-year-old enterprises (7%). These respondents could be those

who have already stabilised their business model and managed to organise their financial management to meet their information needs.

Surprisingly, the need to support financial controlling was recognised most in the category of the oldest companies, which had operated for more than 10 years, whereas as many as 73% of entrepreneurs indicated that they would need more MAI. Presumably, in the oldest companies, the methods of financial controlling had stabilized over the years but no longer produced the kind of information entrepreneurs hoped for. Along with financial planning, financial controlling was the least recognised among the youngest entrepreneurs with the companies that are less than two years old (64%). However, the difference between other age categories was not as remarkable as in the financial planning wishes.

It is also interesting to consider the answer option (e) 'I don't know'. In the typical youngest companies, entrepreneurs can be assumed not to know what kind of financial information they needed. However, the results show the opposite. Surprisingly, the 'I don't know' answer was the most common among the oldest companies (14% of the companies that are 5–10 years old and 12% of the companies that are more than 10 years old). This opinion may be related to the stabilised financial practices of these enterprises: the entrepreneurs recognise the need for more or better MAI but are not able to identify this need.

Besides the age-based comparison, the results of question B14, illustrated in Figure 14 and Table 8, can also be examined in comparison with the size of the company. Based on previous literature, the need for MAI is scarce in the smallest enterprises, but it increases as the company grows and the complexity of its operations increases (chapter 2.3.3 in this dissertation). While the enterprises participating in the utilisation study were mostly very small, it is interesting to examine the data from the perspective of the company size. As illustrated in Table 2 in chapter 3.2.1, 68% of the enterprises in this data had only one employee. These smallest enterprises are typically sole entrepreneurs, which can, based on previous literature (e.g. Pelz, 2019), affect the MAI needs of these enterprises. Table 9 presents the results of the size-based comparison of the results of question B14.

Table 9. Management accounting information needs of entrepreneurs with enterprise size categorisation

Kind of MAI needed more:	Financial planning	Financial controlling	Something else	More MAI not required	Don't know
Responses in total (N = 290)	180	193	62	12	28
Number and % of responses in personnel categories:					
personnel > 10 (n = 8)	7 (88%)	6 (75%)	0 (0%)	1 (13%)	1 (13%)
personnel 4–9 (n = 21)	19 (90%)	19 (90%)	2 (10%)	0 (0%)	0 (0%)
personnel 2–3 (n = 63)	38 (60%)	43 (68%)	12 (19%)	3 (5%)	6 (10%)
personnel 1 (n = 198)	116 (59%)	125 (63%)	48 (24%)	8 (4%)	21 (11%)

Based on table 9, the size of the enterprise can affect entrepreneurs' hopes for MAI. Although financial planning and controlling information is generally much needed, there is less need for it in the enterprises with just one person than in other size categories. Moreover, the need for MAI tends to increase along with the number of personnel and is the highest in the companies with four to nine employees.

Finally, the third question formulated to address the needs of this dissertation is related to the entrepreneurs' wishes regarding the form in which they would prefer to obtain MAI. This question also relates to RQ2, explaining the needs small enterprises have for MAI. This question was asked immediately after the question on the content of FI discussed above and was phrased as follows: 'In what form would you prefer to receive this financial information?' There were four answer options: a) personal guidance/consulting from a trustworthy person; b) from a developed information system, from which you can retrieve the up-to-date and relevant information yourself; c) both; and d) I don't know. The respondents had to choose only one option.

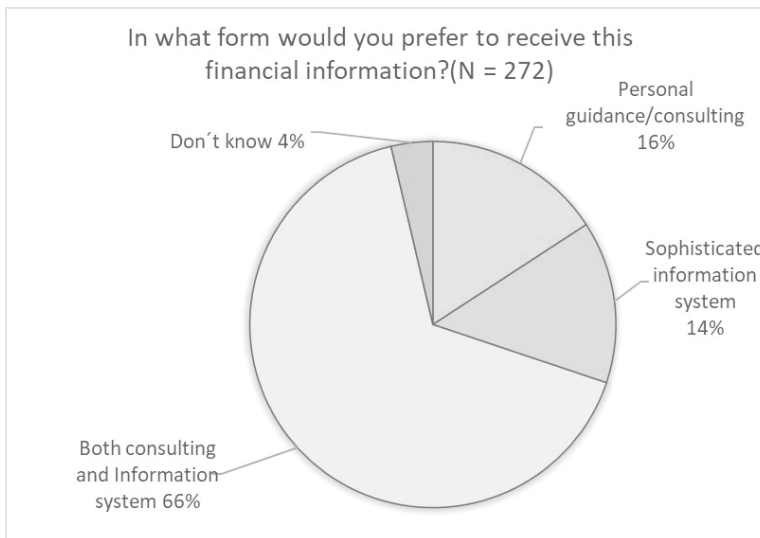


Figure 15. Wishes for the form of management accounting information

As shown in Figure 15 above, 16% of the respondents would like to receive personal advice or consulting from a reliable accounting consultant and 14% prefer advanced information systems. The popularity of these forms of financial service is, therefore, quite consistent. However, most entrepreneurs would prefer a combination of consulting and IT systems. The total of 66% of the respondents answered that they would like to receive both personal advice and access to an IT system.

Comparing the answers across the age groups did not reveal as significant differences as it did for question B14. As Table 10 reveals, entrepreneurs in the companies of all ages typically wish for a combination of consultation and sophisticated information systems.

Table 10. Form of management accounting information wishes of entrepreneurs with enterprise age categorisation

Desires for form of MAI	Personal guidance/ consulting	Information system	Both consultation and information system	Don't know	Blank
Responses in total (N = 272)	43 (16%)	39 (14%)	180 (66%)	10 (4%)	
Number and % of responses in each enterprise age category:					
> 10 years (n = 52)	9 (17%)	9 (17%)	31 (66%)	2 (4%)	1 (2%)
5–10 years (n = 36)	4 (11%)	2 (6%)	28 (78%)	1 (3%)	1 (3%)
2–4 years (n = 97)	18 (19%)	12 (12%)	61 (63%)	5 (5%)	1 (1%)
< 2 years (n = 1 03)	11 (11%)	16 (16%)	59 (57%)	2 (2%)	15 (15%)
(unknown age)	1		1		

The wish for personal advice was more pronounced in the companies that had been operating between two and four years and was the lowest among the youngest companies. Sophisticated information systems were most needed in the companies that were over 10 and under two years old, whereas a combination of consultation and information systems was by far the most desirable option for the companies that had been in business for 5–10 years. Among the youngest companies, 15 respondents failed to answer this question, suggesting that they may not have been able to comment on the matter. Similar to the previous question, the distribution of the responses was examined in relation to the personnel categories of enterprises. This comparison is presented in Table 11 below.

Table 11. Form of management accounting information wishes of entrepreneurs with enterprise size categorisation

Desires for form of MAI	Personal guidance/ consulting	Information system	Both consultation and information system	Don't know	Blank
Responses in total (N = 272)	43 (16%)	39 (14%)	180 (66%)	10 (4%)	
Number and % of responses in personnel categories:					
personnel > 10 or more (n = 8)	0 (0%)	1 (13%)	5 (63%)	1 (13%)	1 (13%)
personnel 4 –9 (n = 21)	2 (10%)	2 (10%)	17 (81%)	0 (0%)	0 (0%)
personnel 2–3 (n = 63)	12 (19%)	4 (6%)	39 (62%)	3 (5%)	5 (8%)
personnel 1 (n = 198)	29 (15%)	32 (16%)	119 (60%)	6 (3%)	12 (6%)

As in the age categorisation, the number of personnel did not have a very significant impact on the form of the needed MAI. The need for personal advice tended to be slightly higher than average in the companies with two to three persons, where the need for information systems alone was similarly lower. Bigger companies, especially those employing 4–9 workers, emphasise the hoped combination of consulting and information systems. Overall, the answers to question B15 indicate clearly that entrepreneurs need both personal financial consultation and MAI generated by sophisticated information systems to support their managerial work.

4.1.2 Challenge study

This is the second explorative study, focusing on the challenges in MA system and service adoption. The data utilised in this study consisted of a sub-sample of a wide survey data that was responded by 1,507 Finnish organisations, ranging from SMEs to large multinationals. However, micro-enterprises were excluded from the original survey. Based on this data, two research papers have been published, investigating other research questions and different parts of the dataset (Ylä-Kujala et al., 2016, 2018). In this quantitative data, one open-ended question regarding the main challenges in MA system and service adoption was not analysed, so it was included in this challenge study. For the purpose of this study, the original data was delimited to small businesses, each employing 10–50 people. The survey data consisted of 502 structured phone interviews with small-enterprise managers working in Finland. This study is meant to develop RQ3 related to the main challenges in bridging the gap between the ideal and current MAI utilisation.

In total, 78% of the respondents, including owner-managers of small businesses, named challenges in adopting MA. Their open answers were carefully reviewed and interpreted to find and understand similarities in the named challenges. This interpretation, which was carried out by me and separately by another researcher, revealed four main types of challenges in MA system and service adoption, allowing us to categorise the answers under as follows: organisation, system, personnel and resources. In many responses, the answers were intertwined and included several types of challenges; in these cases, each answer was carefully interpreted, and we searched for the fundamental root cause of the challenge and the most severe obstacle underlying the answer. This kind of interpretation is subjective by nature, but involving two researchers in the analysis of the responses was intended to improve the reliability of the interpretations.

Apart from these four categories, some responses expressed the idea of either not knowing or not recognising significant challenges in adopting and using MA and MA systems. For this reason, categories ‘no problems’ and ‘don’t know’ were also included in the analysis. Figure 16 conveys the distribution of the most prominent challenge categories among the studied small enterprises.

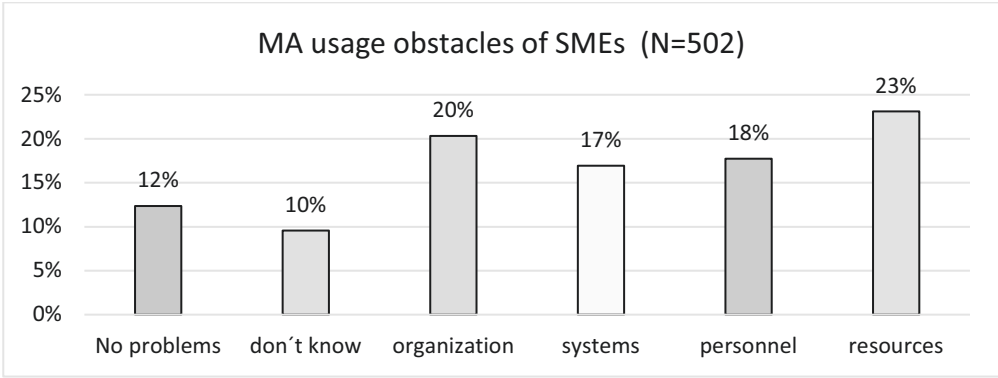


Figure 16. Categorisation of challenges in MA or MA system adoption (Ylä-Kujala et al., 2022)

Organisational problems include features related to the business model or organisational structure of the company. The respondents expressed that due to the complexity or peculiar nature of their business model, there were no appropriate MA available. On the other hand, the responses also indicate that MA systems or services may not be needed due to the simplicity or small size of the company. Moreover, being part of a bigger group was also mentioned in some responses as the main reason limiting the respondents’ decision-making in MA adoption.

The system-related challenges involved assumed unsuitability or shortcomings in the available MA systems and services. In this category, the respondents typically felt that in their business context, suitable MA systems or services did not exist. In addition to unsuitability, many respondents indicated worries about the extra work the adoption of a new system or service can cause and expressed doubts whether MA adoption would be sufficiently useful in their business to cover its costs.

The challenges in personnel category were typically linked to a lack of knowledge or motivation among the owner-managers or key personnel in the company. Small enterprises tend to lack skills required for developing and using MA systems and related advisory services. Furthermore, entrepreneurs’ or personnel’s unawareness of the benefits of the available systems or services can hinder MA adoption.

Additionally, a lack of motivation can be problematic. Several responses mentioned challenges related to the motivation or commitment among the personnel.

Unsurprisingly, resource-related challenges were the most frequently named obstacles for MA adoption. MA system and service development required a significant investment of time and funds, or the respondents were afraid that this would be the case. Small businesses' resources are typically available only to a very limited extent, which can make the costs of investing in MA adoption ruinous for the business.

Although resource constraints were presumably the most common reason preventing MA or MA system adoption in the studied companies (23% of the managers in these enterprises considered such constraints the root cause of the choice not to invest in MA systems and services), there tend to be other severe obstacles as well. Challenges related to the knowledge base or the motivation of the personnel or the entrepreneur are also indirectly related to the resources of the business, and this was called the main obstacle by 18% of the enterprises. Thus, these two categories, linked to the limited resources and capabilities of small enterprises, covered the total of 41% of all responses and composed the generality of the challenges. In addition, organisational issues tend to pose a serious challenge, as 20% of the responses considered the main obstacle to be the peculiar nature or organisation of their enterprise. Finally, 17% of the respondents considered the available systems unsuited to their businesses, which indicates that there is a lack of MA systems or services suited for the needs of small businesses.

4.1.3 Entrepreneurs as management accounting information users (entrepreneur narratives)

In the first in-depth phase of the empirical data, the research subjects (entrepreneurs) wrote individual answers concerning their use of financial information. This narrative data was collected to answer RQ1 about the current MAI usage as well as RQ2 related to the potential MAI utilisation. The term financial information (FI) was used at this stage of the study to make the questions as clear and comprehensible for the respondents as possible. However, as previously stated, when asking about the FI utilisation in the entrepreneurs' managerial work, we in fact study MAI utilisation.

The respondents (small-business entrepreneurs) described how important they considered MAI to be for the success of their enterprises. In addition, they revealed

how they used MAI in their own managerial work. In particular, they were asked to describe situations when they either had been using MAI or would have needed MAI, but it was not available. Furthermore, the entrepreneurs were asked to express their wishes for the ideal MAI that would support their managerial work. So, instead of explicit questions, the research subjects were requested to produce informal descriptions, or narrations.

This diverse narrative data was analysed in various ways. I carried out the analysis and categorisation of the data mainly in accordance with Miles and Huberman's (1994) description of the process of the data-driven inductive analysis. After first reading all the answers several times, I started reducing, transcribing and coding the content of the data relevant to the research questions and thereafter clustered the data, searching for similarities or differences in the data, grouping the similarities under common classes and finally forming categories. I continued to conceptualise the data by distinguishing the information relevant to the research questions and forming categories based on this information. The analysis and categorisation are based on interpretation and reasoning. My conclusions sought to understand what mattered to the informants (the entrepreneurs), and I strove to understand them from their point of view during all stages of the analysis.

During the first stage, the data was also partially quantified by examining the number of times identical codes appeared in the answers of the entrepreneurs (how many entrepreneurs mentioned identical information or method). In this context, quantification does not conflict with the processing of the qualitative data that was collected and analysed using qualitative methods. Instead, quantification aims to add value to the interpretation of the data (Patton, 1990; Marshall & Rossman, 2011, p. 221). While reading the answers, I also coded them based on the information the entrepreneurs had told in their narratives about the present situation of their enterprises as well as MAI importance, utilisation and hopes. Table 12 presents the summary of this coding, including my evaluation of each enterprise's life cycle phase and current MA development level based on the method developed by Granlund and Taipaleenmäki (2005). Both the life cycle stage and the MA development level were estimated based on the information that was available in the data, which was, therefore, more suggestive than absolute facts. The data is included in the table to provide a general view on the use of MAI in the studied enterprises, considering their stages of development.

Table 12. Summary of management accounting information utilisation in narrative data

No	Age	Life-cycle phase	Financial planning	Financial control	Importance	Satisfied with present MAI	MA level	Desires
1	0–1	Birth	No	Yes	4	Yes	3–4	
2	2–4	Growth	Yes	Yes	3	No	1–1.5	support in sales
3	2–4	Growth	Yes	Yes	4	Partly	2	support in investments & developing the business
4	5–10	Growth	No	Yes	4	Yes	2–2.5	practical support in developing the business
5	3–5	Growth	No	Yes	2	No	< 1	support in marketing and sales
6	1–2	Growth	No	Yes	4	Partly	2	real-time financial information
7	0–1	Birth	No	Yes	4	Partly	< 1	cash-flow statement and measures to support operational management
8	2–4	Birth-growth?	Yes	Yes	3	Yes	2	profitability, costs and efficiency of customer acquisition
9	5–10	Growth-maturity?	Yes	Yes	3	Partly	3–4	detailed profitability in several levels
10	10–15	Maturity	No	No	2	Yes	< 1	no
11	0–1	Birth	Yes	Yes	4	Partly	< 1	profitability, accounts receivables
12	0–1	Birth	Yes	Yes	4	Partly	< 1	real-time detailed information and estimates for the future
13	3–5	Growth-maturity?	No	Yes	4	No	1–2	estimates, budgeting
14	> 20	Maturity	No	Yes	4	Partly	1–2	profitability, estimates, budgeting
15	3–5	Growth	Yes	Yes	4	Partly	2	competitor & industry data
16-17	5–10	Growth-maturity?	No	Yes	3	No	1–2	profitability analyses, cost structure

Table 12 also presents an overview of the narrative data, describing the age of each company, the estimate of its life cycle stage, information on the use of financial planning and controlling, perceived importance of FI, satisfaction with the current FI and the estimate of MA development path, following the method developed by Granlund and Taipaleenmäki (2005). The development path was described in literature and presented in chapter 2.4.2 in this dissertation. In the enterprises with the MA level below one, MAI utilisation was very limited or non-existent; at the levels one to two, some basic MA elements are used; and at the levels three and more, MAI is utilised in a more versatile manner. In addition, the table also includes the interpretation of the main wishes for FI the informants expressed in their answers.

Next, the narrative answers will be discussed in more detail. The analyses are presented below, first addressing the answers to RQ1 (the current role and importance of MAI), followed by the questions related to RQ2 (the ideal situation). In other words, the order of the presentation differs from the original order of the questions entrepreneurs were asked, as it was outlined in chapter 3.2.2. For confidentiality reasons, the submitted direct quotations do not indicate who of the respondents expressed it. Some data will also be presented in the quantified mode to make the content more informative for the reader. Each analysis presented here is connected to one or more research questions, and this connection is described briefly before the analyses.

4.1.4 Sources and types of financial information used

To find out how MAI is utilised in the studied enterprises, the informants were first asked to narrate the sources, content, and use of any FI they followed. These questions are related to RQ1 (the role of management accounting information), describing the ways MAI is utilised in the companies. As in all small enterprises, the most natural associate in accounting and financials is the accountant. A total of 12 (out of 17) informants said that they got MAI from their accountant: *“I get all the financial information I need from our accounting firm”*. Eight entrepreneurs said that they produced all or some financial information themselves, and the level of this information varied from basics (‘At the very beginning, I decided to collect data on the incomes and expenses in an Excel file’) to quite sophisticated (‘Our company has an analytical tool to predict the future short-term turnover as accurately as possible’). Two respondents expressed that they hardly received any financial information and

did not produce it themselves either. In their answers, the entrepreneurs mentioned different types of MAI they used or monitored as part of their managerial work. Table 13 presents these types of information.

