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School of Economics and Management

**Design and use of management control systems to support
post-merger integration - is there a key to success?**

Master of Accounting and Finance
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Abstract

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Five keywords: Mergers & Acquisitions, post-merger integration, management control systems, levers of control, informal controls

Purpose: There is an existing problem of high failure rates of mergers and acquisitions during integration. Additionally, understanding of management control systems during this phase is currently scarce. This paper investigates role, design and use of management control systems in the post-merger integration of acquisitions. The aim is to contribute to the understanding of how management control systems are designed and used by top managers in post-merger integration, and how management control systems contribute to its success or failure.

Methodology: Our study follows a qualitative research approach and uses a multiple case study with four participating firms. Qualitative inquiry is aided by a comprehensive literature review on the topic of management control systems in post-merger integration. When collecting data, we use our management control systems framework.

Theoretical perspectives: We developed a framework that represents an extension of existing theories. It focuses on role, design and use of management control systems, as well as their impact on the success of post-merger integrations. It also encompasses strategic drivers and contextual factors. The framework includes both formal and informal controls, and how these two are balanced.

Empirical foundation: Findings are based on primary data collected from interviews with four company representatives and two experts. The four companies are very large, based in Europe, operating in different industries, and highly experienced with international acquisitions. These insights are complemented with comments of experts from industry as well as academia.

Conclusions: The findings indicate that strategic drivers, formal and informal controls, as well as contextual factors are highly interdependent. Besides, all of them can impact the success of the integration process. Rather than attributing success to the final outcome, it is considered to be related to the process of integration. During post-merger integration, management control systems support top management, as they facilitate and guide while having value creation in mind. Since every deal is unique, there is no “one size fits all” solution on how to design and use management control systems to support integrations. However, there are some patterns that make success or failure more likely.

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List of abbreviations

CEO	Chief Executive Officer
EUR	Euro
FTE	Full Time Equivalent
HR	Human Resources
IT	Information Technology
KPI	Key Performance Indicator
LOC	Levers of Control
M&A	Mergers and Acquisitions
MBO	Management Buyout
MCS	Management Control Systems
PMI	Post-merger Integration

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1 Introduction

1.1 Background

“Amazon.com Inc. will acquire Whole Foods Market Inc. for \$13.7 billion, a bombshell of a deal” (Bloomberg, 2017). Similar announcements like this one from mid of June 2017 reach us frequently. According to an analysis of global mergers and acquisitions (M&A) trends from Moody’s Analytics (2018), there were 96.082 M&A deals conducted in 2017, and in total, they were worth \$4.7 trillion. Looking back at data from 2012, this represents an eight percent increase in deal volume and 42 percent increase in deal value. The amount of deals is lower than the five-year peak in 2015 (109.559 deals worth \$5.8 trillion), but certain regions and sectors are nevertheless showing year-on-year growth, such as Western Europe and private equity. The level of private equity and venture capital investment has hit its ten-year high and has surpassed pre-crisis levels from 2007.

M&A are a form of corporate restructuring and are closely linked to the concept of business transformation (Bergamin & Braun, 2018). In an acquisition, a firm takes ownership over another either as a whole entity or only parts of it (Jordão, Souza & Avelar, 2014). While mergers are primarily perceived as cooperative arrangements in which both companies are in favour of the transaction, acquisitions can either be friendly or hostile (DePamphilis, 2011).

High volume of M&A transactions in the market suggests that managers think that there are benefits to be realised (Melewar & Harrold, 2000), such as improved innovation, strengthening of current market position, staying competitive, knowledge transfer, or synergies (Haspeslagh & Jemison, 1991). This positive way of thinking is linked to the prevailing idea in M&A activities that one plus one equals three, meaning that combining two firms will result in more than the sum of its parts (Marks & Mirvis, 2010).