Table 13. Types of management accounting information used in narrative data

Subject of Observation	Times Mentioned in Responses
Sales volume	10
Bank balance	5
Cash flow report/estimate	3
Financial Report from the Accountant	7
Follow-up of the budget	4
Observation of costs	5
Performance Indicators	2
Available information about rival companies	2

Altogether, 15 entrepreneurs described at least some FI that they used, while two respondents said that they did not use any FI in their managerial work. One of these respondents had been managing the same enterprise for a long time in a quite established environment, running the enterprise based on their experience and therefore found FI useless. The other respondent was unsatisfied with the current situation and intended to find a new accountant to improve the availability of appropriate FI: ‘All the financial information comes from the accountant, but that’s not much. Mostly, it is how much the VAT payment is. This information is necessary, of course, but something more should come’.

The most typical subject of observation was the development of the sales volume, which was mentioned in 10 out of 17 answers. In addition, financial reports from accountants are common sources of MAI, which was mentioned in eight answers: ‘Every month, I receive a profit and loss and a balance sheet statement from our accountant, showing the figures for the past month and the development for the whole year’. As liquidity is often critical for small enterprises, the adequacy of funds is expected to be a typical concern of small-business entrepreneurs. The follow-up of cash flow or bank balance was mentioned in six answers and the cash flow estimates in three answers.

More advanced MA systems were also used in a few enterprises: cost accounting was mentioned in five answers, and budget monitoring was noted by four entrepreneurs. Furthermore, two informants talked about key performance indicators that were monitored (the actual customer numbers and the key figures

calculated on the basis of the financial statements). The follow-up of rival companies was also mentioned in two answers.

In their answers, the entrepreneurs also described what they used financial information for (Table 14). In most cases, the information was used in the operational, daily management.

Table 14. Use of financial information in narrative data

Financial information used for	Times Mentioned in Responses
Control/ follow-up	12
Planning of future sales/workflow	5
Profitability management	4
Planning of investments	3
Budgeting/target setting	3
Cost management	2
As a reasoning for personnel	2
Risk management	1

Typically, the informants described that they needed MAI to perceive the whole of their enterprise: How is the business doing? Will the targets be achieved or not? What kind of sales actions or hiring decisions should be made next? Is the profitability of the enterprise adequate and are the costs under control? In addition, a few entrepreneurs answered that they needed MAI to reason their decisions with the personnel and for risk management. Apart from operational situations, a few respondents, at least to some extent, used MAI for strategic management, such as when making budgets or setting targets for the upcoming years. Investment decisions were mentioned in three answers.

The problems entrepreneurs named in relation to the availability of MAI concerned mainly a lack of mutual understanding with their accountants. A few entrepreneurs felt that their accountant did not understand their needs or that they could not find a common language to discuss financial matters: ‘Our accountant and we don’t always understand each other, or she can’t answer my questions’. Another mentioned problem was that the main sources of FI were reports from the past months or years, and that information was not quite useful. Basic information, such as monthly financial reports, was available for most entrepreneurs, but when they ask for something more specific, ‘things can get very difficult’, as one of the respondents put it.

It is remarkable that many entrepreneurs were unsatisfied with their financial management practices. More than a half of the respondents indicated that they were aware of the possibility to utilise MAI more and the necessity to develop in this direction, but they found it hard due to a lack of knowledge and/or resources: ‘We have not made sufficient use of the financial information that has been available’. Thus, they did not solely blame their accountants for the situation; rather, they perceived themselves somewhat unskilled or incapable of improvement in their financial management.

4.1.5 Importance and current utilisation of management accounting information

As RQ1 also seeks to find out the role of management accounting information in small enterprises, an essential question to entrepreneurs was how important they considered MAI for the success of their enterprise. To find an unequivocal and comparable answer to this question, the opinion about the importance of management accounting information was elicited through a quantitative question with a four-step scale: 1 = ‘not at all important’, 2 = ‘somewhat important’, 3 = ‘rather important’ and 4 = ‘very important’. The distribution of the answers is presented in Table 15. Unexpectedly, all the respondents considered MAI important at least to some extent, whereas 15 out of 17 respondents considered it rather or very important, and the most typical answer was ‘very important’.

Table 15. Importance of management accounting information

Importance of MAI for success of the enterprise	
Very Important	10
Rather Important	5
Somewhat Important	2
Not at all Important	0

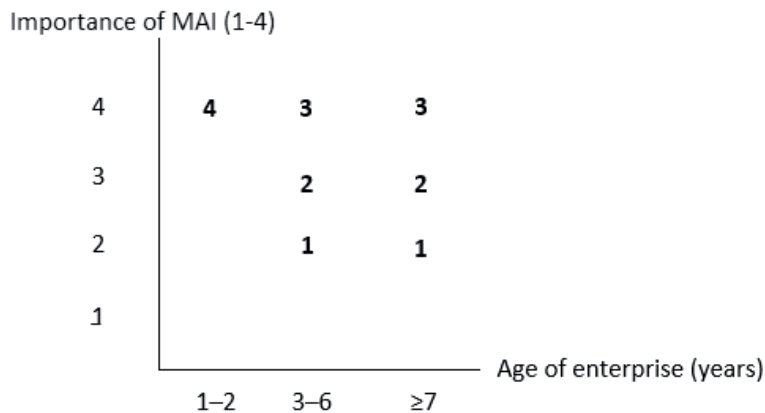
The informants who perceived management accounting information as very important justified their responses with three types of reasons:

1. Management accounting information is needed for forecasting and risk management:
“If the company’s operations are not profitable, it is not worth continuing. Financial information gives direction and purpose to our activities!”
“Financial information is important for growth, solvency, expansion and risk management”.
2. Management accounting information is needed to be able to develop the company and business:
“The importance of financial information is growing the deeper we get into the business”.
“Can a company be developed if you are not aware of the financial situation?”
“Based on the current financial information, you can make decisions about the future; otherwise, you will be just guessing”.
3. Management accounting information makes entrepreneurship meaningful:
“Financials became interesting and significant as soon as I started my own company”.
“Without proper financial management, business is not business. The purpose of an enterprise is to make a profit”.

Those informants who perceive management accounting information as rather or somewhat important typically explained their opinion by the small size and simplicity of their business. Most of them argued that the importance of MAI would increase if their business expanded and the need to perceive the entirety of the enterprise grew: ‘When the business is growing, we need to be more aware of the financial issues as well’. Moreover, two respondents pointed out the cost–benefit relationship of the gathered information. The advantage of MAI was not always adequate, compared to the costs that the production of this information caused: ‘The financial information I need would be relatively expensive at the moment’. Those two entrepreneurs who considered MAI only somewhat important seemed to be able to run their daily business based on their practical knowledge and, thus, did not require more information. However, they appeared to be in general less target-oriented and forward-looking in their managerial work than those entrepreneurs who considered MAI as rather or very important.

A remarkable notion related to the age of entrepreneur was that all entrepreneurs with new enterprises found MAI very important, while in some older enterprises the importance was lower. According to former literature, the significance of MAI should increase as an enterprise grows and complexity increases. Table 16 pictures entrepreneur’s opinion of importance of MAI in various aged enterprises.

Table 16. Importance of management accounting information vs. age of enterprise



The next question covered the change of opinion about the importance of MAI. When asked whether the perception of the importance of MAI had changed over the past five years, the answers fell into three groups (Table 17). Eight respondents gave an affirmative answer; six denied it; and in four cases, the respondents were not able to answer because they had not yet had a long enough experience as an entrepreneur. In the affirmative responses, all the entrepreneurs said that the importance had increased. The respondents described that as the enterprise was growing and becoming more tortuous, the need for compact FI was getting more and more vital: ‘It has changed to a more systematic direction. Financial practices and tools have improved, allowing the company to run on a larger scale’. In addition, the increasing need for predictability and meticulous planning was mentioned in several responses as the reason for increasing the need for MAI.

Table 17. Change in importance of management accounting information

Has the importance of MAI changed during your entrepreneurship?	
Yes, importance increased as the enterprise grown	8
No, has always been as important	6
Not able to answer (no enough history yet)	3

The six respondents who gave negative answers told that they all had considered FI important from the very beginning of their entrepreneurship: ‘I have always

considered financials to be an important part of my business, and my thoughts may have become even brighter with age’. These comments indicate that MAI is considered a vital factor, especially in developing an enterprise: ‘The biggest development steps in our business have always been linked to carefully made calculations and a detailed review of our expense structure’.

Based on the results of the last two questions, FI was important for the respondents, although many had told previously in their answers that they were not satisfied with the level of the available FI or with their own financial management practices. Therefore, there appears to be a significant gap between the demand and actual use of MAI in these enterprises.

In Table 18, the respondents were categorised according to the management control development path by Granlund and Taipaleenmäki (2005). In the enterprises with the MA level below one, MA utilisation is at a very low level or does not exist at all; at levels one to two, some basic MA elements are used; and at levels three and more, MA is utilised in a more versatile manner.

Table 18. Management accounting development level vs. age of enterprise

MA level (G&T)				
		age of enterprise (years)		
		1-2	3-6	≥7
> 3				3
2-3	1	5	3	
< 1	3	1	1	

Five enterprises were at level one or lower: MA did not exist, or its use was very limited. The generality, a total of nine enterprises, used basic reporting, budgeting, and analysing systems, so their MA was above level one but below level three in this categorisation. Three enterprises were above level three, which means they used proper profitability analyses and cost accounting systems. In comparison with the age of the enterprise, the assumed theory-based correspondence between the age and MA level of an enterprise was not evident. Instead of more sophisticated MA used mainly in more aged companies, there were some relatively old enterprises that were still under level one or two. However, it should be noted that only a small

number of companies were included in this comparison; therefore, no actual conclusions can be drawn from these results. The statistical representativeness was not attempted in this context; rather, this dissertation aims to increase the understanding of MAI needs and the views of entrepreneurs by interpreting the in-depth qualitative data.

4.1.6 Wishes for management accounting information

To meet the RQ2 about the ideal utilisation of MAI, the informants were asked to describe their needs or wishes for better financial information. In the submitted narratives, the diversity of requirements was remarkable. The respondents were asked to describe separately their needs for information supporting the strategic and operational management of their enterprises. Although it was emphasised to the respondents that it was desirable to describe the ideal situation overlooking possible restrictions, most answers were very realistic and pragmatic. Most importantly, the entrepreneurs hoped to receive more analysed information about the profitability of their enterprise at different levels. The financial performance reports and measures were considered important parts of MAI. The financial information needs for the strategic and operational management are summarised in Table 19.

Table 19. Financial information needs for strategic and operational management

Financial Information needs			
for strategic management:		for operational management:	
Analyses of present situation (sales/costs/ profitability)	7	Information about actual financial situation (bank balance, receivables/payables)	3
Performance reports/ measures	6	Detailed cost and profitability analyses	5
Information for financial planning and estimation	4	Key Performance Indicators (cash flow, margins, turnovers, effectiveness of sales)	8

Same parts of information were mentioned as desirable for the use in both operational and strategic management. However, in their daily management, the informants hoped to receive more follow-up type of basic information in an easily absorbable form. A notable detail about the answers is that the entrepreneurs did not wish for basic financial reports normally produced by the financial accounting function, such as income statements or balance sheets; instead, they wished to obtain more detailed and simple figures and indicators about the financial situation of their

enterprises. Presumably, in the hope for strategic management, the need for forward-looking information is emphasised, while for the operational management, the entrepreneurs would need more backward-looking, quick, and easily interpretable information for control purposes.

4.2 Entrepreneur's view of ideal management accounting information (entrepreneurs' group conversation)

The second phase of the qualitative data collection was also a group conversation, where the same entrepreneurs as in the narrative data were present. In this conversation, the topic was the content and availability of the ideal MAI. Thus, this data seeks to elaborate on RQ2, which was discussed only to a limited extent in the narrative data. The first part of the conversation centred on the contents of the ideal MAI, and the later stages concentrated on the access to this ideal information. The latter part also to some content clarified RQ3 related to bridging the gap between the ideal and current MAI. The conversation was lively and diverse: the group discussed the subject actively. As the researcher, I did not participate in the discussion except when feeding the questions for the discussion.

4.2.1 Wishes for content and availability of ideal management accounting information

The discussion started from a question: What would the financial information be like at its best? The list of the main subjects discussed is presented in Table 20, listing the main comments in the order of their appearance in the conversation. In their responses, the entrepreneurs talked about FI, using such adjectives as 'essential', 'timely', 'exact' and 'appropriate'. They required the information that would work as a driver or incentive for more detailed and relevant analyses of their financial situation: 'Financial information should be a driver: the received information should be used to go into more detail and make necessary calculations'.

Table 20. Main comments during group discussion

<i>Should be possible to self-define the needs, what information is useful.</i>
<i>Basic needs: financial reports and key indicators monthly/weekly.</i>
<i>Most important and understandable financial indicators first. When these are in control, can expand.</i>
<i>FI should work as a trigger for managerial decisions.</i>
<i>FI should be available in real-time.</i>
<i>Accountants should act like a financial officer giving guidelines for entrepreneurs.</i>
<i>Enterprise's "fitness test" & report would be useful + recommendations for the future.</i>
<i>Entrepreneur knows best what information is essential and should explain that to accountant.</i>
<i>Awareness of own strategy is the key fact: FI needs are linked to strategy.</i>

On the other hand, some entrepreneurs wished to first define their needs themselves and then, based on their demand, get exact information. Several participants said that they were not particularly interested in financial matters and would therefore need someone to guide them to pay attention to the right facts: 'Entrepreneur is not particularly interested in financial matters... As an entrepreneur, you would like to know the essentials and that the accountant would tell you what is essential to consider'. Thus, entrepreneurs were less interested in the figures but would rather get interpretations made based on the figures. Other entrepreneurs, however, argued that the content of useful FI depended on the vision and strategy of the enterprise; therefore, entrepreneur themselves must define what information is vital: 'It would be better if you could determine the need for FI yourself and then ask for specific information'.

Regarding the content of the needed FI, the entrepreneurs did not discuss it in detail. They named reliable monthly basic financial reports, meaning the primarily income statements and balance sheets; additionally, the key performance indicators and cash flow reports were mentioned as the sources of MAI.

The entrepreneurs had a long talk about the role of accountants in providing useful MAI. Many discussants wished for an accountant who would understand the business and could offer suggestions and guidelines for the entrepreneur to steer the company in the right direction ('the accountant could give tips and instructions to the entrepreneur'). Some also wished for an accountant who would act as a financial consultant or manager of the customer. These answers clearly indicate that there is a gap between the needs and provision of MA services. Nevertheless, there were also

other opinions in the discussion. Some entrepreneurs thought that instead of a person (an accountant), they would like to use an automatic software, a kind of business intelligence system, which would promptly provide the entrepreneur with any requested financial information: ‘We would need some kind of a corporate fitness test, based on which recommendations could be given on what should be done to make the company successful. During the current digitalisation era, this should be possible!’ The expressed wishes also pointed to MA system and service deficiencies. Although there were many wishes related to the quality of the customer relationship and the personality of the accountant, the most important requirement, however, was the experience and financial expertise of the accountant. The wishes, or requirements, for an efficient accountant mentioned by the entrepreneurs are listed in Table 21.

Table 21. Entrepreneurs’ comments about expectations for accountants

<p>Wishes/requirements for accountants:</p> <ul style="list-style-type: none"> • <i>good, strong customer relationship</i> • <i>understands the business of a customer well</i> • <i>gives options and can guide the entrepreneur to the reasonable direction</i> • <i>is able to give useful advice</i> • <i>tells the most essential facts instead of numerous reports</i> • <i>stability</i> • <i>mutual confidence and respect</i> • <i>respects the fact that the entrepreneur makes the final decisions</i> • <i>analyst, expert, consultant</i> • <i>expertise is more important than customer service skill</i>
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In summary, a wide range of wishes were presented with regard to accountants. Similar to previous studies (e.g. Halabi et al., 2010 and Barbera & Hasso, 2013), the most important required characteristic was the accountant’s ability to provide useful advice and, despite that, the appreciation to give instructions and recommendations to the entrepreneur. Although understanding, trust and respect are the words that appeared repeatedly in this discussion, the entrepreneurs considered that expertise in financial matters was the first and most important necessity for an accountant.

4.2.2 Towards ideal management accounting information

The second question under discussion was: How can this optimal situation be reached? The discussion on this subject focused on the role of accountants and accounting services. The entrepreneurs wished for a strong long-standing relationship with their accountant or accounting office: *“An accountant should play a strong partner role; there should be someone who you can meet with regularly, and the accountant would direct the financial management ... and give tips and guidelines to the entrepreneur”*. The entrepreneurs thought that without mutual trust and understanding, accountants could not really help the entrepreneur in their managerial work. Furthermore, besides being experts in accounting, accountants must understand the industry and business model of the customer: *“It is important to understand that the accountant knows the company’s situation and industry and is able to really advise”*, *“At the very least, a strong customer relationship is needed, in which the accountant feels that the enterprise is genuinely a customer and understands the client’s business, being able to give alternatives to the actions to be taken and help the entrepreneur steer the company in the right direction”*. In addition, it was important for accountants to understand that entrepreneurs ultimately made decisions: the participating entrepreneurs disliked taking orders from their accountants.

Another wish for MAI was personalisation. Instead of formal routine reports, entrepreneurs wished to receive information suited to their own businesses as well as their individual knowledge and interests: ‘Different companies have different objectives and needs; the same reporting and the same kind of recommendations do not work for everyone’. This challenge should be considered by accounting firms and software developers.

A few informants compared the financials of enterprises with blood tests of humans. Basic financial reports could be made available along with guideline values and suggestions for remedies. They thought that this tool should be available now or become available in the nearest future, offering a range of opportunities, such as digitalisation, artificial intelligence, and sophisticated software. This need is related to the wish for more advanced MAI systems to serve entrepreneurs’ needs.

Thus, entrepreneurs seem to place heavy demands on accounting offices. Many of the comments made during the group discussion expressed dissatisfaction with the current state of MAI services. Therefore, the results show clearly that there is a significant service gap between the demand for and the supply of MAI services.

4.3 Accountants as management accounting information producers (accountant interviews)

In the interviews of three accountants, the target was to find out how the accountants see MAI usage and needs in small enterprises as well as their perception of the challenges in MAI utilisation by small-business entrepreneurs. Thus, the data sought to offer another perspective on RQ1 and RQ3. All the informants of this data had a contact surface with entrepreneurs as their customers and, therefore, had reasonable interpretations of entrepreneurs' challenges and expectations. Some electronic financial management web service or software was being used in all three accounting firms where the interviewed accountants worked. However, the level of their utilisation varied, and the web services were not used with all customers.

The interview data was analysed using open coding (Corbin & Strauss, 2008, p. 61): the data was read very carefully and divided into fragments, which were then compared with one another; next, the data was grouped into categories based on the subject and labelled according to a specific code or the summarising phrase.

4.3.1 Supply and demand of management accounting services

Table 22 summarises the supply of management accounting information mentioned by the interviewed accountants. When asked about MAI provided and offered to customers, all informants mentioned monthly basic reports from FA: they either delivered those income statements and balance sheets to the customers or informed their customers that these reports were available in the web service or software. This seemed to be the only generally offered type of MAI. Nevertheless, the accountants had an impression that their customers did not always examine those reports closely. The reports are presented in the form of statutory FA and may seem arcane for many entrepreneurs.