However, forecasted benefits often do not materialise, and the transaction can result in value destruction - failure rates range typically from 50 to 70 percent or higher (Stahl, 2004). The perception of M&A failure seems to prevail throughout the years, as Haspeslagh and Jemison (1991) stated already back in the early ‘90s that it is commonly known many acquisitions fail to achieve their purpose. Majority of mergers fail due to lack of a well-planned strategy for post-merger integration (Epstein, 2004). Most issues around merger implementation stem from cultural issues, whether organisational or country related, often resulting from an insufficiently clear understanding between the individual companies (Melewar & Harrold, 2000).

Through management control systems (MCS), managers can direct and influence employee behaviour to implement strategy, which is perceived as their traditional function (Anthony & Govindarajan, 2007). However, nowadays, they are considered to have broader use in organisations (e.g. Anthony & Govindarajan, 2007; Malmi & Brown, 2008; Ferreira & Otley, 2009).

MCS are also used in manifold ways in M&A (Bergamin & Braun, 2018). In the pre-merger stage, their main focus is on due diligence activities and evaluating possible takeover candidates (Bergamin & Braun, 2018). However, during post-merger integration (PMI) their role is to provide management with information for strategic decision-making purposes, and to simultaneously ensure that day-to-day operations are sustained or even enhanced (Jones, 1985b). Usually at the beginning of PMI different ways of running the previously stand-alone companies prevail; this includes distinct business strategies and visions, different organisational cultures, unlike key performance indicators (KPIs) and reward systems (Hoque & Chia, 2012; Larsson & Lubatkin, 2001; Nilsson, 2002). If MCS are not taking into account these aspects and are not altered accordingly, they can contribute in a significant way to PMI failure (Nilsson, 2002).

As decisions and actions of senior managers affect the entire organisation, they become the key players in PMI and have a direct impact on the outcome of the integration process. Stahl (2004) emphasizes the critical role of leadership in PMI, as poor execution is a major cause of M&A failure. Likewise, Gomes, Angwin, Weber and Tarba (2013) highlight leadership as one of the key PMI success factors.

As Chief Executive Officers (CEOs) hold an important role during times of organisational change, Simons (1994) looks at MCS from a top management perspective when he studies how and why CEOs use formal MCS as a device to implement novel strategies. His developed levers of control (LOC) framework distinguishes between four types of controls: belief systems, boundary systems, diagnostic control systems, and interactive control systems. Simons (1995) suggests that firms are only successful in implementing strategies and encouraging strategic renewal if the different levers are combined and used in a balanced way.

Despite some criticism regarding for example the simplicity of the framework, exclusion of informal controls (Tessier & Otley, 2012) and being unclear on the concept of balanced use (Kruis, Speklé & Widener, 2016), it has been widely used as a research framework (Martyn, Sweeney & Curtis, 2016). Although the framework has proven to be useful in analysing situations of organisational change, we found it only rarely used in corporate restructuring contexts, however especially applicable. For example, Bruining, Bonnet and Wright (2004) looked through the lens of Simons' LOC at a management buyout (MBO), and Hoque and Chia (2012) applied it combined with Porter's theory of competitive advantage in an M&A context when they studied an Australian PMI.

1.2 Problem

Many M&A transactions fail due to different reasons that are identified during PMI. Since leadership has been pointed out as one key success factor during PMI and use of MCS in this phase has a support function, both are important components of PMI success (Gomes et al., 2013; Jordão, Souza & Avelar, 2014; Nilsson, 2002). There has been plenty of M&A activity over the last years (Moody's Analytics, 2018), and therefore it is relevant to understand the role of MCS and how they are used by top management in PMI, both in theory and practice.

CEOs and top managers need appropriate tools for successful PMI, which is why design and use of MCS in this context has to be understood in more detail (Jordão, Souza & Avelar, 2014; Beusch, 2007). But literature that focuses on use and design of MCS in PMI remains scarce; hence understanding of their contribution to success or failure of the integration is still limited.

High M&A failure rates indicate that there is still a lack of knowledge, ability, or both in the business world on how to turn integrations into successes. As MCS are used during PMI and have generally been acknowledged as support tools (e.g. Ferreira & Otley, 2009; Hoque & Chia, 2012), a better understanding of how to use them in the best possible way to assist integration is therefore indispensable for practitioners.

1.3 Purpose and contributions

1.3.1 Research purpose

In this paper, we want to contribute to the understanding of how MCS are used in M&A context, especially in acquisitions. Our focus is on PMI, how top management uses MCS in this phase, and whether there are any differences among successful and unsuccessful integrations. Moreover, we investigate if use of MCS changes over time during PMI, whether different control levers are utilised, and how they are balanced. We use a framework based on Simons' LOC for collecting and analysing data and address the following research questions:

1. What is the role of management control systems in post-merger integration?
2. How are management control systems designed and used in post-merger integration?
3. How can design and use of management control systems in post-merger integration contribute to its success or failure?

We understand role as the function and/or purpose of exercising management control, as such the concept of "role" is related to examination of "why". We comprehend "design" as arrangements made in a way that fulfil function and purpose (role) and "use" as the implementation and/or deployment of arrangements (design) made to achieve function and purpose (role). Due to their nature, design and use are associated closely with "how" questions. As there is a high level of interconnection between role, design and function, some overlaps may exist between the three parts.

1.3.2 Contributions

In this paper, we make three distinct contributions. First, we contribute to the existing literature by reviewing academic articles related to the use of MCS in PMI, which remains scarce. We synthesise findings with regards to role, design and use of MCS as well as impact on success vs. failure of the integration to provide the reader with a comprehensive overview. Second, we develop a framework that takes into account findings of PMI literature and current critique towards Simons' LOC and use it when collecting primary data.

We especially look for interconnections between the four levers, an approach that is under-investigated, and test for presence of informal controls. Third, by collecting primary data, this thesis advances the limited understanding of MCS' design and usage by top management in PMI. It also explores differences between successful and unsuccessful integrations.

1.4 Outline of the thesis

This thesis will be structured as follows. First, we introduce the method used for conducting this study (chapter two). Then we undertake a literature review that provides background information on PMI, and on MCS (chapter three). In addition to introducing the PMI process, different PMI strategies and key success factors, this chapter provides an overview of existing studies and elaborates on PMI findings with regards to MCS and their interconnections. In this chapter, we also explain our choice of framework, describe Simons' LOC, and highlight their relevance to the post-merger integration context. Based on a reflection of the criticism towards the LOC framework, we then introduce our framework that will be used for primary data collection.

In chapter four we present our empirical findings from interviews with experienced professionals from companies and consultants. These findings will then be discussed with regards to existing literature and our framework in chapter five. In chapter six, we conclude by answering our three research questions, evaluate the usefulness of our framework, and reflect upon theoretical and practical contributions and limitations, as well as provide some suggestions for future research.

2 Method

2.1 Research design

Qualitative research and multiple case study

Research design represents the overall structure for data collection and corresponding analysis (Bryman & Bell, 2011). In this thesis, we followed a qualitative research approach conducting a multiple-case study. Qualitative research is concerned with collecting data about beliefs, values, and behaviour (Bryman & Bell, 2011), which also applies in this paper. Our study led to an adaptation of existing theory, Simons' LOC framework, which is common for qualitative research (Bryman & Bell, 2011).

Referring to Yin (2014), case studies are employed in several circumstances and aim among other factors at adding to our comprehension of individual, social and organisational phenomena. Hence, they are especially applicable in business studies and useful for getting a broad, real-world perspective on managerial procedures, such as the ones we were investigating in our thesis. Case studies are conducted in an exploratory manner that focus on "how" and "why" questions and target at gaining in-depth knowledge of the studied situations (Yin, 2014). Therefore, we considered case study method as the most suitable approach for answering our research questions, that aim to obtain a better understanding of role, design, and use of MCS during PMI.

We considered our approach as a multiple case study, though we recognise that the design differs from the typical multiple case study format in which different objects (e.g. companies) are studied in a specific situation (e.g. a particular post-merger integration) (Yin, 2014). We looked at four company cases that dealt with MCS in PMI, but instead of studying a specific PMI, each company case included several PMI experiences.