Table 22. Quotes from accountants' comments about management accounting information supply offered to entrepreneurs

Accountants' supply to entrepreneurs:

- *Financial reports are provided on a monthly basis and sent either via email or the customer is advised to view them in the system themselves.*
- *If an entrepreneur asks for further information in addition to monthly reports, it is preferable but not done without a separate fee.*
- *When the entrepreneur asks for further information from the accountant, the question is most commonly related to taxation. Other types of requests are exceptional.*
- *Consulting services are provided to all entrepreneurs, but most entrepreneurs are not willing to use them.*
- *Entrepreneurs in new-born companies need a lot of advice on practicalities but charging them for this advice is challenging.*

The automatically generated performance indicators are also available for the entrepreneurs who use the electronic software system provided by the accounting firm. However, the informants said that their customers hardly utilised this information: 'Monthly reports are available for the entrepreneur to view in our system. There is a lot of information in the system—if only entrepreneurs knew how to use it' (Interviewee C). Entrepreneurs may consider the information useless or too difficult to understand, and one of the informants said that the intention was to provide strategic financial management services to their customers, yet she had the impression that her small enterprise customers were not ready for such services.

Normally, the dialogue between the entrepreneur and the accountant is related to the routine tasks and FA practicalities. Accounting firms seek to offer their advice and MAI services to customers, but all the interviewed informants agreed that it was necessary to further develop those services to meet the needs of entrepreneurs. Accounting companies find it difficult to assure customers of the usefulness of consultation or MAI, whereas most entrepreneurs are keen on statutory accounting services only: 'In general, customers do not ask for any other information because they are afraid of an additional bill. They don't think more information is worth its cost, even if it is investment in the future' (Interviewee A).

Accounting companies do not aim to improve their services to entrepreneurs only to increase their own turnover or profits. The interviewed accountants found accounting duties more meaningful and rewarding if there was a confidential close

relationship with their customer. Based on their experience, they could help customers succeed: 'Long-term cooperation is fruitful and useful for both sides, which is certainly what all accounting firms strive for' (Interviewee A). However, building such confidential and long-standing relationships takes time and requires effort from both sides.

Entrepreneurs rarely contact their accountants to ask for MAI or advice. When entrepreneurs ask accountants for help, the questions are mostly related to taxation. Entrepreneurs in young enterprises tend to have more questions for their accountants, but even these questions are mainly about the practicalities in the financial matters: 'New-born companies need a lot of practical advice, but they would like to get it for free. It is difficult to draw a line between the advice provided for the basic charge and the advice offered at an additional cost' (Interviewee A). Some entrepreneurs can ask accountants to help them with budgeting or investment calculations, but these requests are quite exceptional. Interviewee B said that they sometimes helped some customers with the calculations for their funding applications (e.g. the EU funding).

As the entrepreneurs in the narrative data, the interviewed accountants noted that the interest in MAI was high in new enterprises. However, they also mentioned that this interest tended to wane in the course of time, possible due to entrepreneurs' lack of understanding of accounting terms and procedures. This interest may also decrease if the financial situation of the enterprise stabilises and the entrepreneur stops worrying about it: 'For example, in a small hair-dressing company, the entrepreneur can at first follow the financial situation closely, but if their operations stabilise and go well, the interest in financial information will fade' (Interviewee B). On the other hand, the financial situation of the company can also get so weak that the entrepreneur will want to deny the facts and, therefore, becomes unwilling to know anything related to the financials: 'When the business goes bad, many entrepreneurs lose interest in financial matters for a long time' (Interviewee B). The accountants also recognised the more analytic customer type, naming them the engineer type of entrepreneurs. Such entrepreneurs are analytic-minded and interested in figures, but accountants may find it difficult to serve them as they ask profound questions but do not necessarily know the principles of accounting. Thus, the accountants said they sometimes found it challenging to explain the grounds for the financial reports: 'It can even be difficult for the entrepreneur to understand that the balance in the bank account and the profit according to the financial statement do not mean the same thing. They have no idea of accruals, etc.' (Interviewee C).

There are also challenges in the interaction between accountants and entrepreneurs. According to the interviewed accountants, entrepreneurs rarely engaged accountants in their managerial work. One of the informants had the impression that accountants and entrepreneurs hardly ever discussed managerial issues with each other: 'Our customers do not ask accountants for help, for example, in the decisions related to investments or human resources management' (Interviewee C). However, according to interviewee B, that this could be different if there is a longer confidential relationship: in such cases, entrepreneur can ask accountants for advice, for example, about strategic planning, investment calculations or the challenges related to human resources. Interviewee C explained that they offered every customer a possibility to have a monthly conversation with the accountant about the content of the financial report and the overall financial situation of the customer's company, but many customers were not willing to take advantage of this offer; instead, they asked to send them the report. All the interviewed accountants expressed their willingness to support customers in their managerial work and hoped to have relationships that would enable such close collaboration. These responses further confirm the gap between the demand and supply of MAI services.

4.3.2 Accountants' view on obstacles to better management accounting information usage

When asked about the reasons for entrepreneurs' scarce use of MAI, the interviewed accountants told that all entrepreneurs tended to be interested in the financial situation of their enterprise; however, the relationship between entrepreneurs and accountants was often problematic. The informants named three areas that caused difficulties in this relationship. The first problem had to do with the expenses. All three accountants had the impression that entrepreneurs were often afraid to ask the accountant about anything just to avoid the costs: 'In general, the customer does not ask us for any additional information because they are afraid to receive an additional bill. If there were no costs, entrepreneurs would certainly take budgets, extra reports, etc. They'd be interested, but they don't see the importance of investing money. They don't think that additional information is worth its cost'. (Interviewee A) Similarly, accountant may hesitate to do or offer to do anything that would entail extra expenses for their customers. Interviewee C described that accountants were often the most satisfied and felt successful when the bill for the customer was as small as possible: 'An accountant is easily too afraid to increase the

cost for the customer. So, our work is not appreciated, and our contribution is downplayed'. (Interviewee C)

The second challenge is the views and doubts that entrepreneurs and accountants have about each other: 'Not all entrepreneurs find numerical information interesting' (Interviewee A). Furthermore, entrepreneurs may think that accountants, being experts only in accounting, had neither understanding nor interest in the industry or business of their enterprises and were, therefore, unable to help them: 'I consider the main reason [for being not interested in FI] is the entrepreneur's lack of knowledge and lack of understanding that [financial] consulting could bring benefits to the business' (Interviewee C), 'Customers' level of understanding of the financials and what systematic financial management means is not sufficient' (Interviewee A). Similarly, the accountants often had the impression that entrepreneurs were not interested in accounting issues and did not rely on accountants in managerial issues; rather, they only wanted accountants to fulfil legal obligations: 'It is easy [for the accountant] to think that the work is best done when an optimally small invoice is sent to the customer' (Interviewee C). To some extent, this doubt of entrepreneurs regarding accountants' ability to understand their business can be justified. The expertise of accountants may not be sufficient for advanced financial consulting: 'We also strive to provide controller or CFO services. However, this requires more highly trained staff' (Interviewee B).

The third problem is the communication and a lack of common language. Entrepreneurs may feel confused trying to understand accounting terms, concepts and outputs: 'Entrepreneurs, especially in small companies, cannot interpret calculations or the key figures' (Interviewee C). At the same time, accountants may not notice what entrepreneurs do not understand or not comprehend entrepreneurs' way of thinking. Furthermore, accountants serve many customers and should be able to communicate with all customers using the language that suits each individual customer best: 'It is challenging when companies are different, and the accountant should identify what each entrepreneur wants' (Interviewee C). Although this may be complicated to deal with in hectic working situations, such communication problems cause misunderstanding and augment mistrust in the relationship between accountants and their customers. Furthermore, tailoring MAI services to the needs of each customer may be a challenge, especially in larger accountancies: 'The challenge for a large accounting firm is to standardise its services. You cannot tailor the needed services to each customer, but you need to find good reports or calculations that are suitable for most customers' (Interviewee C).

Despite the difficulties, forging a confidential relationship between the entrepreneur and the accountant is fruitful for both sides: 'When a good and confidential relationship with the customer has been created, the provision and ordering of information takes place naturally, and the cost is no longer a threshold issue' (Interviewee B). Informant B also described that she had had confidential and close relationships with her customers, in which entrepreneurs treated her as a confidante, sharing their private worries and delights with her; in this kind of relationships, talking about the financials and managerial issues of the enterprise was easy. All the informants were of the opinion that both parties should invest in building a strong relationship: 'It would be important for the accountant and the entrepreneur to bond and understand each other' (Interviewee C). The interviewed had the impression that entrepreneurs did not always understand this and could be explicitly suspicious of accountants: 'Some customers are also very suspicious of their accountant' (Interviewee A). This behaviour, in turn, can make the accountant dislike the customer, so the cooperation becomes limited to minimum: 'If the entrepreneur is, for example, very eager to criticise the charges and is suspicious, the accountant also has a bad feeling about the client, and a good relationship cannot be created' (Interviewee B). Such misgivings are typical at the beginning of a new customer relationship, but confidence can be gradually gained if both sides invest in building it. As interviewee A said, 'building trust takes time and starts from zero in every customer relationship'.

5 REFLECTIONS ON FINDINGS

The previous chapter presented the findings of each data analysis phase. This chapter seeks to deepen the results of the dissertation, combining the findings from the study phases. The chapter is structured as follows. First, section 5.1 discusses MAI utilisation and significance to form an overview of the current use and needs of MAI in small enterprises. Secondly, the detected MAI hopes of entrepreneurs and accountants are analysed in section 5.2, using the narrative data and the results of the group discussion and the accountant interviews. Thirdly, to gain a deeper understanding of the role of MAI in small-business management, the respondents of the narrative data were categorised based on their perceptions of MAI in managerial work and their wishes for the ideal MAI. This categorisation, intended to provide a more in-depth answer to RQ1 and RQ2, is represented in section 5.3. Finally, the challenges in MAI utilisation and barriers for optimal MAI usage recognised at different phases of this study are reflected on and compared in section 5.4. The chapter concludes with a synthesis of the findings presented in this dissertation.

5.1 Management accounting information utilisation in small enterprises

The results of the explorative utilisation study describe the current state of MAI use and its significance in small enterprises. Based on this study, MAI tends to play a more important role in small enterprise management than expected. As presented in chapter 3.3.1, focusing on the utilisation study, both financial planning and monitoring methods are used relatively little. At least some of the financial planning methods are used on average a few times a year, and the financial monitoring or controlling methods are used on average monthly. The most typical financial planning methods mentioned in the utilisation study and their frequencies are on average as follows:

- cash-flow planning is done a few times a year;

- budgeting (including sales budgets) is done less often than a few times a year;
- pricing principles are modified less often than a few times a year;
- planning of financing or investments is done less often than once a year.

Thus, based on these results, financial planning in general tends to be done quite rarely in small business management. Budgeting, if used, is most typically done on a yearly basis, and the adequacy of liquidity in terms of cash flow planning is done a little more often. Considering the use of financial control methods, the most typical controlling methods and their frequencies on average are as follows:

- sales realisation is monitored less often than monthly;
- financial statements are monitored a few times a year, comparing them to the previous year of budgets is done even less frequently;
- accounts receivables are monitored monthly;
- cost controlling is done less often than monthly;
- profitability analyses are conducted a few times a year.

Given the small size of the surveyed companies and the knowledge from previous literature, these results are not surprising. The use of MAI is generally low in small enterprises, which focus on short-term essential issues, such as cash adequacy planning, sales monitoring, or accounts receivables. However, what is astonishing is entrepreneurs' view regarding the importance of these methods. Entrepreneurs perceive MAI to be of considerable importance in running their businesses. The average response regarding the importance of MAI for all financial planning and monitoring methods was between options 4 ('agree to some extent') and 5 ('strongly agree'). Bearing in mind that most of the surveyed companies were both small and young, the importance of MAI for managing the company is somewhat surprising finding compared to previous studies (e.g. Quinn, 2011, López & Hiebl, 2015, Armitage et al., 2016 and Pelz, 2019). Thus, despite not using MA methods extensively, the respondents of utilisation study considered the methods of financial planning and monitoring important in managing their companies. However, there is a significant gap between the current use and needs of MAI.

Deeper analyses of the results of the utilisation data revealed that the age of the company had some impact on MAI needs. Although financial planning and controlling information was in general much hoped for by small enterprise

entrepreneurs, the need for more MAI was less recognised in the youngest and smallest enterprises than in the other company age categories. The need for MAI also tends to increase depending on the number of personnel the company employs and is most pronounced in the companies with four to nine employees. Additionally, the need for support in financial controlling and the desires to have access to more sophisticated software was recognised mostly in the category of the oldest companies that had been operating for more than 10 years. These results correspond to the MA life cycle discussed in chapter 2.4.5 of this dissertation.

When I compared the perceived importance of MA methods with the use of these methods in the utilisation data, the results were partly surprising. In financial planning methods, the entrepreneurs tend to use more the MA methods they find the most important for managing their company, which is a default result. However, there is a clear difference between the most important and the most used MA methods of financial control. This is difference is summarised in Table 23.

Table 23. Financial planning methods: most used vs. most valued by the entrepreneurs

Financial planning methods found most important (top 3)	Financial planning methods used most (top 3)
Cash flow analyses or cash flow budgets	Cash flow analyses or cash flow budgets
Choosing pricing principles	Choosing pricing principles
Profit & loss budgeting	Profit & loss budgeting
Financial control methods found most important (top 4)	Financial control methods used most (top 4)
Monitoring profitability of goods/services sold	Monitoring accounts receivables
Inspection of the accuracy of pricing	Monitoring the realization of sales
Monitoring the realization of sales	Monitoring costs
Monitoring costs	Monitoring financial statements

As Table 23 indicates, in financial planning methods, the list of the most used methods is identical to the list of the methods found most important for managing the company. However, in financial controlling methods, there are differences between the lists: the most important monitoring methods (profitability analyses and the review of pricing criteria) are not found in the list of the most widely used methods; this can, possibly, be because the list of the most used MA controlling methods may not represent the list of the most readily available MAI, and the information that entrepreneurs would value the most is difficult to access and, therefore, used less.

Previous literature indicates that in small enterprises, MAI is mostly produced by FA for external reporting purposes, and this information is based on statutory bookkeeping (Granlund & Taipaleenmäki, 2005; López & Hiebl, 2015). However, based on the results of this dissertation, some information can belong to MA (e.g. budgets, profitability accounting and cost accounting) and be utilised reasonably often. Furthermore, even if the use is low, information can still be considered important for managing the company.

Entrepreneurs wish MAI to support both the controlling and planning functions of their companies, which indicates that small-business entrepreneurs consider planning and monitoring their business important and wish MAI to support these tasks. When asked about the functionality needs of MAI services, most entrepreneurs expressed that they would like to get personal advice from trustworthy accounting specialists and/or have access to an accounting information system. Thus, there is need both for financial consultancy services and advanced information systems in the small business context.

Similar to the findings of the explorative studies, the entrepreneur narratives indicate that the use of MAI is limited in small enterprises. However, some financial control methods are used in almost all studied enterprises, including the youngest companies, as most entrepreneurs did name some financial monitoring or controlling methods in their answers regarding MAI use. Table 24 below summarises the MA methods and MAI utilisation and production.

Table 24. MAI and MA methods' use and production in narrative data

MAI mentioned in narrative data	Producer of MAI		
	accountant	entrepreneur	bank
A) Controlling information			
Financial reports	provides		
Analysis information			generates
Sales volume		controls	
Bank balance		controls	
Cost control	provides	controls	
Follow up of budgets	provides	controls	
B) Planning methods			
Sales & cash estimates	system may provide	controls	
Workflow estimates		makes	
Pricing decisions		makes	
Budgeting	may help in		
Setting performance indicators		sets and controls	

The majority of the MAI used by the entrepreneurs was the control type of information for the daily operational management. This information is mainly provided by accountants as part of FA. The informants mostly mentioned that they themselves controlled the sales volume or bank balance, whereas other types of MAI, such as monthly or quarterly financial reports, were typically provided by external accountants. Moreover, some entrepreneurs utilised the analysis information that their bank generated and offered to their customers: this actualised information helped entrepreneurs observe the overall situation of their enterprises. A few entrepreneurs also admitted that they personally controlled some management accounting related to such factors as cost observation or the follow-up of the budget. As for financial planning, if implemented, most entrepreneurs tended to take care of it themselves. However, many respondents mentioned that they got sales and cash estimates from the web services their accountancies offer. Some entrepreneurs used accountants' help in budgeting. At the same time, many entrepreneurs wished to have access to help and consultation specifically to help their financial planning. Typically, the respondents of the narrative data mentioned both short time planning methods (sales, cash and workflow estimates, pricing decisions) and strategic planning processes (target setting in the form of budgeting or performance indicators) to be important in managing their companies.

Encouraging and significant findings were also obtained in the narrative data related to the importance of MAI. In the quantitative question of otherwise qualitative data, the total of 15 (out of 17) entrepreneurs found MAI either very or quite important for the success of their enterprises. This result corresponds well with the utilisation study. Thus, although previous literature argues that MAI use is scarce in SMEs, MAI tends to be, at least in principle, remarkably significant for SME managers. Furthermore, the narrative answers indicate that despite the importance of MAI, many entrepreneurs expressed dissatisfaction with their current financial management practices. They were displeased with either the information they received or more often their own limited ability to seek and utilise MAI in their managerial work. Corresponding to the findings of the utilisation study, this indicated that entrepreneurs were conscious of the potential benefits of MAI that they did not take advantage of.

The findings of the challenge study indicate that small-business entrepreneurs consider adoption of MA systems or services challenging in many ways. Resource constraints were presumably the most common reason preventing MA system adoption in the studied small enterprises. Resources, such as available time and funds, are typically limited and the knowledge about MA is in most cases vague in

SMEs. However, there are also other significant obstacles to MA utilisation that are less known from previous literature. For example, motivation of entrepreneurs or their personnel can also be a serious obstacle to MA adoption. Small-business entrepreneurs are often not particularly interested in financial matters, and it is easier for them to focus on such matter under the urgency of operational activities. However, the most disconcerting finding of the explorative study was a significant number of entrepreneurs who believed that MA investment was not feasible or appropriate due to a lack or unsuitability of MA systems or services available for their business context. This assumption of entrepreneurs can be explained by the fact that entrepreneurs may not have sufficient information about the available systems or the existing MA solutions may not meet the needs of small-business entrepreneurs.

Unlike the findings of the utilisation study, the entrepreneur narratives indicate that MAI needs and use may not depend on the life cycle phase of the company. On the contrary, in the narrative data, all three entrepreneurs of new enterprises considered FI very important for their managerial work, whereas in some enterprises that had existed for five to ten years or more, MAI use was still at a quite low level and was not considered important. Similarly, unlike what the utilisation data and the MA life cycle theories (e.g. Granlund & Taipaleemäki, 2005, Davila & Foster, 2007, Laureano et al., 2016) suggest, the narratives implied there was no noticeable correlation between the stage of MA system development and the age of the enterprise. On the contrary, there were relatively aged enterprises using very limited MA systems and young enterprises using quite sophisticated MA systems. Moreover, the interviewed accountants concurred that in many young enterprises, entrepreneurs were fascinated by all available MAI. Unfortunately, this interest tends to vanish over time. Established business operation and moderate financial success may lead to underutilisation of MAI: managerial decisions turn into routines, and the potential of MAI becomes lost.