Looking at different cases permitted for comparison between them and existing studies, as well as it aided in obtaining a multi-faceted picture (Bryman & Bell, 2011). This also allowed us to contrast successful and unsuccessful PMIs. We put these findings into context by using two expert interviews as a complementary source, which is a form of data triangulation (Patton, 2015). Though there is no specification or final recommendation concerning number of cases to include in multiple case studies, it is acknowledged that having several cases has analytical benefits (Yin, 2014). Given the limitations of this study regarding time and access, we considered four cases a suitable number.

2.2 Literature review

The focus of our literature review was to first familiarise ourselves with what has been currently written (Bryman & Bell, 2011) regarding role, design, and use of MCS in PMI, as prevailing literature is scarce. The literature review also assisted in developing our analytical framework. It provided us with an overview of different alternative existing frameworks and helped us to identify possible adaptations needed for our

framework. In presenting the existing literature on PMI and MCS, we further aimed to give the reader as broad an overview as possible of the topic.

A typical undertaking that was followed in this thesis is so-called “snowball method”. It essentially means that references and citations of relevant articles are adopted (Bryman & Bell, 2011). We started by using different keywords in various established search engines to screen existing literature. Keywords used were among others “MCS”, “management control”, “post-merger integration”, “mergers and acquisitions”, “post-acquisition integration”, “takeover” and “integration management”. By trying different keywords, which we partly found via articles and books that we deemed useful, we were seeking to get the fullest possible overview on the topic. Existing literature reviews on M&A, PMI and Simons’ LOC were good starting points that provided us with information on most cited books, articles, and relevant authors on the topic.

2.3 Framework for data collection

When considering our framework for data collection, we undertook several steps to narrow down our choices. The framework alternatives and criteria are presented in chapter 3.3.. Since we noticed a need for adjustment, we adapted the chosen framework, which was Simons’ LOC, and developed our own framework. Our extensions included informal aspects, strategic drivers and relevant contextual factors, which we identified via reviewing MCS and PMI literature as well as by considering critique on Simons’ LOC. Our framework was also the basis for creating our interview questionnaire.

The framework selection process is depicted in Figure 1 below.

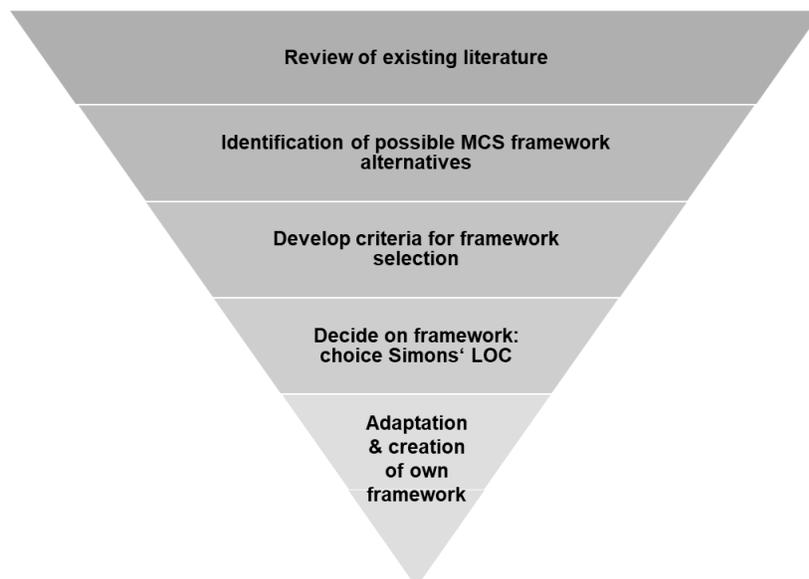


Figure 1: Framework selection process

2.4 Interview process and collection of primary material

Respondent selection

Respondents in this study were chosen based on recommendations from our personal networks. Therefore, our sample is not random, but this choice was made consciously in order to ensure that the respondents would be able to provide us with quality inputs related to our topic and thus ensure relevant and interesting findings. We targeted people either in top management positions or with access to knowledge of top management decision-making processes, and approached them in person or through email. In total, we interviewed six respondents, four who are company professionals, and two who are consultants. Company representatives have been engaged in M&A transactions, mostly acquisitions, throughout their career and have experience with PMI. Consultants have worked with companies that were undergoing PMI, and they provide a valuable outside perspective. All interviewees have experience with MCS, and most of them have a top management background. An overview of our respondents can be found in Table 1 below