Cooperation between entrepreneurs and accountants is often limited to routine tasks and practicalities of financial management. The most typical and often the only financial information accountants or accounting firms offer to their customers is monthly FA reports. From entrepreneurs' point of view, this information is not sufficient. There are problems related to both supply and demand for financial services. While FA is mandatory and produced to all customers of accountants at least on a basic level, MAI is produced only slightly, although entrepreneurs often find it important. Accountants do not seem to offer their services efficiently, and

entrepreneurs do not seem willing enough to ask them for help with their financial management.

Based on the accountant interviews, the accountants had a slightly different opinion on the use of MAI in SMEs than entrepreneurs. The accountants felt that many of their customers were not sufficiently interested in the information they produced and rather preferred to receive the required statutory financial services from accounting companies. Furthermore, the accountants noted that most entrepreneurs did not discuss their managerial issues with accountants; instead, the discussion was normally limited to the practicalities of accounting. These results indicate that entrepreneurs, as users of MAI, and accountants, as providers of MAI, are not on the same wavelength, and the demand and supply of MA services do not meet.

5.2 Potential use of management accounting information in small enterprises

To develop the content of MAI services and systems, it is necessary to understand what kind of information entrepreneurs hope to use and in what form this information should be provided to them. In this section, the wishes for MAI, as revealed in the utilisation study, entrepreneur narratives, entrepreneurs' group conversation and accountant interviews, are discussed and compared.

Based on the utilisation study, entrepreneurs required MAI to primarily support financial controlling and also provide assistance in financial planning. Furthermore, many entrepreneurs lacked advice on taxation and the practicalities of accounting. Similar to these findings of the wide quantitative data, the analysis of the entrepreneur narratives revealed that entrepreneurs lacked and hope to have information for both operational and strategic management of their enterprises. The operational management of the narrative answers could be mainly equated with the financial control and the strategic management with the financial planning methods of the utilisation study. When asked about MAI, the entrepreneurs expressed their need to be able to use it in their strategic management; the informants of the narratives wished for both analyses and statistics of the actual results (e.g. profitability at different levels) and forward-looking information (e.g. profit estimates or investment calculations) for the future. Several respondents of the narratives stated in their answers that they only received the past figures in the format of financial reports, such as profit and loss statements and balance sheets. In addition

to this control-related of information, they expressed their eagerness to know more about the prospects of their enterprises.

For the operational management and monitoring and control purposes, the needs expressed in the entrepreneur narratives mostly related to easy-to-follow reports and indicators of the actual figures of the enterprises. However, based on the narratives and entrepreneurs' group conversation, despite the participants' awareness of the need to improve their financial management, many were not able to phrase their needs for better MAI. Instead, many entrepreneurs spoke about general financial advice or consulting, which was probably due to the entrepreneurs' vague knowledge of accounting and finance-related issues, which were discussed in the literature overview (chapter 2.2.3). The entrepreneurs may not have been aware of the possibilities MAI could offer their managerial work. Furthermore, a lack of interest in financial matters could also spur the need to receive more consultative information instead of pure figures.

When asked about the MAI the entrepreneurs would like to use in the ideal situation, the answers in the narratives were very realistic and practical. The analyses of costs and profitability were hoped both for daily operational management and strategic purposes. To support their strategic management, the informants wished for re-analysed, thorough information about the present situation of their companies. Such information would be useful for strategic planning. For the daily operational management, the informants hoped to have more follow-up basic information in a form that would be easy to absorb. The entrepreneurs also wished to have more MAI to support them in developing their businesses (e.g. to plan investments or improve profitability).

Based on the entrepreneurs' group conversation about the opinions on the ideal FI, the entrepreneurs mostly hoped to have MAI that would be both accessible and useful for their managerial work. Since most of the entrepreneurs did not find financial matters particularly interesting and managing the company demands much work, they wished for access to the information that was presented as closely as possible but was still easy to understand. They did not find the basic reports of FA useful enough but spoke about the key performance indicators or fitness tests of enterprises instead. Such pre-edited MAI would help them quickly understand the company's financial situation.

It was interesting to analyse and compare the opinions on MAI use and challenges that were expressed by the entrepreneurs in the group discussion and by the interviewed accountants. Table 25 below illustrates the main expressions the respondents used in the data, revealing a discrepancy between the views of

entrepreneurs and accountants on the ideal MAI (RQ2). The table is divided into two sections: the upper section lists the comments of the entrepreneurs and accountants related to the content of the ideal MAI are listed; the bottom section contains similar comments on the functionality of MAI services.

When discussing MAI utilisation in the ideal world, the entrepreneurs named a few particular wishes for the content of the needed information, such as the cash flow, key figures and financial analyses. However, the most prominent hope tended to be the need to go one step further: instead of merely receiving MAI, the entrepreneurs wished to receive forward-looking advice and tips on how to improve their businesses based on the provided information. The accountants also perceived inadequacy of the current services, recognising that their customers wished for more discussion and additional information beyond basic financial reports; however, the expressions used by the accountants were not as specific and detailed as the wishes expressed by the entrepreneurs. This indicates that accountants may not be fully aware of the needs entrepreneurs have for management accounting information.

Table 25. Entrepreneurs' and accountants' expressions about ideal MAI use

	Entrepreneurs' group discussion	Accountant interviews
Ideal MAI (->RQ2)	<p>Comments related to content of ideal MAI:</p> <p><i>The first thing to do is to get the basics right, i.e. monthly income statements and, on the side, key figures + analysis from the accountant.</i></p> <p><i>Information should be in real time, e.g. cash flow.</i></p> <p><i>It would be better if you could determine the need for FI yourself and then ask for specific information.</i></p> <p><i>FI should be a driver, i.e. the information received could be used to go into more detail and make necessary calculations.</i></p>	<p>Comments related to content of ideal MAI:</p> <p><i>It's not just the crabs and the indicators that make the entrepreneur blissful.</i></p> <p><i>Even with a little extra input, you could make good additional reports.</i></p> <p><i>We also strive to provide controller or CFO services. However, this requires more highly trained staff.</i></p>
	<p>Comments related to functionality of MAI:</p> <p><i>The accountant could give tips and instructions to the entrepreneur.</i></p> <p><i>As an entrepreneur, you would like to know the essentials and that the accountant would tell you what is essential to take into account.</i></p>	<p>Comments related to functionality of MAI:</p> <p><i>Presumably, customers hope for more oral feedback and discussion</i></p> <p><i>As an accounting firm is under an obligation of confidentiality and the entrepreneur needs a listener, the accountant can naturally act as a good listener.</i></p>

All the interviewed accountants emphasised the importance of having a strong, confidential, and open relationship between entrepreneurs and accountants. In such relationships, cooperation is easy and to the best advantage for both sides. However, there are several barriers in building such a confidential relationship. According to the accountants, the biggest obstacle is the commercial relationship and the

customers' limited financial resources. Cooperation with accountants is often limited to the essential tasks and, for fear of additional costs, entrepreneurs avoid anything extra. In this context, it is not possible to achieve the atmosphere that both sides would ultimately like to achieve. Furthermore, there are challenges in communication, and the impression entrepreneurs and accountants have about each other is problematic.

The interviewed accountants felt that at present they did not support their customers much in their managerial work but would be more than willing to do it in the future. This willingness is partly due to their ambition to develop their business and partly because accountants consider their work more rewarding if the relationship with their customers is good and they feel they are being genuinely useful for their customers. Accountants face many challenges in relationships with their customers, such as entrepreneurs' unwillingness to pay for additional services and a lack of confidence or common language between accountants and entrepreneurs. However, all of the surveyed accountants also had encouraging experiences of fruitful and profitable for both sides collaborative relationships with their customers.

When asked about the form in which the respondents would like to receive MAI, the answers were slightly different. The explorative study indicates that most entrepreneurs would like to both take advantage of advanced information system and receive personal guidance or consulting. However, there were also as many respondents who felt they needed either information system or consultancy. Personal guidance or consultancy was requested slightly more compared to those who would rather rely on information system. The absolute majority of the respondents felt that both information systems and personal services were needed. However, in the entrepreneurs' group conversation, it became apparent that the opinions of the entrepreneurs split explicitly into two groups. Most respondents wished for personal guidance and consultation in their financial management and would, therefore, wish for a close relationship with their accountant. They hoped for a financial consultant, who would reliably and in plain language provide them with essential information on the financials of their enterprise and consult them in financial matters. Thus, this group was more willing to outsource analysing the financials to external experts instead of studying the reports or financial figures themselves. Moreover, this group of entrepreneurs also wished for concrete advice on the ways to improve their business performance in the future. On the other hand, the other, significantly smaller, group of entrepreneurs wished for access to business intelligence software which would enable them to analyse the financial situation of

the enterprise at any required time. These entrepreneurs saw the role of accountants as less essential. Figure 17 portrays the different basis entrepreneurs perceived as the drivers and sources of MAI utilisation.

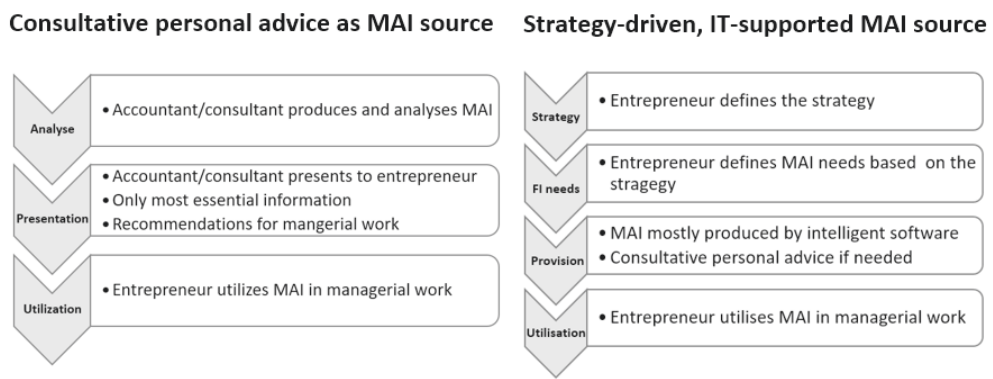


Figure 17. Different premises of management accounting information provision

As Figure 17 illustrates, it is important to understand, that entrepreneurs differ in management accounting information utilisation and the manner in which they see the role of MA. Thus, it is not possible to define a single ideal model to produce MAI for the managerial work of entrepreneurs. Instead, this finding raises a fundamental question: Is it enough if the accountant points at MAI to the entrepreneur, or should the strategy and targets set by the entrepreneur determine the needs for MAI?

5.3 Categorisation of entrepreneurs as management accounting information users

While reading and coding the narrative data, especially from the point of view of RQ1 and RQ2, certain uniformities began to emerge in the answers. Eventually, I discovered **four types of entrepreneurs with different views on the role of management accounting information**. The first, and most obvious, group comprised the entrepreneurs who had only recently started their businesses. The three new entrepreneurs included in the data had quite similar ideas about the importance and exploitation of MAI. So far, their utilisation of MAI had been very limited, but they all expressed similar thoughts about its usefulness and potential, especially in the future of their companies. Based on both the situation of the

company and the entrepreneurs' similarity as MA information users, I named this first category as **forward-looking beginners**. The next individual group were the entrepreneurs of the companies undergoing the development phase. These entrepreneurs described some of the ongoing development or investment projects and shared that especially in this situation they needed more and better MAI. The thoughts were somewhat similar to those of the entrepreneurs from the first category, but these entrepreneurs had more experience in managerial work and utilisation of MAI. I named the second category **demanding developers**. Next, a few quite sophisticated MAI users stood out from the data. These entrepreneurs with quite analytical financial thinking formed the third category that I called **profound analysts**. They were already using MAI rather extensive and, above all, had sophisticated wishes for more detailed FI. The fourth and last category that I discovered from the data were the entrepreneurs who ran the companies that tended to succeed and grow relatively well despite the scarce use of MAI. These entrepreneurs recognised their insufficient financial management but did not have resources or motivation to improve it. I named this category **discontented underachievers**. This name also refers to the entrepreneurs' personal dissatisfaction with their lack of ability to utilise FI and the fact that those enterprises succeeded relatively well despite vague financial management.

There were three entrepreneurs who were excluded from the categorisation due to their divergent answers. One of them had just started as an entrepreneur in an existing company and found MA important, expressing interest in financial reports, but so far had not yet used MAI or discovered their own personal information needs and opinions. The second informant was mainly responsible for the sales in a joint enterprise and was somewhat unfamiliar with the financials. This entrepreneur considered MAI important but relied on the co-owners in financial issues. His answers could have been included in the demanding developers' category, but as his answers mostly relied on the descriptions of how other shareholders utilise MAI rather than his personal views, I decided to exclude this entrepreneur's answers from the categorisation. Finally, the third unique entrepreneur in the sample had run the enterprise for a considerably long time and expressed that MAI was not used in their stable business. This informant indicated that a long experience and personal philosophy let the management use a rule of thumb and MAI did not play a role in managing the company. Thus, this answer did not fit any category and was, therefore, omitted.

The entrepreneurs in these different categories had their own background and opinions but shared a similar perception on the role of FI in their managerial work.

Figure 18 presents the formation of this categorisation. Subsequently, these categories and the reasoning for each category are presented. I have also formed a typical narrative of the role of MAI in each category based on the typical viewpoints and expressions shared by the informants.

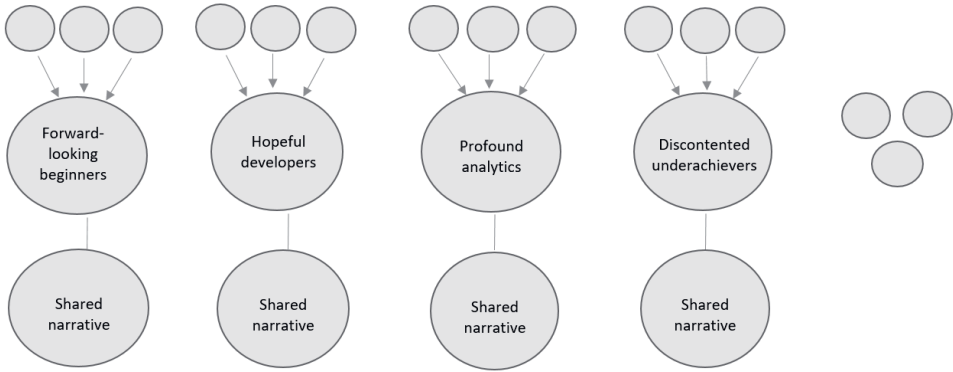


Figure 18. Four categories of entrepreneurs as management accounting information users

Each of the four categories and the reasoning for them are next represented. Those expressions used in narratives that have interpreted to refer to certain category are listed as quotations from original data in tables 26-29. Each table covers one category and represents the expressions used when entrepreneurs described their opinions about importance or potential as well as practices of MA. These themes are further grouped according to present utilisation (referring to RQ1) and future wishes for MAI utilisation (referring to RQ 2). Finally, a summarizing description, kind of shared narrative is written for each category. Despite the entrepreneurs were not actually asked about the challenges in MAI utilisation, these themes are touched on the answers to question about needs for better MAI utilisation. Thus, also the challenges recognized in each category are shortly discussed referring to RQ3.

5.3.1 Forward-looking beginners

This group consists, among other, of new-born entrepreneurs with minor experience in managing the company. Based on their expressions regarding the importance or potential of MAI, the entrepreneurs of the forward-looking beginners' category (Table 26) considered MAI very important, and even essential, for their managerial

work. The respondents said that they needed MAI to support decision-making and future planning. They expressed their belief that FI could better place their companies and improve their chances to succeed. However, so far they had utilised MAI only to a very limited extent, justifying it by the early stage of their enterprise development.

Table 26. Expressions about MAI utilisation: froward-looking beginners

	Present MAI utilization (-> RQ1)	Wishes for better MAI utilization (-> RQ2)
Importance/ potential of MAI:	<p><i>It's useful. I do not believe in success without a plan, a goal.</i></p> <p><i>If the business is not profitable, it is not worth continuing. FI gives direction and purpose to our activities! In other words, FI is very close to the company's mission, considering the practical purpose.</i></p> <p><i>As far as management is concerned, I believe that FI helps to make and prioritise one's own decisions and to seek the future direction of the company.</i></p> <p><i>Based on current financial information, you can make decisions about the future, otherwise you will be just guessing.</i></p>	<p><i>... and there must be indicators for monitoring.</i></p>
MAI usage:	<p><i>My business is in such an early stage that no significant financial figures have yet accumulated.</i></p> <p><i>At this very beginning, I decided to collect data on incomes and expenses in an Excel file.</i></p> <p><i>The company has just been established. So far we haven't yet used financial information for anything other than doing statutory bookkeeping.</i></p> <p><i>Our operations are still in the very early stages... At the moment, we owners only monitor bank balance and billing status.</i></p>	<p><i>To help with my day-to-day management, I need a basic cash flow calculation and to build easy measures.</i></p> <p><i>Our accountant won't start until the turn of the year, then we'll get more accurate and aggregated FI.</i></p> <p><i>Some kind of information in the form of graphs on the development of profitability.</i></p> <p><i>I need simple information about who hasn't paid their bills yet.</i></p> <p><i>In ideal situation I would have continuous access to up-to date information on expenditure and revenues per customer, by system, by industry.</i></p>

Their needs for MAI utilisation were related to forward-looking MA to support the development of the company. They did not speak about challenges or obstacles to MA utilisation, probably because they had not identified such problems yet. However, the responses indicated that the available MAI did not meet their needs in the best possible way. These entrepreneurs perceived the role of MA mainly as

support in the management and further development of the business. The available MAI does not fully meet this need.

5.3.2 Demanding developers

In the demanding developers' category (Table 27), the main commonality of the entrepreneurs is that their companies are in the phase of change or development. These entrepreneurs spoke about investments, development or change in the mode of action. Their present use of MAI varied, but they clearly indicated their hope to improve MAI use in their managerial work. These entrepreneurs believed that improved MAI utilisation could help them overcome the challenges of change. However, they were also puzzled about how their financial management could be implemented. Their wishes for MAI were of general nature and indicated that general support was required for the financial management and content of MA services rather than any specific MAI.

The expressions used in this category related to the entrepreneurs' dissatisfaction with the current MAI utilisation and optimism for the future. The underlying challenges mainly related to the entrepreneurs' knowledge and unskilfulness in financial management. Some responses also contained references to peculiar characteristics of the businesses that affected the use of MAI. Furthermore, the entrepreneurs also indicated that they were dissatisfied with the content of the services they received from accountants. Similar to the previous category, these entrepreneurs perceived the role of MAI mainly as support for developing their businesses.

Table 27. Expressions about MAI utilisation: demanding developers

Expressions about:	Present MAI utilization (-> RQ1)	Wishes for better MAI utilization (-> RQ2)
Importance/ potential of MAI	<p><i>Financials became interesting and significant as soon as I started my own company.</i></p> <p><i>The importance of financial information is growing the deeper we get into the business.</i></p> <p><i>Can a company be developed if you are not aware of the financial situation?</i></p> <p><i>Financial information is useful when planning investments and reducing costs.</i></p> <p><i>At the moment I'm mainly interested in how much extra I can use for marketing etc.</i></p> <p><i>FI plays an obvious role in operational management when planning projects, assessing profitability etc.</i></p> <p><i>It is useful to see how sales develop and plan campaigns for the next year.</i></p> <p><i>The company is so small that following financials is easy...I need FI when planning how much I can have an outside employee to work.</i></p>	<p><i>We have not made sufficient use of the financial information that has been available.</i></p> <p><i>We don't always understand each other with our accountant or she can't answer my questions.</i></p> <p><i>It seems that (easily) accessible financial information is very limited to the basics.</i></p> <p><i>If someone more qualified than me would like to show me how they would manage my company's finances and what metrics to follow and what kind of solutions to make, I would love to listen.</i></p> <p><i>All the information comes from the accountant, but there's not much.</i></p>
MAI practice	<p><i>I follow sales and purchases. It's also useful to know profitability of product categories.... Right now I'm planning to start a web store.</i></p> <p><i>I follow sales and profits. We have just made a mode of actionFI is used for planning and anticipating.</i></p> <p><i>Now when the business is growing we need to be more on the ball also in financials.</i></p> <p><i>When planning development projects, you need to know what the financial situation is like and also how it is expected to develop.</i></p> <p><i>We haven't really used FI.</i></p>	<p><i>... for investment decision I need information on how much own funds I can invest.</i></p> <p><i>I desire knowledge about hands-on management through FI and how to better anticipate and thus help to succeed.</i></p> <p><i>I am unfamiliar with developing the company by making bigger investments. It would be nice to hear about such opportunities in practice.</i></p> <p><i>Would be nice to see some graph about how the gigs divide. Based on that I could plan sales for the quiet months.</i></p> <p><i>In the future, we will look at the figures in more detail.</i></p>

5.3.3 Profound analysts

The striking peculiarity of the entrepreneurs from the profound analysts' category (Table 28) is their relatively advanced and detailed utilisation of MAI. Both the present MAI utilisation and the needs of these informants pointed to a high level of

financial understanding. However, although these entrepreneurs already utilised MAI extensively, they still did not consider this information sufficiently useful. They hoped for more analytical, in-depth MAI to support their managerial work and hoped to receive detailed information, such as mediation profitability of the marketing and sales, the analysis of the sales and competitors as well as a thorough analysis of profitability of various products or services.

Unlike the two previous categories, the entrepreneurs of this category were not discontent with their financial management; rather, they expressed their dissatisfaction with the available MAI and wished for more useful information to support their managerial work. Thus, the challenges mostly related to the content and insufficiency of the available MAI. This finding suggests that the systems or services available do not provide the kind of information these entrepreneurs would need.

The entrepreneurs of the profound analysts' category did not speak about the growth or development of their businesses. Instead, they wished to have MAI that would help them further understand factors influencing the profitability of their companies. Thus, the role of MAI was perceived mainly as support in further analysing and developing the profitability of the company.

Table 28. Expressions about MAI utilisation: profound analysts

Expressions about:	Present MAI utilization (-> RQ1)	Wishes for better MAI utilization (-> RQ2)
Importance / potential of MAI	<p><i>It's a single-person company, so I use FI to manage my own work.</i></p> <p><i>Financial information is important for growth, solvency, expansion, risk management.</i></p> <p><i>In general, I see knowledge of the financial situation and cash management very important. ...In the everyday life of our company, financial information plays a rather small role.</i></p>	<p><i>I have not found the information received in the profit and loss statement useful.</i></p> <p><i>Many automatic measurements...give our company top credits in terms of profitability, but most of the time these analyses are pretty stupid and ignore the specifics of our business. (9).</i></p>
MAI practices	<p><i>The active use includes a cash flow statement, from which I can see, for example, my project situation for the coming months. It helps to understand the work situation and thus also serves as a sales tool.</i></p> <p><i>Each year, our bank provides an analysis based on our financial statements. This analysis.... shows relevant comparisons with other companies in the same sector.</i></p> <p><i>In our company, useful and measurable FI figures have been realised in margins and inventory turnover. In addition to this, we measure a lot of marketing figures.</i></p> <p><i>We follow profit margins of the past few years and, based on these figures, we simulate how much we would have to buy in order to achieve a certain turnover. This also serves as a pricing tool.</i></p> <p><i>The company has an analytical tool with a view to predict future short-term turnover as accurately as possible.</i></p>	<p><i>It would be interesting to obtain information on the turnover and operating profits of competitors operating in the same region. Similarly, the industry's total turnover in different cities and in the whole country.</i></p> <p><i>To support strategic management, I desire information on the profitability of different services.</i></p> <p><i>Customer acquisition indicators. What is the conversion relationship in marketing to existing customers versus new customers?</i></p> <p><i>It would be interesting to get information about the way in which each customer has entered the company and after what kind of investment of time/money. This would help to focus own use of working hours more efficiently.</i></p> <p><i>All information is available if you want to calculate or find out by yourself.</i></p> <p><i>From time to time, the accountant responds too slowly and the problem of the moment cannot be solved.</i></p>

5.3.4 Discontented underachievers

The entrepreneurs of the discontented underachievers' category (Table 29) use only basic FI for the operational management of their companies, which are already in the stable stage. These enterprises are relatively successful, despite their scarce utilisation of FI. The entrepreneurs expressed that they found MAI important, although they did not utilise it much. They recognised the need for more predictable and analytical MAI usage and mentioned, for example, the need to enable budgeting, which they had not yet worked out due to a lack of time.

Table 29. Expressions about MAI utilisation: discontented underachievers

Expressions about:	Present MAI utilization (-> RQ1)	Wishes for better MAI utilization (-> RQ2)
Importance /potential of MAI	<p><i>I believe that financial information is absolutely essential precisely for the sake of predictability. It would be impossible for us to anticipate anything ... without having factual information on the future financial situation.</i></p> <p><i>Without proper financial management, business is not a business. The purpose of the company is to make a profit.</i></p>	<p><i>If we had the resources to spend more time on this, I believe that we could to improve our profitability fairly quickly and make even better investment decisions.</i></p>
MAI practices	<p><i>From our accounting firm, I get all the financial information I need. The monitoring includes, for example, the account's real-time balance and forecast for balances upcoming two weeks based on sales and purchase invoices.</i></p> <p><i>From the program, I get all the financial issues, such as day-to-day cash, sales and accounts payable.</i></p> <p><i>I follow the monthly report on turnover, purchases, sales.</i></p> <p><i>We have our own financial observation, based on which we monitor the development of the cash situation and lead everyday sales. "Bigger" image we follow on the basis of our accounting firm's monthly reports.</i></p>	<p><i>So far, I have not done budgeting at all, because perceiving the financials is my own weakness. Budgeting would be needed to support both operative and strategic management.</i></p> <p><i>It would also be important for me to be informed at cost structure of each branch, i.e. how much work should be done at each site in order to be in the situation +0. I just haven't got it done.</i></p> <p><i>Financial planning is on a weak note for us. Budgeting is an opportunity we have not introduced in our financial management system.</i></p> <p><i>In order to be able to lead our strategy more strongly, we should have more resources to continuously review financial figures as part of decision-making.</i></p> <p><i>The biggest help to support day-to-day management would be more accurate calculations of project-specific profitability and cost structures.</i></p> <p><i>The accounting firm has done a lot of errors which have unfortunately affected our operations. For example, unexpected tax expenses due to incorrect calculations. Similarly, I have given feedback on situations where I have not been adequately informed about the new practices.</i></p>

The entrepreneurs also referred to their personal unskilfulness and a lack of motivation in financial issues.

The satisfactory financial situation of the companies is likely to account for the scarce use of MAI. As the businesses are reasonably profitable at present, the demand for more advanced MAI is not enough to drive the entrepreneurs to

improvements but leads to underachievement in MAI utilisation. The entrepreneurs of the discontented underachievers' category did not speak much about developing their businesses; rather, they wished to have access to MAI that would help them in the operational and strategic management and decision-making. Thus, the role of MAI was perceived mainly as support in the managerial work.

A deeper analysis of the narrative data also supported the four categories of entrepreneurs as MAI users, which are presented above. Although the entrepreneurs of these categories had partially different viewpoints on FI, they all perceived the role of MAI as support in running the company and improving its success. Figure 19 illustrates the role of MAI in each entrepreneur category. In the forward-looking beginners' category, the entrepreneurs hoped to have support to the daily operational management of their companies and develop their new businesses. In the demanding developers' category, MAI is needed specifically to support the entrepreneurs in developing their businesses, whereas the profound analysts hoped to have detailed MAI to improve the profitability of their companies. The entrepreneurs from the discontented underachievers' category did not express any requirements for MAI that would help them develop their businesses; rather, they wished to received advice on the operational and strategic management and decision-making.

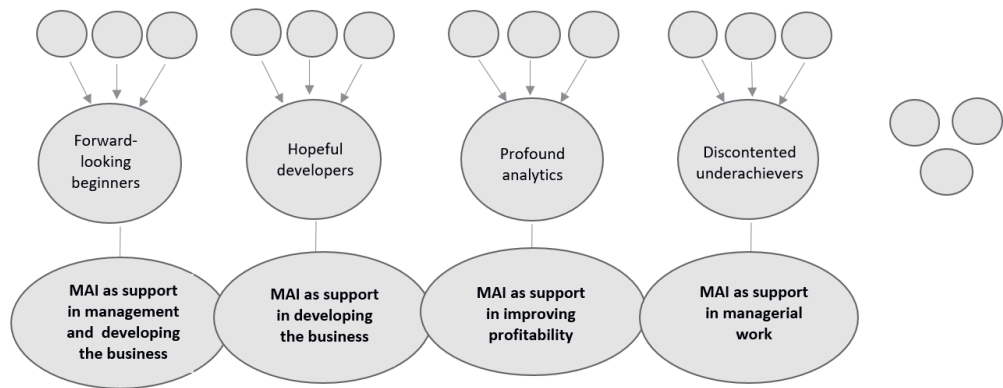


Figure 19. Role of management accounting information in different entrepreneur categories

5.3.5 Criticism and reflection on categorisation

I found forming the categories mainly clear and maintain that the four categories represented above describe the different views entrepreneurs have about the role of

MAI. There is no doubt that the state of the company affected this categorisation; however, the interpretation of the entrepreneurs' wishes for MAI and their views on the role of MA were the overriding factors. Therefore, the size and age of the companies were not the main factors that were considered when forming the categories. The first two categories are similar in their optimism for the future and partly consistent vision regarding the role of MAI. Thus, these categories could have been combined. However, as the new entrepreneurs in this data had distinctively identical views on the role of MAI and the needs of the newly established companies and deserved special attention in MA literature, I decided to keep the entrepreneurs of newly founded companies separate from those who had already operated for some time.

The categorisation of the entrepreneurs was not difficult, but for some respondents, the demarcation was rather challenging. The decisive factor in the categorisation was the entrepreneurs' interpretation of the role of MAI. For example, one respondent could also have been included in the discontented underachievers' category based on their very low use of MAI, but because the respondent's answer expressed the role of MAI as the support of the business growth (sales) and signified clear dissatisfaction of the entrepreneur, the answer was included in the demanding developers' category.

5.4 Challenges in management accounting information utilisation

To move closer to the ideal situation, it is important to identify the challenges that currently hinder the optimal use of MAI among entrepreneurs. In addition to the challenge study concentrating mainly on interpreting and categorising the voiced obstacles hindering MA system and service adoption in small enterprises, challenges in MA utilisation and a service quality gap arose from the phases of the qualitative studies. This final section of the findings chapter analyses the findings related to the obstacles in MAI use discovered at the different phases of the study to validate the results and form a synthesis of challenges small-business entrepreneurs experience and that hinder the optimal MAI use, causing this service quality gap.

The findings of the challenge study indicate that small-business entrepreneurs found adoption of MAI systems or services challenging in many ways. Resource constraints were presumably the most common reason preventing MA system adoption in the studied small enterprises. Resources, such as time and funds, are

typically limited and the knowledge about MAI is in most cases vague in SMEs. However, there tend to be also other serious obstacles for MAI utilisation that are less known from previous literature. For example, the motivation of entrepreneurs or personnel can obstruct MA adoption. Small-business entrepreneurs are often not particularly interested in financial matters, and it is easier for them to focus on such matter under the urgency of operational activities. Secondly, there tend to be organisational challenges related to the peculiar nature or the small size of the business. Perhaps, the most disconcerting finding of this explorative study was, however, that a significant number of entrepreneurs believed that MA investment was not feasible or appropriate due to a lack of available MAI systems or services or their unsuitability for the particular business context. This observation raises the following question: What is the reason for this assumption entrepreneurs tend to share? Entrepreneurs may not have sufficient information about the available systems, and it is uncertain whether the existing MAI solutions meet the needs of small-business entrepreneurs.

When comparing the results of the challenge study and the in-depth study phases (entrepreneur narratives, entrepreneurs' group conversation and accountant interviews), the experienced challenges tend to be mostly similar. The typical explanatory factors are the obstacles related to inadequate resources and knowledge base of the entrepreneurs as well as their lack of motivation to familiarise themselves with financial issues. In this respect, the results of the explorative and in-depth studies are consistent. In the qualitative studies, the respondents, however, did not find organisational issues to be as frequently challenging in MA utilisation as the challenge study indicated. The obstacles related to the specific nature of the businesses were quite typical, explaining the scarce use of MA in the challenge study; yet, such challenges only rarely arose in the entrepreneur narratives and were not mentioned at all in the entrepreneurs' group conversation or accountant interviews. Instead, other three obstacle categories of the challenge study (systems or services, personnel, and resources) were emphasised equally in the qualitative studies.

The analysis of the challenges of MAI services in the light of the entrepreneurs' group discussion and interview data reveals that the views of entrepreneurs and accountants differ from each other. Table 30 below illustrates the main expressions the respondents used in these different parts of the data, revealing the discrepancy between the views of entrepreneurs and accountants.

Table 30. Expressions about obstacles for ideal MAI used by entrepreneurs vs. accountants

	Entrepreneurs' group discussion	Accountant interviews
Obstacles for ideal MAI (->RQ3)	<p>Challenges related to systems or services:</p> <p><i>A lot of data is collected, but there should be more relevant signals about the financial situation.</i></p> <p><i>The system could get to know what it is necessary for each entrepreneur to follow.</i></p> <p><i>Different companies have different objectives and needs, the same reporting and same kind of recommendations do not work for everyone.</i></p>	<p>Challenges related to systems or services:</p> <p><i>Challenging when companies are different, an accountant should identify what each entrepreneur wants.</i></p> <p><i>The challenge for a large accounting firm is to standardize services. You cannot tailor the services that are desired to each customer, but you need to find good reports or calculations that are suitable for the majority of customers.</i></p> <p><i>We also strive to provide controller or CFO services. However, this requires more highly trained staff.</i></p>
	<p>Challenges related to personnel:</p> <p><i>Entrepreneur is not particularly interested in financial matters.</i></p> <p><i>As an entrepreneur you don't always know how to ask the right questions.</i></p> <p><i>Understanding is important, that the accountant knows the company's situation and industry and is able to really advise.</i></p> <p><i>At the very least, a strong customer relationship is needed.</i></p> <p><i>The accountant should not change frequently, otherwise there is no mutual knowledge.</i></p>	<p>Challenges related to personnel:</p> <p><i>Not all entrepreneurs find the numerical information interesting.</i></p> <p><i>Some customers are also very suspicious of their accountant.</i></p> <p><i>If the entrepreneur is e.g. very snoring out to criticise the charges and is suspicious, the accountant also has a bad feeling about the client and a good relationship can not be created.</i></p> <p><i>Entrepreneurs, especially in small companies, cannot interpret calculations or key figures.</i></p> <p><i>There is a lot of information in the system, if only the entrepreneur knows how to look at them.</i></p> <p><i>The level of understanding of the financials, what systematic financial management means, is not sufficient for customers.</i></p>
	<p>Challenges related to resources:</p>	<p>Challenges related to resources:</p> <p><i>Entrepreneurs are afraid of additional bill.</i></p> <p><i>If there were no costs, entrepreneurs would certainly also take budgets, etc. extra reports. So they'd be interested, but they don't see the importance of investing money. Customers don't think more information is worth the cost.</i></p> <p><i>It is difficult to draw a line between the advice provided by the basic charge and the advice offered at an additional price.</i></p> <p><i>An accountant is easily too afraid of more costs for the customer. One's [accountant's] own work is not appreciated, but own contribution is downplayed.</i></p>

The challenge expressions of the informants are grouped to follow the categorisation of the challenge study. It can be noted that the informants of the group discussion and accountant interviews did not mention organisational challenges, but other challenge categories that were found in the challenge study (systems, personnel and

resources) were also mentioned in those answers. However, the emphasis on these challenges varied significantly. Entrepreneurs wish for MAI tailored to the needs of each enterprise and entrepreneur, while accountancies want to standardise their services to meet the needs of the majority of their customers. The challenges experienced in relation to personnel and cooperation were more consistent. Insufficient financial knowledge of entrepreneurs was recognised by both groups, as is the importance of having a confidential relationship. In terms of resources and costs, the opinions clearly differed: accountants considered fear of costs to be the most serious obstacle to improvements in MAI utilisation, while entrepreneurs did not mention costs at all but indicated that the kind of MAI they would need and would, perhaps, also be willing to pay for was not available.

Table 31 below summarises and compares the challenges in utilisation of MAI that emerged during this dissertation study. The challenges indicated in each of the four entrepreneur categories are linked with the MA adoption obstacle categories of the quantitative research presented earlier in chapter 4.2. Furthermore, the challenges that emerged during the other qualitative study phases, including the entrepreneurs' group conversation and accountant interviews, are also included in this comparison.

Table 31. Management accounting usage obstacles highlighted in different parts of data

MAI usage obstacles	Obstacle types of explorative challenge study:			
	Organisation	Systems/ services	Personnel	Resources
Qualitative data: Entrepreneur narratives:				
Forward-looking beginners		mild		mild
Demanding developers		moderate	severe	
Profound analysts		severe		
Discontented underachievers		severe	severe	moderate
Qualitative data: Group conversation:		severe	severe	
Qualitative data: Accountant interviews:		moderate	severe	severe

All challenge categories of the explorative challenge study, including organisation, systems, personnel, and resources, can also be found in the narrative data. In the entrepreneur category of forward-looking beginners, the challenges in MAI usage were not named explicitly. However, the entrepreneur narratives of this category indicated that the entrepreneurs did not have possible MAI and financial service they

would need. Thus, it can be concluded that there are some milder challenges related to the services and resources in the youngest companies. The entrepreneurs of the second category, the demanding developers, indicated severe challenges that concerned their own knowledge and unskilfulness in financial management. Such challenges refer to the personnel category. Furthermore, these entrepreneurs were also relatively dissatisfied with the content of the accounting service available, and their responses also included a few references to the organisational factors, such as the small size of the company, affecting their financial needs. In the third category, the profound analysts, the severe challenges the respondents named were mostly related to the shortcomings in the available systems or services. These entrepreneurs have knowledge about the financials and are also aware of what kind of information would be useful. However, they find that the kind of MAI they needed was hardly available, indicating that the MA systems or services did not meet the needs of their business. In addition to these shortcomings in the available systems and services, they also indicated moderate organisational challenges, revealing that the MAI they received did not suit their business model in the best possible way. In the last category, the discontented underachievers, the challenges were the most significant in terms of services, personnel and resources. The respondents emphasise severe shortcomings in their own financial knowledge and motivation to familiarise themselves with financial management. They also spoke about moderate challenges related to the resources and severe challenges related to the inadequate services received from their accountants. In this category, no organisational challenges were revealed.