Background information				
Respondent index	Position	M&A experience (incl. PMI)	Country	Industry
Respondent 1	Senior M&A controller	<ul style="list-style-type: none"> ▪ Approximately 10 years ▪ Works in central support function for PMI 	Sweden	Industrial
Respondent 2	CFO	<ul style="list-style-type: none"> ▪ 7 years within company, also M&A experience from previous position ▪ Personally engaged in pre- and post-merger phases 	Sweden	Natural resources
Respondent 3	Vice president M&A	<ul style="list-style-type: none"> ▪ Managerial position within M&A for 14 years ▪ Attended several PMI (central perspective) 	Germany	Technology, media and telecom (TMT)
Respondent 4	Senior Vice President Corporate Finance (retired)	<ul style="list-style-type: none"> ▪ Worked with M&A since 1972 ▪ Central coordination function during PMI 	Norway	Natural resources
Expert 1	Head of M&A at very large management consultancy	<ul style="list-style-type: none"> ▪ Approximately 15 M&A transactions, mostly international ▪ Engaged in pre- and post-merger stages 	Sweden	Worked with different industries
Expert 2	Experienced researcher and formerly consultant	<ul style="list-style-type: none"> ▪ Researched and worked with the topic of M&A and PMI since 1980s ▪ Consultant within PMI integrations in public sector 	Sweden	Various industries, private and public sector

Table 1: Overview of interview respondents

Company selection

We chose to focus on very large (operating revenue above 100 million EUR, more than 1000 employees), internationally operating firms for several reasons. First, they are likely to have sound MCS and conduct many acquisitions. Second, it allowed us to look into international PMI which deal with differences in national as well as company culture and corresponding idiosyncrasies that are frequently discussed in literature. Third, Simons' LOC framework is especially applicable for large firms as it was developed in this context. All firms in our sample have their headquarters in Europe.

introduced with practical language. Sending the questionnaire beforehand allowed interviewees to think of successful and unsuccessful PMI examples in advance. A semi-structured approach gave us flexibility to adjust the questions during interviews based on the background and knowledge of the respondents. However, we tried to our best ability to keep the interviews structured to ensure a certain degree of comparability.

Interview process

The interviews were conducted in person (two), via phone (three), and via Skype (one). Phone and Skype were chosen due to geographical distance to interviewees. All interviews were held in English, lasted on average 60 minutes, and were conducted in week 17, 2018. We did not experience any negative bias resulting from how the interviews were conducted and we had no issue in establishing rapport. When we could not read the body language of the interviewees, we made sure to ask follow-up questions in case something was not entirely clear to us, and to give additional clarifications for respondents where needed.

At the beginning of the interview, we asked personal background questions and inquired about how respondents wanted to go through the questions: discussing a chosen successful and unsuccessful PMI separately, or talking about general experiences reflecting on both. Due to ambiguity surrounding definitions of “successful” and “unsuccessful” PMI, we asked the respondents of their specific understanding related to their chosen examples. We also allowed the respondents to talk about topics that were not covered in our questions but that they deemed relevant, as this could uncover information we did not think of beforehand.

During the interviews we took notes. Once we had ensured all relevant aspects of our questionnaire were covered, we gave respondents the opportunity to add some concluding remarks as well as the chance to add any additional information. Some made use of this opportunity, while others did not. Irrespective of this decision, they all offered us to come back either via phone or email to clarify understanding in case that was needed. However, we did not experience such need, thus did not ask any follow-up questions after the interviews.