The results of the entrepreneurs' group conversation were similar to those discussed above, especially with regard to the motivation and quality of the available MAI. Some entrepreneurs conveyed that they had little interest in financial matters and, therefore, did not spend much time on them. Instead, they wished to engage an external advisor who would understand their financials in detail and could promptly provide them with the most relevant information and give recommendations based on it. Furthermore, dissatisfaction with the available financial reports delivered by accountants emerged in several comments during the conversation. Instead of the routine reports from their accountants, entrepreneurs would rather define their own information needs and have the information provided in an understandable form. The results clearly revealed the needs and remarkable shortcomings of accounting services. Instead of systems, most respondents hoped to receive better services from their accountants, including better content of the service and creation of a personal confidential relationship with the service provider. There were also some wishes to

have access to reporting systems. Furthermore, some entrepreneurs explicitly stated that their own skills and interest in financial management was inadequate. Thus, in this data, the most severe challenges were related to the services and systems and moderate challenges were related to the personnel-related factors.

The accountant interviews, in turn, offered a different description of the reality. As in the findings from the challenge study, accountants saw that the limited resources of their customers were the most prominent reason for their scarce usage of accountants' services. According to the accountant data, entrepreneurs wanted to avoid costs and, therefore, minimise requests for extra information or advice; therefore, fear of costs emerged as a possible remarkable obstacle to accounting service utilisation. On the other hand, entrepreneurs did not consider that the MAI accountants could offer them was sufficiently useful to justify the expenses it caused. Furthermore, from accountancies' point of view, customisation of services to meet the needs of each enterprise was not economical. Such challenges fall under the systems and services category and, at the same time, can be due to the limited resources of small enterprises. Another point is that accountants stated that their customers were generally not very interested in the services accountants could offer, and there tend to be doubts among entrepreneurs whether accountants were able to understand their business and, therefore, provide useful advice. Accountants also mentioned that they often experienced problems finding a common language with their customers because entrepreneurs did not understand the language of accounting, and accountants did not understand the operational activities and related challenges of entrepreneurs. Such problems are related to the personnel category and the severe challenge category, based on the accountant interviews.

When combining the results of these different pieces of data, it is important to keep in mind the different nature and content of these studies. Firstly, in the challenge study, the respondents were asked about the obstacles they experienced in MA system or service adoption. In the qualitative narrative data, the entrepreneurs were asked to describe their use of and wishes for MAI and the obstacles revealed were gathered and interpreted based on those answers. Similarly, in the entrepreneurs' group conversation, the entrepreneurs discussed their wishes for the ideal MAI and the challenges they faced were revealed in that context. Therefore, the questions and the results are not entirely consistent but are closely interrelated. Acknowledging this, the comparison proves interesting and adds depth to the analysis of the datasets.

Thus, the challenges discovered in the challenge study correspond well to the results revealed during all three phases of the in-depth studies. Only the obstacles

related to the organisation were not identified in the qualitative data to the same extent as they were in the quantitative study, which can be due to the fact that the responses in the quantitative data focused more on the MA system deployment and revealed that the available systems did not suit the enterprises' business contexts or their organisational characteristics could hinder MA system utilisation. In the qualitative data, the respondents mainly talked about the use of MAI services: the entrepreneurs found the available accounting systems less suitable to the needs of their small businesses, but in the MAI service provision, such obstacles related to the peculiar characteristics of the businesses were not as typical. Secondly, in the quantitative study, the informants were small enterprises, and micro-enterprises were excluded from the original survey population. Thus, the informants of the survey were slightly larger companies than in the qualitative data, where most enterprises belonged to the category of micro-enterprises. The smallest companies most typically use accounting services, while larger enterprises may employ their own accounting personnel, so investing in accounting systems is more likely, which may have influenced the responses in a way that the respondents gave more thought to systems than services. The characteristics of the business were more likely to have an impact on decision-making when considering accounting system investments than purchasing accounting services.

5.5 Synthesis of findings

This dissertation aims to answer the research questions through several quantitative and qualitative studies. Table 32 brings together the research questions and the main findings, showing the studies which each finding is based on. This table includes the key research results, thus completing the research design that was shown in Table 7 at the beginning of the data analysis chapter.

Each research question was approached through quantitative and qualitative methods, thus aiming to provide a comprehensive understanding of the researched phenomenon.

Table 32. Research design and main findings

Research Questions:	Quantitative studies:		Qualitative studies:		
	Utilisation study	Challenge study	Entrepreneurs' narratives	Entrepreneurs' group conversation	Accountant interviews
RQ1: How do entrepreneurs of small enterprises utilize MAI?	MAI usage is faint, but importance is understood.		Entrepreneurs dissatisfied and willing to improve MAI utilization.		Main form of MAI are FA reports that are not useful enough to entrepreneurs.
RQ2: How can entrepreneurs of small enterprises potentially utilise MAI?	MAI desired both to operational controlling and strategic planning. Both consulting and		MAI desired to support in managerial work. Four different entrepreneur categories.	Entrepreneurs wish for forward-looking advice and consultation based on MAI.	
RQ3: What are the main challenges in bridging the gap between ideal and current MAI utilisation?		Four challenge categories: organization, systems, personnel and resources.		Inadequate content of available MAI. Lack of mutual understanding and trust.	Entrepreneurs' efforts to avoid costs. Lack of mutual understanding and trust.

The findings show that the use of MAI among entrepreneurs and accountants has a great scope for improvement. However, the results are promising in the sense that both the entrepreneurs utilising and the accountants providing MAI tend to be favourably disposed to improvements. In the next chapter, the findings summarised in Table 32 are discussed in more detail and compared to those in previous literature.

6 DISCUSSION

The objective of this study was to enhance the understanding of the role MAI plays in the managerial work of small-business entrepreneurs and find out how the efficiency of the current MAI services could be improved. This discussion chapter seeks to answer the research questions posed at the introduction of this dissertation. Each of the three research questions are addressed combining the analyses presented in the previous chapters and comparing them with the reflections from previous literature. Chapter 6.1 seeks to answer RQ1 and RQ2, discussing the current role and importance of MAI in the small business context, highlighting its untapped potential as well as the needs entrepreneurs have for MAI. This section seeks to find what the ideal MA would be like from the entrepreneurs' and accountants' point of view, discussing and comparing the opinions these two counterparts have about the ideal MAI utilisation. Next, the challenges recognised in MAI utilisation are discussed in chapter 6.2. with a reflection on the service gap in MAI demand and supply, thus covering RQ3. Finally, suggestions to reduce the gap between the current and ideal MAI utilisation are presented and discussed in chapter 6.3.

6.1 Addressing contradiction: role and potential of management accounting information in small-business management

The aim of this dissertation was to examine how small enterprises currently utilise management accounting information (RQ1) and how this current situation differs from the ideal management accounting information utilisation (RQ2). These questions were explored using both wide survey data of the utilisation study and the more in-depth entrepreneur narratives. In addition, accountant interviews illuminated the current MAI utilisation from the information providers' point of view.

The result of this study is the inconsistent with previous studies (e.g. Quinn, 2011, López & Hiebl, 2015. Armitage et al., 2016, Pelz, 2019) but encouraging as it reveals

that small-business entrepreneurs tend to consider MAI important for their managerial work: although the use of MAI is limited, this study indicates that entrepreneurs understand its potential in management work and are willing to improve their financial management. This significant finding was consistent, based on both the quantitative utilisation study and the qualitative study phases. The importance of MAI tends to be maintained in all enterprises, even in the smallest and youngest ones, and, based on the utilisation study, is more significant in the larger companies. At the same time, the findings of both the explorative utilisation study and the in-dept study phases indicate that MAI remains underutilised. However, the results indicate explicitly that entrepreneurs are dissatisfied with the present situation, and small enterprises are willing to utilise MAI in their managerial work, recognising its importance for successful management. This important observation reveals the need for change and provides a good starting point for the development of MAI systems and services in the small business context.

The entrepreneurs from the utilisation study find both financial monitoring and controlling methods important, although those are the methods they use the least. This phenomenon is observed in the case of financial planning methods as well. Similarly, the respondents of the entrepreneur narratives found MAI important for their managerial work. Thus, while both previous literature and the findings of this study indicate that MAI usage is relatively scarce in SMEs, this information is significant (at least in principle) and needed in the managerial work of small-enterprise managers.

The basic control-related information, such as sales volume, bank balance, receivables, and costs, is the most monitored kinds of information, and it is easily available and compact for interpretation. Financial statements are, on average, examined only a few times a year. Based on the utilisation study and the opinions of the interviewed accountants, entrepreneurs do not investigate financial statements produced by their accountants thoroughly. Such profit and loss statements and balance sheets are prepared as part of statutory FA and do not tend to be very useful from entrepreneurs' perspective. This tendency corresponds with the findings of Halabi et al. (2010) and Dyt and Halabi (2007), who reported that entrepreneurs often considered that FA reports were produced mainly for the taxation purposes. Notwithstanding, accountants identify financial statements as the most essential information that they provide to their customers on a regular, typically monthly, basis. For many entrepreneurs, these financial statements are the only MAI they get regularly and without extra settlement. Thus, the service provided by accountants and the needs of entrepreneurs are often poorly met.

The analysis of the entrepreneur narratives revealed four types of entrepreneurs as MAI users: forward-looking beginners, demanding developers, profound analysts, and discontent underachievers. In each of these categories, entrepreneurs have partially different opinions on the role of MAI in their managerial work. In the forward-looking beginners' and demanding developers' categories, the role of MAI is mainly to **support management in developing the business**. The youngest enterprises also need support for their everyday management, and in the demanding developers' category, help is needed to overcome the challenges of change. However, the entrepreneurs of these categories were not able to pin down what kind of MAI this would be, probably due to their insufficient financial management skills (Marriott & Marriott, 2000; López & Hiebl, 2015; Pelz, 2019). Instead, they expressed the need to get support for daily management, especially in relation to financial management practicalities. The entrepreneurs classified as profound analysts saw the role of MAI as **support in analysing and improving the profitability of the business**. They wished for detailed analytical MAI to help steer the company management towards the targets. The last category, discontent underachievers, has similarities with Lohr's (2012) findings, stating that MA use is faint in the companies with experienced managers, stable market, and satisfactory performance. In this category, the use of MAI is relatively scarce, but the business operates rather well without deeper analyses of the financials. Still, even these entrepreneurs wish for **more predictable and analytical MAI to support their managerial work**. They were able to name some MA methods that would be needed, such as budgeting or cost accounting, but could not or were not motivated to adopt them to their managerial work. All informants of these four categories considered the role of MAI essential for running the company and improving its success. Furthermore, all participants were also unsatisfied with the currently available MAI and its utilisation in their managerial work.

Entrepreneurs are also willing to improve the utilisation of MAI in their everyday management. In particular, they hoped to have access to the information that would support both planning and controlling the business. Entrepreneurs would like to utilise the control-related MAI in monitoring daily operational management and the financial planning information in the future-oriented strategic management of their companies. Previous studies (Lucas et al., 2013; Halabi et al., 2010; Marriott & Marriott, 2000) demonstrated that in MAI utilisation of SMEs, the emphasis is placed on control-related information, and those interested in this information were usually outside the company (e.g. creditors and tax authorities). The findings of this dissertation, however, indicate that information supporting strategic planning was

also needed. The problem arises most probably due to the low availability of such forward-looking MAI rather than entrepreneurs' unwillingness to utilise this kind of information. Similar to entrepreneurs' narrative answers, the interviewed accountants admitted that they delivered monthly or at least quarterly reports based on FA information to all customers. However, the accountants had the impression that entrepreneurs did not necessarily take advantage of those reports. Furthermore, the accountants shared that their customers normally asked for help with the questions related to routine practicalities in FA but rarely contacted their accountant to ask for MAI or advice based on the financial reports. The accountants expressed that they would be willingly to produce more MAI or hold consulting discussions with entrepreneurs in addition to providing basic reports, but they felt that most of their customers were not interested in such extra services. Thus, although the role of accountants as financial experts and business advisors has improved in recent years (Blackburn et al., 2018) and this kind of advice tend to have a positive effect on the businesses' performance (Barbera & Hasso, 2013), there still seems to be ample room for improvement in terms of the quality of MAI services for small enterprises.

With regards to the functional quality expectations from MAI services, there appear to be two segments of entrepreneurs. Most of the informants wished to have a financial consultant, who could, reliably and in plain language, provide them with essential information about the financials of the enterprise. These entrepreneurs wished to receive support for their managerial work from an external financial expert, most typically an accountant. Their own expertise and motivation are not sufficient to analyse financial information, but instead they want to have an accountant or consultant go through the financial reports and inform them in clear language only about the relevant facts needed for decision-making. On the other hand, there was another group of entrepreneurs, who hoped to have an automatic real-time software system that would enable the entrepreneur to look up any information they found useful. These analytical entrepreneurs have more confidence in their abilities as financial managers and would rather obtain support from sophisticated IT systems than external specialists.

Although most entrepreneurs wish for personal counselling and only the most analytical ones prefer data from intelligent software, these two sources of information do not exclude one another. The entrepreneurs who need guidance and advice are likely to be able to take advantage of the information provided by an information system as well. Similarly, the analytical entrepreneurs could benefit from

external consulting and discussions with experts. Therefore, both consulting services and advanced information systems should be made available.

Different types of entrepreneurs have different opinions on the starting point of the basis for MAI use. Most entrepreneurs hope to have an external expert guiding them through financial situations and pointing out the needs for improvement, while the more analytical individuals prefer setting targets and conducting the analyses themselves with the assistance of intelligent software. This classification of two types of needs of MAI sources raises the fundamental question regarding the starting point, or the basis, for MA in small enterprises: Should the driver for MAI use be the current financial situation and the potential to improve it or should the strategy and target set by the management determine MA development? It is possible that both options may be needed for the optimal utilisation of MAI. Financial control-related information offers a solution for the first setting, and the financial planning information offers a solution for the second setting.

As presupposed and previous literature has shown, external accountants, or accounting firms, play a remarkable role in providing MAI for entrepreneurs (Jay & Scharper, 2003; Carey & Tanewski, 2016). The majority of the respondents in the narrative data use the services of accounting companies and, therefore, named their accountants as the main source of FI. Therefore, the availability of MAI and the way this information is offered to entrepreneurs has a considerable effect on its use. In addition to the information provided by their accountants, many entrepreneurs said that they also produced some information themselves (e.g. collected follow-up data or sales statistics in Excel sheets). This indicates that the financial services delivered by accountants are not sufficient to meet the needs of entrepreneurs. Instead, more concrete, and informal MAI is needed; this refers to self-generated informal accounting systems, which may be called vernacular accountings. According to Kilfoyle et al. (2013), such vernacular accounting systems are used when formal accounting systems do not provide the kind of information managers or employees need or the formal systems are not trusted enough. In the small business context, the reason for vernacular accounting systems is most probably the former along with the need to collect concrete and easily understandable MAI to support management, whereas formal reports are not considered useful for this purpose.

In summary, MAI utilisation is quite scarce in small-business management, but the importance of MAI is well-understood. According to this dissertation, the role of MAI does not necessarily depend on the size or degree of the development of the enterprise. Entrepreneurs are typically dissatisfied with their current financial management and are willing to increase the role of MAI in their managerial work. In

the narrative data, the entrepreneurs described the role of MAI as supportive, aiming to help successfully manage the business. However, entrepreneurs are typically incapable of utilising MAI optimally inasmuch as accountants, as MAI service producers, are unable to offer the information that would be useful from entrepreneurs' point of view. There are several reasons for this service gap, which are discussed further in the next subchapter.

6.2 Main challenges in management accounting information utilisation: service quality gap

The final, and perhaps the most important, part of this dissertation is to find answers to RQ3 concerning the challenges of management accounting information utilisation. This question was investigated by exploiting the findings of the challenge study and the entrepreneurs' group conversation. Furthermore, the accountant interviews elaborated the researched phenomenon from MA service providers' viewpoint.

This dissertation pointed out a wide range of obstacles in MAI utilisation in the SME context. In essence, entrepreneurs are dissatisfied both with the MAI they receive and with their own way of utilising this information. Notwithstanding, accountants, who usually provide MAI to entrepreneurs, feel that entrepreneurs are not interested in the information they produce. There are also challenges related to both technical and functional qualities of MAI service provision. These apparent contradictions and the related challenges call for a deeper understanding to be able to develop the use of MAI services in small businesses. This section highlights these challenges and aims to bridge the compatibility of MAI services with the demand. An in-depth analysis is needed to understand the root causes of these challenges, and the way to make it is to consider the quality of MAI service as a whole, analysing it against service quality gap theories.

It is interesting to consider the contradiction in the role of MAI: Why do entrepreneurs neglect MAI utilisation despite recognising its importance? The comparison of the challenges to MAI utilisation discovered during the different study phases of this dissertation revealed that the challenges most typically are related to the limited resources, unsuited systems or services and unskilfulness of the personnel in small enterprises. Furthermore, organisational factors, such as the small size of the company or a peculiar business model, may also hinder MAI utilisation.

Similar to previous studies (Bridge et al., 2003; Lohr, 2012, López & Hiebl, 2015), limited resources, such as available time and funds, are the most typical explanation to scarce MAI utilisation. This is an existing fact that is difficult to influence; however, it is also a matter of choosing what to use the limited resources for. If MAI is really considered important, it can be expected that even minor resources would be used for it. On the other hand, it is also debatable why many resources are required for MAI utilisation. Is it possible to improve the quality of MAI services in such a way that would allow small entrepreneurs to receive the services they needed and consume less resources?

The personnel-related challenges in the small business context were typically related to the skilfulness of the key person (the entrepreneur). The entrepreneurs were also dissatisfied with their own current level of MAI use, partly due to the unavailability of useful MAI. The findings of this dissertation correspond to those in previous literature (e.g. Halabi et al., 2010; López & Hiebl, 2015; Shields & Shelleman, 2016) in highlighting the significance of MA know-how of the person utilising the MAI generated from MA systems or services. A lack of financial knowledge weakens entrepreneurs' ability to take advantage of the available MAI. Entrepreneurs confirmed that their own knowledge and familiarisation with financial issues was not at a satisfactory level and their own ability to seek and utilise MAI in their managerial work was inadequate. A lack of knowledge was also revealed when entrepreneurs were asked to provide more detail on the needs for MAI in the narrative data. Most entrepreneurs were not able to pin down what information they needed; instead, they talked about advice and consultancy (more processed financial information and recommendations instead of pure figures and basic reports). The entrepreneurs are unable to determine what MAI they would need. Most likely, there is some helplessness behind this inability. Entrepreneurs with a lack of financial knowledge do not really know how to develop their exploitation of MAI. This situation could be compared to exercising among the population: everyone understands that exercising is healthy and should be practised, but many still constantly neglect it because it is laborious and because it is more rewarding to spend the time doing something else. Similarly, entrepreneurs may find it difficult and troublesome to learn to utilise MAI, and when time is limited, they prefer to do something else instead. On the other hand, there were also analytical entrepreneurs who did not need advice but wished for access to diverse numerical data that they preferred to analyse themselves according to their existing needs. Such express needs imply inadequacy of MAI systems and indicate functional quality requirements for

MAI service. Similarly, the interaction challenges both entrepreneurs and accountants expressed refer to shortcomings in the functional quality of MA.