Use of Likert scale

We had several quantitative questions based on a Likert scale from one to five, with one being low and five being high. Descriptions of “low” and “high” were consciously chosen in order to narrow down the scope of choices (instead of choosing “very low” and “very high”, which we also considered). We chose a five-point scale as it is a simple approach and it is commonly used (Bryman & Bell, 2011). These quantitative questions were not used to run regressions, but to structure and compare our qualitative responses. Not all respondents did feel comfortable to answer these questions, and therefore we were not absolute in their use.

Ethical considerations

To ensure ethical compliance, the participants and companies are kept anonymous. Anonymity might also have a positive effect on the respondents, as it might free them to share more details than they would otherwise have (Bryman & Bell, 2011). Concerning anonymity, we also reflected on how to treat recordings of interviews. Recording allows for listening to the interview repeatedly and thus permits a comprehensive examination of what has been said by respondents (Bryman & Bell, 2011). It also makes taking notes during the interview less important, thus giving the interviewers the chance to focus more deeply on the interview when undertaking it (Bryman & Bell, 2011). Having these advantages in mind, we decided to ask for permission of recording from each participant but also stressed that these were only going to be used for analysis and would be deleted after our writing process. We also considered how to deal with our note and summary taking. We opted for using written records to improve analysis but also decided to eliminate them once our study was done to comply with ethical requirements.

2.5 Alternative methods

We also considered other methods that could aid us in answering our research questions, namely: case survey methodology, surveys, literature review, or single case study. Case survey methodology is a quantitative approach in which, by using a coding scheme and defining variables, existing cases are analysed statistically (Larsson, 1993). After having piloted this alternative, we quickly found that this method was unsuitable for our purpose as there was only little available material on the use of MCS in PMI. Moreover, the cases were undertaken with different intentions, thus not yielding comparable results.

We also considered conducting a survey but found this approach too standardised, not giving us the opportunity to explore beyond given answers. Concerned with a possible low response rate and getting a sample large enough for being representative (Bryman & Bell, 2011), we deemed surveys to be inappropriate for our thesis. We decided not to conduct this study as a pure literature review due to the same reason as case survey method. It proved challenging to find enough material that would suffice for an interesting analysis and discussion. However, undertaking a literature review as a complementary element allowed us to integrate findings into our interview questions and developed framework as well as it permitted for comparing our results with previous studies.

Another alternative would have been to conduct an in-depth single case study over time, accompanying a recently merged firm undergoing PMI. Despite being interesting, we recognised this would not be possible given our time and resource constraints. It would neither have given us the opportunity to assess differences among successful and unsuccessful PMI.

2.6 Presentation of empirical material and analysis of data

In order to present and analyse our data obtained from interviews, we listened again to our recordings individually, shared our notes with each other, and created combined summaries. Thereby, we wanted to ensure that we covered all important points. It also allowed us to discuss the material from our personal points of view and explore whether we had similar or different understanding, before starting with a detailed analysis. Moreover, listening to recordings helped us identify and select quotes we could use to introduce different sections when presenting our empirical material, to arouse the reader's interest and to provide him with a rough idea what content was going to follow.

We presented the obtained empirical data based on the structure of our framework, which constituted an extension of Simons' LOC. We introduced the four case companies and gave them numbers which corresponded to the different respondents; this aimed at making it easier for the reader to follow the text, and simultaneously comply with agreed upon anonymity. Next to company cases, we included two PMI experts. With experts, the focus was not on individual companies but rather on their general PMI experiences with different industries and firms. Hence, we decided to present them in a different way than the case companies. Consequently, we provided the reader with more background information on the role experts had during different PMIs, to allow for a better understanding of how the chosen experts could complement findings from company cases. Additionally, we included all respondents' (i.e. company representatives and experts) view on what they constituted successful and less successful integrations, and gave some examples. In this way, we targeted to ensure that the reader could more easily comprehend the following findings and their context.

As our questionnaire included some structured questions which resulted in similar results, we decided to present the empirical findings in a synthesised way and not to describe findings of each company separately. This allowed us to arrange findings among themes and to include direct comparisons between different cases. This form of presentation can be seen as cross-case synthesis, in which the focus lies on exploring whether studied cases have replicating or contrasting characteristics (Yin, 2014).