Meanwhile, stable companies that have been operating for a longer period may underachieve in MAI utilisation and thus lose part of their potential performance; in young enterprises with scarce financial resources, the entrepreneurs may consider MAI essential for survival. Unfortunately, it seems that MAI suitable for the needs of the smallest young enterprises is poorly available and there are shortcomings in both technical and functional quality of MAI services for new-born enterprises. Entrepreneurs in these companies find that the existing financial systems and services do not serve their needs, so they wished for advantageous consulting, software and simple, easy-to-understand information. Furthermore, the focus of MAI tends to be on reporting the actuals when entrepreneurs need to have future scenarios.

As already mentioned above, accountants play an essential role as MAI producers and partners in financial practicalities. Entrepreneurs rely on accountants (Blackburn et al., 2018), but based on the in-depth study phases of this dissertation, the information accountants produce does not optimally meet the needs of entrepreneurs. Furthermore, accountants are not fully aware of the MAI needs of entrepreneurs and find communication with their customers challenging. Accountants typically provide their customers with monthly financial statements and wonder why entrepreneurs are not very interested in these reports. Entrepreneurs, on the other hand, hope to receive concrete, re-analysed and simplified information instead of formal reports that they find difficult to understand. In addition, they would like to move one step further: based on the analysed MAI, entrepreneurs wish to have prospects for the future and receive practical recommendations how to improve their business. Such information is seldom provided by accountants. Thus, there is a serious mismatch in the technical quality of MAI services supporting small business management. The challenge can be that the content of the accounting service provided, and the needs of entrepreneurs do not coincide. The in-depth research phases of this dissertation indicated strongly that the content of the MAI easily available for small-business managers was incomplete and inadequate. However, the situation cannot be blamed solely on accountants or accountancies. As clients, entrepreneurs should be able to better communicate their wishes regarding financial services and, most importantly, should be more willing to pay for these services.

MAI systems suitable for entrepreneurs' needs are not available, and many entrepreneurs wish for personal consultation in financial matters instead of an

information system. Entrepreneurs and their accountants find it difficult to interact or engage in a dialogue with one another, especially since accountants use accounting terms and entrepreneurs speak operational business language. These obstacles relate to the functional quality challenges of MAI services.

Finally, there are also challenges related to the mutual perceived image affecting MAI service relationship: entrepreneurs are suspicious whether accountants understand business problems and can assist in solving them, whereas accountants do not believe that entrepreneurs would be interested in the MAI they are provided with. The commercial business relationship also causes tension: accountants avoid producing additional information that would cause extra costs to entrepreneurs, whereas entrepreneurs are afraid of costs that exceed the benefits if they ask for MAI services.

Figure 20 represents different types of challenges affecting the MAI service quality, forming an overview of the service quality gap revealed in this dissertation.

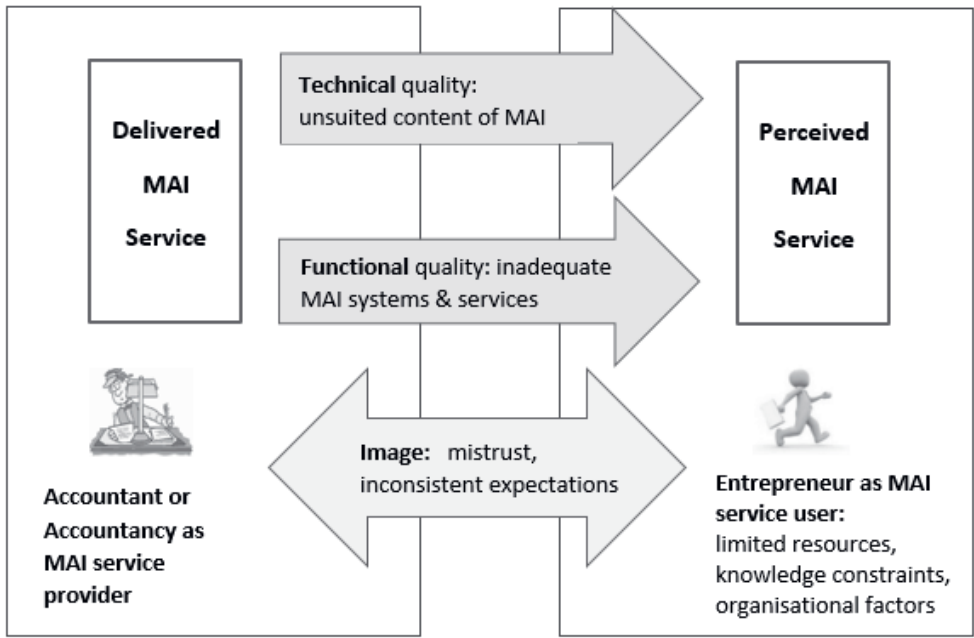


Figure 20. MAI service quality gap and related challenges

In Figure 20, the service quality gap consists of three fields, circled by a red line: a lack of mutual trust related to the image of both counterparts, technical quality constraints concerning the content of the MAI delivered and the shortcomings of

the functional quality with respect to the unsuitability of MAI services and systems provided to small-business entrepreneurs. As far as trust and suspicions are concerned, the problem is mutual. On the other hand, the technical and operational problems are mostly those of service providers (accountants or accountancies). In addition to these three fields comprising the MAI service quality gap, there are also challenges that relate almost exclusively to entrepreneurs as MAI service users. Resource constraints, a lack of financial know-how of entrepreneurs and unique characteristics of businesses or organisations are the factors which can impede the optimal use of MAI, but which are not easily influenced by service providing accountants. However, these problems should be considered when providing and further developing services for entrepreneurs.

6.3 Narrowing the gap between current and ideal management accounting information utilisation

After identifying the challenges in management accounting information service provision, this paragraph considers the ways of addressing the problems of service quality to reduce the gap between the supply and demand of MAI services. As described above, MAI utilisation is scarce in small enterprises. At the same time, entrepreneurs consider MAI important for their managerial work. Thus, the basis for improvements is encouraging.

The first and most important target of development is the technical quality of MAI: namely, the content of accounting services. The information currently available to entrepreneurs does not meet their needs but is based on FA and the requirements of the legislator and tax authorities. MAI is useful only when the person receiving this information can exploit it to support the objectives of their business. The **entrepreneurial perspective** is lacking in financial reporting, and entrepreneurs' needs are not properly known. Small business decision-makers would need appropriate small-business-suited MAI and consultation. FA reports, such as profit and loss statements and balance sheets, must be drawn up because of their statutory nature, but more practical and easy-to-understand reporting should be developed to meet the needs of small-business decision-makers. Instead of accounting terms, the information provided can be presented using a common vernacular language that all entrepreneurs understand. Instead of numerical reports, verbal information can work better as a way to communicate the financials to entrepreneurs. Furthermore, **future orientation** would be an important standpoint in this new kind of reporting.

Entrepreneurs are interested to know whether they will have sufficient funds next month, how profitable the enterprise will be in the future, how much the sales should increase to make hiring a new employee possible, etc. Such requirements challenge the traditional accountants' job description and require understanding of customers' businesses. This is what entrepreneurs hope to get, and if accountants are to serve their customers in the best possible way, it should be possible to satisfy these needs. However, the finger of blame cannot be pointed solely at accountants. Entrepreneurs should communicate more with their accountants and share their MAI hopes with them. They should also be prepared to pay for additional services. If entrepreneurs only want to buy statutory accounting services at the lowest possible price, developing MAI services is almost impossible.

The findings of this dissertation support the idea about freestyle MA that Pelz (2019) proposed particularly in relation to start-up companies. By freestyle MA, Pelz (2019) means flexible use of both quantitative and qualitative information about the company, such as measures and key performance indicators, to gain understanding and ensure success of the business. The founders and managers of young companies can define and decide best financial and non-financial indicators, tailored to the measure success of each specific company.

The second important target is to develop functional quality of MAI services, including agile information systems. Based on the results of this dissertation, there is a gap in the demand and supply of MAI services provided to small enterprises and a prevalent lack of information systems suitable for small business needs. The explorative challenge study pointed out that in addition to personal services, such as guidance and consulting on financial issues, entrepreneurs would like to use information systems to support their managerial work. Although there are multitude business intelligence and web analytic tools as well as accounting software available on the market, based on the challenge study, entrepreneurs feel that information systems suitable for their needs do not exist. This can be due to the wrong target group of these systems. Existing MAI systems and tools are typically either developed for FA purposes or they serve the needs of medium-sized and large companies to process and analyse large amounts of data. Alongside these systems, rapidly developing information technology should provide agile and light MAI services tailored to meet the needs of small businesses. However, despite the attempts to design information systems generating relevant and appropriate MAI, small-business managers use and will most probably continue using informal processes of informing (Preston, 1986). This means that the MAI provided should not be over-formalised; rather, informal interaction and debate is also needed to

receive and fully utilise MAI in managerial work. Thus, a combination of formal information produced by information systems and informal personal services in the form of discussions and consultations tailored to the needs and understanding of each entrepreneur would be the ideal content of MA services.

The third target of development in MAI utilisation is to invest in the image improvement by developing cooperation between entrepreneurs and service-providing accountants or accountancies. Accountants and entrepreneurs have problems with communication: both the entrepreneurs in the group conversation and the interviewed accountants talked about a lack of mutual understanding. These findings correspond explicitly with previous literature about accountants' role and the service gap in MAI service provision (Halabi et al., 2010; Nandan, 2010; Shields & Shelleman, 2016). Furthermore, the accountants felt they could not find a common language with entrepreneurs as entrepreneurs were not familiar with accounting terms and procedures. This supports the findings by Walker et al. (2012) about communication problems in MAI service provision. Entrepreneurs wish for a confidential relationship with knowledgeable accountants who understand their businesses and can give efficient advice. In the same way, the accountants described that at its best, relationships with customers are confidential, both parties valuing each other. In addition to a lack of confidence, entrepreneurs and accountants also tend to have some prejudices against one another. When their association is limited to routines and practicalities, entrepreneurs may see accountants only as bureaucratic bookkeepers and may not realise that they could also offer consultative help in relation to managerial work. Similarly, accountants often see that entrepreneurs are not interested in their work or in the outputs of accounting and only want to handle the compulsory tasks at minimum costs.

The novel finding in this study was the contradiction in entrepreneurs' and accountants' perceptions regarding the reasons for scarce use of MAI. Entrepreneurs hope to receive personal advice and consultancy in financial management, whereas accountants indicate that entrepreneurs are not interested in this kind of consulting services. Based on the analysis of the interview data, accountants tend to be eager to provide their customers with more MAI and consultation, but they felt that entrepreneurs are not willing to pay for such services to avoid extra costs. Nevertheless, when the entrepreneurs were asked about this during the group conversation, the answers differed from those of accountants. None of the entrepreneurs said that the costs would be the main problem; instead, they maintained that their accountants did not understand their businesses or there was no confidential relationship with accountants to warrant consulting and guidance the

entrepreneurs would rely on. The main task of accountants is mostly bookkeeping, whereas entrepreneurs wish to receive financial consultation in confidential relationship.

Open and confidential communication can ensure understanding in the course of time. Accountants can advise entrepreneurs on financial issues, and entrepreneurs can explain their business models to their accountants to increase their mutual understanding. Similarly, suspicions can be dispelled and the reputation of accountants among entrepreneurs (and vice versa) can be improved as a result of good experiences. Cost-benefit thinking is typical for small enterprises, and if entrepreneurs solely seek to find the most inexpensive way to take care of their statutory accounting, the prospects for creating a close confidential relationship are faint. Entrepreneurs should begin to see their accountants differently, that is, more as their financial partners or potentials and less as a necessary expense. More communication is needed to foster this attitude in the entrepreneurial field. Furthermore, this message should be taken forward during entrepreneurship trainings. At the same time, accounting companies should also encourage building good relationships with their customers. The communication between accountants and entrepreneurs could be enhanced by acknowledging the starting point on each side. Figure 21 represents the service gap and the possibilities in the relationship between small-business entrepreneurs and accountants.

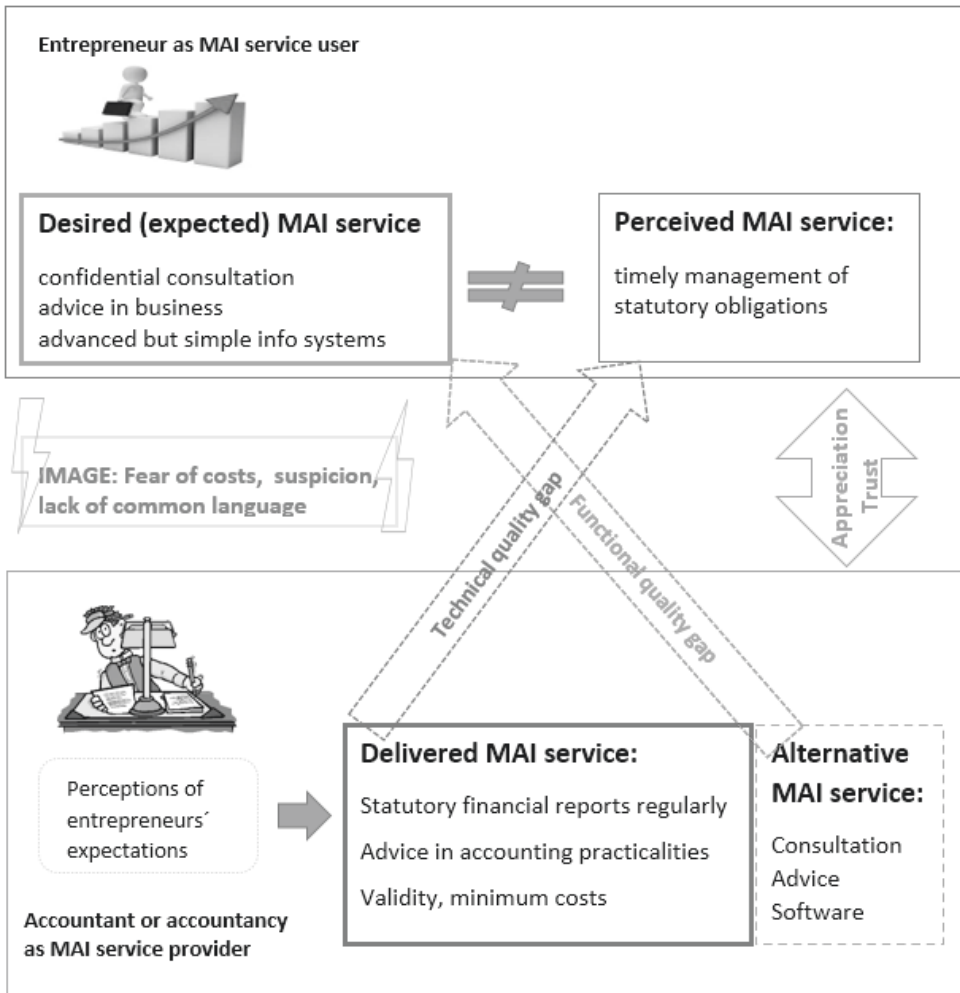


Figure 21. Challenges and possibilities in MAI service provision

Service providers (accountants) assume that the accounting service users (entrepreneurs) are mostly interested in statutory accounting responsibilities and, as evidence of compliance with these obligations, provide customers with FA reports, such as profit and loss statements and balance sheets on a regular basis. However, entrepreneurs do not fully understand these reports and do not find them very useful. Entrepreneurs do appreciate the fact that statutory obligations are fulfilled, but this does not help them in their managerial work. Instead, the entrepreneur may want to receive pre-analysed, easy-to-understand MAI from a person who understands their business and is able to give advice on the development of the

business. Entrepreneurs are also likely to utilise information systems that allow them to seek and analyse the up-to-date MAI about their company themselves. Based on accountants' experience, entrepreneurs may not be interested in consultancy or advice but may instead strive to minimise the costs of the accounting function. Fear of costs is one of the reasons for the gap between accounting service supply and demand. Thus, there is a technological gap in the content of MAI services and a functional gap in the manner how information is offered. Furthermore, entrepreneurs and accountants may have suspicions about each other's nature and motives and may find it difficult to understand each other as accountants use accounting terms and concepts that may be unclear to entrepreneurs, and entrepreneurs talk about the operational business of their companies, which accountants may not understand. These problems illustrate the challenges related to the mutual image. The primary factors that promote cooperation and bridge the gap between entrepreneurs and accountants are confidence and mutual appreciation. Both parties should invest in building understanding and trust between each other.

However, all mentioned suggestions on the development of MAI utilisation require resources. Small enterprises have scarce resources to invest in MA development, even if they find MAI beneficial. Accountants' relation with entrepreneurs is primarily commercial, similar to the relationship between a seller and a customer, and this commercial angle can easily cause tension. Instead of the parties seeking to benefit from each other, confidential cooperation to benefit both parties should be sought. The costs of purchasing MAI services should no doubt be less than the benefits achieved. In addition, there must be established value communication of MA services between entrepreneurs and accountants. Entrepreneurs should be convinced that it is worth investing in MA services. However, investments in financial consultation utilisation or advanced information systems should not impose significant costs on small companies due to their limited financial resources. Therefore, accounting firms and authorities can play a greater role in the development of MAI utilisation in small enterprises. Bringing about a significant change is likely to require a joint development process involving several parties to spread the costs more widely and achieve common benefits.

7 CONCLUSIONS

This concluding chapter presents the synthesis of this dissertation, highlighting its merits and limitations. The chapter begins by summarising its contributions to previous literature. This dissertation reveals the importance of MAI in entrepreneurs' mindsets, clarifies what kind of management accounting information is essential from the point of view of the small-enterprise management and elaborates on the gap between the current and ideal management accounting information. Thereafter, the most relevant practical implications of the dissertation are highlighted, and the chapter continues to discuss the limitations of the study. Finally, the study concludes with propositions for further research.

7.1 Theoretical contributions

This dissertation has implications for researchers interested in management accounting in the small business context, especially in terms of bringing new insight on the phenomenon from entrepreneurs' perspective. Compared to the existing literature, the results of this dissertation are surprising and also encouraging in many respects. The study has three key findings related to the differences among entrepreneurs as management accounting information users, the challenges in MAI service utilisation and the lost potential of MAI in small-business management.

Firstly, the specific merit of this dissertation is in making the **entrepreneurs' voice known** in the MA context. Unlike previous research focusing on studying MA methods use and the performance consequences of MA in the small business context from the enterprises' viewpoint, this dissertation concentrated on finding out the entrepreneurs', or owner-managers', point of view on MAI utilisation. Based on previous studies (e.g. Quinn, 2011; López & Hiebl, 2015; Armitage et al., 2016; Ruiz & Collazo, 2020), it was already known that MAI use was scarce in small enterprises. This study brings new insights on the importance of MAI and highlights the ways in which entrepreneurs would like to utilise MAI. Based on the results of this dissertation, entrepreneurs tend to value MAI and realise that they underachieve in this respect. This viewpoint of entrepreneurs and their opinion on the importance

of MAI had not been studied previously. However, considering that entrepreneurs are different from each other, the categorisation carried out in this dissertation reveals new knowledge on the MAI service utilisation and needs of small-business entrepreneurs. The four entrepreneur categories found herein are forward-looking beginners, demanding developers, profound analysts and discontent underachievers. Depending on the entrepreneur category, the emphasis on the role of MAI varies from supporting the development of the business to assisting in profitability analyses and general management. Although the entrepreneurs of different categories had different expectations for MAI, there were also similarities: the importance and insufficient use of MAI was recognised in all entrepreneur categories.

Previous studies (e.g. Moores & Yuen, 2001, Granlund & Taipaleenmäki, 2005, Su et al., 2013) indicate that the need for MAI increases along with company's growth and the MA development level is related to the life cycle phase of the company. The findings of this dissertation challenge this assumption. Both the utilisation study and the results of the narrative data indicate that MAI is considered important for managerial work even among the managers of the smallest and youngest enterprises. Although MAI is found to be generally much needed, the results of the utilisation study indicated that the need was somewhat lower in the smallest and youngest companies, whereas in the narrative dataset and the accountant interviews, this was not observed. Therefore, instead of evolving at the same pace as the company growth, MA adoption can be more dependent on the knowledge and interest of the entrepreneur. The development phase of the company may affect the utilised MA methods and systems, as presented in previous studies, but MAI itself is needed from the very beginning of the business. Furthermore, new-born companies may require special attention as the business is not yet well established, and although its financial resources are typically scarce, its potential for growth is significant. Similarly, concern about the financial situation and general environmental uncertainty encourage acquisition and use of MAI (López & Hiebl, 2015). For this reason, especially for young companies, the importance and need for MAI are significant. Reasonable and stable financial success can easily lead to satisfaction, in which case MA development is not considered important, especially if the entrepreneur is not interested in financial issues. Thus, satisfactory performance of the company can prevent further development of MAI utilisation and deprive the company of the potential for even better performance. This somewhat lamentable phenomenon requires deeper understanding and intervention.

The second contribution of this dissertation is in **bringing the service quality gap theory into the relationship between entrepreneurs and accountants** and

increasing the understanding of the specificities of this relationship. The service quality gap proved to be an appropriate theory to address the topic. Accounting is a service function that is typically outsourced to external service providers (accountants or accountancies) in the small business context (Fleischman et al., 2017). Accountants' role and viewpoint as financial advisors of SMEs has been studied extensively (e.g. Halabi et al., 2010, Nandan, 2010, Barbera & Hasso, 2013; Sjögren et al., 2014, Blackburn, 2018). However, the existing literature does not recognise the big picture of MA service function and its service quality gaps. The findings of this dissertation indicate that the content of the available MAI systems and services is unsuitable for the needs of small-business entrepreneurs and their functionality, such as communication, services and systems, is unsuited for the decision-makers of small enterprises. Thus, there are technical and functional quality challenges in MAI service provision. The findings of this dissertation correspond with previous studies, highlighting the relationship between accountants and small-business entrepreneurs (e.g. Barbera & Hasso, 2013, Blackburn, 2018). This observation is related to the third dimension (image) in the service quality theory of Grönroos (1984), pointing out the importance of the mutually perceived image in service provision. Entrepreneurs hope to have a long-standing confidential relationship with accounting specialists who would understand their businesses and support them in their management without intervening too much in the decision-making. Similarly, accountants described that cooperation with entrepreneurs can be constructive and very advantageous for both sides. Although both entrepreneurs and accountants wish for this kind of a close confidential relationship, such relations seldom emerge (Berry et al., 2006; Halabi et al., 2010).

Thirdly, the most specific contribution is created by combining the previous two contributions. In other words, considering entrepreneurs' perspective and the service quality gap together reveals the MAI potential that has been lost in many respects. The service quality gap theory **creates an understanding of why entrepreneurs are unable to utilise MAI even though they are aware of its efficiency**. Entrepreneurs would like to develop their use of MAI, but they can be clueless about the ways how to implement it. Their own skills are insufficient (Halabi et al., 2010; Pelz, 2019), and the kind of MAI services they wish for may not be easily available. This paradoxical finding about high importance but faint use of MAI indicates that some of the potential for growth and success becomes lost for small businesses when entrepreneurs are unable to make optimal use of MAI. While as previous studies (e.g. Duréndez et al., 2011; Sjögren et al., 2014, Pelz, 2019) suggested, the use of MAI increase the chances of the company to succeed, low use

of MAI means that small businesses are not succeeding as well as they could, due to their inability to take full advantage of MAI. The considerable difference in the use of financial methods and their perceived importance that emerged in the utilisation study as well as entrepreneurs' dissatisfaction with their financial management expressed in the narrative data reveal that entrepreneurs are aware of this lost potential due to inadequate MAI utilisation and would like to improve it. **Paying attention to the three dimensions of MAI service (technical and functional quality and the image of the service) are the key to improvement in the MAI service quality.**

7.2 Practical implications

This dissertation has a few applied implications. First, the findings of this study indicate that small-business entrepreneurs appreciate management accounting information and understand that MAI can help them run their enterprise more successfully. However, MAI utilisation is scarce in most companies and entrepreneurs are aware of their shortcomings in financial management. This finding should encourage small-business accountants or counsellors to develop financial services to tailor them to small-enterprise customers. Entrepreneurs should be encouraged and advised to utilise MAI, and the most natural and accessible partners for this are accountants. However, accountants should be aware that the currently offered services do not meet the needs of entrepreneurs. Communication about the value of MA services tends to be inadequate, so accountants and accountancies need new concepts to re-design their services. Classification of entrepreneurs into distinct segments presented in this dissertation may help accounting firms dovetail their services to better serve small-business clients.

Secondly, in addition to inadequate MA services, there is also a call for the development of MA software systems for small-business use. Some of the accounting software used in small enterprises was almost invariably developed for bigger companies and mainly for financial accounting purposes; therefore, it does not provide information that would be useful from small-business entrepreneurs' point of view. Therefore, there is a challenge and open call for accounting software suppliers to develop concrete, understandable, user-friendly business-intelligence MAI systems to specifically cater for small-enterprise needs.

Thirdly, this dissertation provides evidence for training programme organisers, policy makers and authorities about the demands and special needs of small enterprises. The study indicates that in the companies undergoing initial stages, entrepreneurs are very interested in, and perhaps concerned about, the financials and hope to have all possible financial information. However, this interest tends to decrease over time as the business stabilises to a satisfactory level. The enthusiasm young entrepreneurs have for financial issues should be exploited by offering new entrepreneurs basic training about financial planning and control over one's own enterprise. Similarly, entrepreneurs in the existent companies should also be offered periodical training and coaching on financial management. MAI system and service providers should take advantage of this interest to strengthen and maintain it. Developing systems and services to produce financial information that would be useful from the entrepreneurial perspective could be a business opportunity for accounting companies or software developers, or both. Such trainings could also be publicly funded as an investment in small enterprises that would pay off in the form of increased tax revenue and new employment places offered by small companies.

Furthermore, this dissertation provides new information on how the MA theory and education should be developed from small businesses' point of view. As discussed earlier, the current MAI services do not serve entrepreneurs in the best possible way. Professional accounting terms and vocabulary should not be used during discussions with entrepreneurs or in the reports delivered to them. This point should be considered when training accounting professionals and in MA textbooks. In addition to producing MAI, it is also important to help entrepreneurs make use of this information: after all, entrepreneurs need advice on what to do to improve the performance of their businesses, and the value of any MAI service they receive mostly depends on the usability of the information the system or service includes.

7.3 Limitations

As in all studies, this dissertation has limitations. The internal and external validity of the findings of this study need to be assessed along with the reliability of the presented results.

In general, this dissertation assumes entrepreneurs to be subjective, not necessarily rational decision-makers. Instead, entrepreneurs are certainly affected by many social and emotional factors influencing their behaviour and attitudes towards managerial information utilization. However, the findings of this dissertation would

help developing decision-making and managerial work of small-business entrepreneurs from different perspectives.

The internal validity implies the extent to which the outlined results represent the truth for the studied target group. In other words, evaluating the internal validity means assessing the research design and data collection processes. Such studies as this rely heavily on the interpretation of individual experiences and attitudes of the informants, and these interpretations are also dependent on the experiences of the researcher. Furthermore, the meanings of the studied phenomenon are intertwined and emerge as qualities peculiar to entrepreneurs as individuals, their actions, and cultural events. The qualitative research in general and the narrative research in particular operate using subjective interpretations of the researched phenomena, and the personal views and experiences of the researcher may influence these interpretations (Bell et al., p. 374; Eriksson & Kovalainen, 2008 p. 223). It is possible that another researcher can interpret the empirical materials differently to some extent.

The narrative research used in the in-depth study phase has both strengths and limitations. When formatting and interpreting the narrative data, the researcher is bound to take certain liberties. For example, it is sometimes necessary to fill in gaps or leave something out (Riessman, 2008). On the other hand, the narrative method in data gathering allows the informants to express their own viewpoint, using their own vocabulary, which typically improves the internal validity of the data (Elliott, 2005; Paavilainen-Mäntymäki & Aarikka-Stenroos, 2013).

Another concern is related to language. Both the explorative utilisation study and the challenge study were conducted in Finnish. Similarly, the narrative answers from the entrepreneurs were originally written in Finnish, and the group discussion with the entrepreneurs and the interviews of accountants were conducted in Finnish. Thus, the transcriptions and interpretations were first made in Finnish and later translated into English, at which point some nuances may have changed or disappeared, even though the translation was carried out as exact as possible.

The external validity can be evaluated by questioning whether the study results apply to a wider context. This is called the generalisability of the conducted research and is often a challenging subject, especially in qualitative research (Boeije, 2010, p. 170–171; Myers, 2009, p. 9). It is important to understand the extent to which the findings of one research that uses certain methods in a specific setting can be applied in other circumstances and settings. In this dissertation, the explorative studies with wide samples of enterprises are likely to be consistent with the experiences of all similar entrepreneurs. However, even though opportunity to participate in the

utilisation study project was offered to all entrepreneurs in the business advice association's database, those entrepreneurs who were most interested in financial issues may be overrepresented in the responses to survey. In the qualitative in-depth study phases, the primary study objectives were a relatively small sample of entrepreneurs undertaking the Master's programme in entrepreneurship. Thus, these informants are likely to be more educated and favourable towards development than average entrepreneurs are. With a statistically representative sample of all Finnish entrepreneurs, the results can differ to some extent. However, the degree programme these informants participated were taking did not include any accounting-related content at the stage the data was gathered, and the enterprises the informants represented differed in many ways. Altogether, this dissertation employed mixed methods and the pragmatic approach, aiming at transferability rather than generalisability. Thus, instead of the universal truth, this dissertation offers a version of the truth from the viewpoint of small-business entrepreneurs, who were positive about educating themselves and developing their enterprises. Such generalisability limitations are typical for the pragmatic approach and abductive reasoning logic (Morgan, 2014) and for qualitative research in general and narrative research in particular (Eriksson & Kovalainen, 2008, p. 223–224).

The reliability of the study refers to its repeatability (i.e. whether another researcher in another environment would come up with similar results). It should be noted that some parts of empirical data were collected several years ago. In the meantime, the practices and views of entrepreneurs may have changed to some extent. However, the central challenges under examination in this dissertation still remain relevant. When considering reliability, it is also necessary to analyse how the nature of the study and the research topic may have influenced the response of the participants in the study. Instead of what they honestly think, the entrepreneurs may have distorted the truth, responding based on what they think is deemed smart and wise. This phenomenon called reactivity may have influenced the results both in the explorative studies and in the in-depth study phases. Although the use of written narratives during the data collection should have reduced this risk of embellishing the truth, it is still likely to have occurred to some extent. In the group conversation, there are risks related to the group dynamics and interrelationships in the group. The general atmosphere of the group typically affects those who speak and the content of the conversation. Compared to a two-way interview, informants in a group conversation may be more careful when expressing their thoughts, so the interaction within the group is a crucial factor that is to be studied (Bell et al., 2019, p. 472). However, in the group conversation event of this dissertation, all informants knew

each other relatively well and were used to having similar group discussions during their studies. The atmosphere during the conversation seemed relaxed, open, and trusting. To study the viewpoint of the accountants, all three accountants were interviewed individually. A wider sample of accountants with different backgrounds could have given a better insight into their business environment. However, as the entrepreneurs are the focus of the study and the purpose of the interviews with the accountants was only to supplement the material that was previously collected from another perspective, the views of three different accountants were considered sufficient.

In the qualitative in-depth study phases, the studied phenomenon was approached from two different perspectives, employing both the narrative data and group discussion with the entrepreneurs and the interviews with their MAI producers (accountants). When gathering these different pieces of data, the previous data was always analysed, and new interpretations were tested during the next phase. This triangulation of data diversifies research and improves the reliability of the qualitative study (Sarajärvi & Tuomi, 2017, p.141–142).

7.4 Recommendations for further research

There is still a considerable demand for further research on MA in the small business context. Many of the limitations of this study can provide a basis for further research. The findings of this dissertation could be further tested with another research design and a different sample of entrepreneurs. It would be interesting to test whether the classification into four categories of entrepreneurs applies on a larger scale. Furthermore, as this study deviates from previous literature and suggests that the life cycle thinking does not necessarily work in the MA context and MAI utilisation is especially important in new enterprises, this subject should be further explored. A longitudinal case study in several young companies could bring a deeper understanding of the development and drivers of MA information utilisation.

A service gap between accountants and entrepreneurs calls for a deeper understanding. There appears to be a deep abyss between what accountants offer and what entrepreneurs expect from accountants in the MA context. Both the content of the MA service and the challenges in the interaction between accountants and entrepreneurs require further examination and refinement. Interventionist research into this relationship of accounting service provision and utilisation might bring new insights to this phenomenon. Furthermore, this dissertation examined MA

services in the service quality gap framework. Another interesting and useful framework for further studies can be the relationship quality theory in a B2B professional service context. Accountancies are typical professional service firms, and examining the drivers and outcomes in the relationships between accountancies and their customers from the starting point of the relationship quality theory could offer new knowledge on this complex but important topic.

This dissertation agrees with previous literature on entrepreneurs' lack of knowledge of financial issues. This unskilfulness is often seen as one of the main causes underlying performance challenges of small enterprises. In addition to the existence of knowledge constraints, this study indicated that entrepreneurs are aware of their inadequate use of MAI and would like to improve their financial management skills. This observation forges a new avenue for further research: Would such improvements affect the overall performance of small enterprises? There are two interesting factors that would be worth studying in this context. Firstly, the impact of systematic financial counselling on the small-business performance should be analysed. In Finland, there are both commercial consultations and free voluntary advisors on financial management available for enterprises, but the effectiveness of these services has not been studied scientifically. Another issue is to study whether improving the financial skills of entrepreneurs would benefit small businesses. Providing training for entrepreneurs and analysing the impact of such training on the company performance would offer new knowledge on the real impact of financial knowledge on the small-business success.

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Appendix 1:

Questionnaire to the entrepreneurs:

A: Company information

1. Year of establishment of the enterprise

2. Company turnover of the last fiscal year?

- ☐ under 100 000 euros
- ☐ 100 000 - 200 000 euros
- ☐ 200 000 – 400 000 euros
- ☐ 400 000 – 1 mil. euros
- ☐ 1 – 2 mil. euros
- ☐ 2 – 10 mil. euros
- ☐ 10 – 20 mil. euros
- ☐ over 20 mil. euros

3. Current number of personnel? _____ employees (in total, including entrepreneur)

4. Who has founded the company? _____

5. Is the founder still active in the company?

- ☐ Yes, in what role? _____
- ☐ No

6. Who owns the company now?

- ☐ The entrepreneur alone?
- ☐ Multiple owners:
 - ☐ family company? Yes/no
 - ☐ are venture capitalists involved? yes/no

7. Is the company part of a group?

- ☐ Yes, what group? _____
- ☐ No
- ☐ Don't know / No answer

8. Who is making the financial decisions?

- ☐ A) Solely the interviewee him/herself
- ☐ B) The interviewee and other persons in charge
- ☐ C) Someone else, who? _____

9. Does the company trade internationally?

- ☐ Yes, importing from abroad
- ☐ Yes, exporting abroad
- ☐ Yes, joint venture or branch abroad?
- ☐ Yes, some other kind of international business, what _____
- ☐ No
- ☐ Don't know / No answer

10. Evaluate your company's success in the following dimensions:

	NA	1 = Very poor	2	3	4 = In line with goals	5	6	7 = Excellent
Overall success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competitiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Efficiency of operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B: Use of financial information

10. Does your organization use the following methods of financial management?

11. I view this method important with regards to managing this company

12. I have sufficient skills to use this method.

Code	Answer options q. 10
DK/NA	Don't know / No answer
0	Not used at all
1	Used max. once a year
2	Used a few times a year
3	Used monthly
4	Used weekly
5	Used almost daily

Code	Answer options q. 11-12
DK/NA	Don't know / No answer
1	Disagree strongly
2	Disagree to some extent
3	Do not agree or disagree
4	Agree to some extent
5	Agree strongly

	In use 0-5	Importance 1-5	Skill 1-5
On financial planning			
<input type="checkbox"/> 1. Planning and forecasting sales or sales budgets			
<input type="checkbox"/> 2. P&L Budgeting			
<input type="checkbox"/> 3. Choosing/modifying pricing principles			
<input type="checkbox"/> 4. Cash flow analyses or cash flow plans / cash budgets			
<input type="checkbox"/> 5. Planning of financing			
<input type="checkbox"/> 6. Investment calculations / Capital budgeting			
On monitoring or controlling finances			
<input type="checkbox"/> 7. Monitoring the realization of sales			
<input type="checkbox"/> 8. Monitoring financial statements (Income statement and balance sheet)			
<input type="checkbox"/> 9. Comparing realized income statements to budget or previous year			
<input type="checkbox"/> 10. Monitoring accounts receivables			
<input type="checkbox"/> 11. Monitoring stock value / inventory turnover			
<input type="checkbox"/> 12. Monitoring costs (variable and fixed costs in general)			
<input type="checkbox"/> 13. Monitoring the profitability of goods/services sold			
<input type="checkbox"/> 14. Monitoring customer profitability			
<input type="checkbox"/> 15. Monitoring employment costs			
<input type="checkbox"/> 16. Inspection of the accuracy of pricing			
On other monitoring			
<input type="checkbox"/> 17. Monitoring customer satisfaction			
<input type="checkbox"/> 18. Monitoring employee satisfaction			
<input type="checkbox"/> 19. Monitoring quality (errors/delays/claims etc.)			
<input type="checkbox"/> Something else, what?			

13. Do you (or your company) get any financial support or advice?

- ☐ No
- ☐ If Yes: Where from? _____
What kind of help? _____
How often? _____
Are you satisfied with this financial support or service? _____

14. What kind of financial information would you need more to better support you in management / leadership?

- ☐ A) Information to support financial planning (e.g. help with budgeting, setting targets)
- ☐ B) Information to help monitor and analyse finances (e.g. help with analysing and improving the financial situation)
- ☐ C) Other information, please name what? _____
- ☐ D) I don't need more of anything
- ☐ E) Don't know

15. In what form would you preferably get this financial information?

- ☐ A) Personal guidance/consulting from a credible/trustworthy/reliable person
- ☐ B) From a developed information system, from which you can retrieve current and relevant information yourself
- ☐ C) Both
- ☐ D) Don't know

kummi 16. Work experience

How much work experience have you accumulated? years

How much out of that in managerial role? years

How much experience in SME's? years

How much experience of entrepreneurship? years

17. What is your position/title in this company? _____

18. Educational background? (Highest degree completed)

- ☐ A) Grade school or equivalent
- ☐ B) Secondary school (college, vocational school, high school)
- ☐ C) University degree (bachelor's or master's level)
- ☐ D) PhD

19. Business education?

- ☐ Have you completed a business degree or a similar education in business?
- ☐ Yes, what? _____ (degree, what? Some other training, module in other degree etc?)
- ☐ No
- ☐ Don't know/No answer

Something else to say or comment?