Ranking questions about importance of each control lever were based on five-point Likert scale, and their results were verbalised in the different sections of the data presentation. Since our sample was small and not all respondents answered these questions, we did not analyse them quantitatively. An overall summary of the rankings was included in the concluding chapter of empiricals (chapter 4.11) to give more detail on individual responses.

When undertaking our analysis, we aimed to first present general conclusions emerging from our empirical findings, and then compared them to the existing literature. Via this form of pattern matching technique (Sinkovics, 2018), we aimed to answer our three research questions that focused on role, design, and use of MCS, as well as differences across successful and unsuccessful PMI. We further considered contextual

factors in order to find possible alternative explanations that may have impacted our findings, which is an analysis technique recommended by Yin (2014).

2.7 Validity and reliability

When undertaking business research, certain quality standards have to be met. These are reliability, replication, and validity, and they are examined through four criteria, namely credibility, transferability, dependability and confirmability (Bryman & Bell, 2011).

Credibility is concerned with how trustworthy and believable findings are (Bryman & Bell, 2011). We addressed this criterion by carefully choosing our interview respondents. All of them are very experienced with PMI and have been involved in more than ten PMIs during their career; two of them even in more than fifty. Due to their wealth of real-life experience and professional backgrounds, we did not find any reason why not to rely on their statements. Additionally, we complemented and contrasted our case findings with expert opinions to increase credibility and clarity. By ensuring anonymity regarding company and person, we encouraged our respondents to feel comfortable to share also less successful PMI insights. We further made use of pattern matching technique and followed our framework in presenting and analysing our empirical material, which are components to enhance credibility recommended by Yin (2014). We also included questions about contextual factors; in this way we could explore if they had any effect on success or failure of PMI, and present alternative explanations beyond the impact of design and use of MCS.

Transferability refers to whether results also apply to different contexts and thus deals with the ability to generalise findings (Bryman & Bell, 2011). To get as many insights as possible and thereby increase transferability to a certain extent, we decided to collect multiple cases instead of conducting a single-case study. Yin (2014) suggests including both “how” and “why” questions to improve transferability, which is something we did during the interviews due to the focus of our research questions.

Dependability is about meeting reliability requirements and is mainly concerned with whether findings are relevant at other times (Bryman & Bell, 2011) and if other researchers could come to the same conclusions when replicating the study (Yin, 2014). Dependability can be enhanced through protocols and developing databases for collected case study material (Yin, 2014). We addressed this concern by taking notes individually and by making use of recordings. We also tried to follow a similar structure in all interviews as far as that was applicable with respect to interviewees’ preferences and backgrounds. In the Appendix, we present a detailed documentation of our approach, as we provide our interview leaflet (Appendix 1) and interview questions (Appendix 2), which could be used for further research.

Confirmability deals with the objectivity of the researcher (Bryman & Bell, 2011). We targeted to use as neutral language as possible to prevent own biases. To increase objectivity, we reflected on questions that have been used by other researchers with similar aims, and reviewed our questionnaire with the help of mock interviews and feedback from our supervisor. Before interviews, we researched both the companies

and interviewees by looking at published information which is in line with Yin's (2014) recommendation to consider available data outside of primary data collection. Moreover, we summarised our interpretations of information during interviews and let interviewees confirm them. All interviewees offered a possibility to contact them either by email or phone for further clarifications or follow-up questions in case this was necessary.

2.8 Limitations

Subjectivity is a typical issue in qualitative research. According to Bryman and Bell (2011), collected material is subject to interpretation by the interviewers and is thus affected by their previous knowledge and experiences. Replication is thus difficult, which is another common issue within qualitative inquiry. The sample size used in this study is not exhaustive, which is one factor among others why results cannot be generalised. Since our sample was not randomly chosen, it was biased with respect to company choice, respondent selection, and type of transaction.

Results, suggestions, conclusions, as well as implications presented in this study, may differ if other companies or respondents were selected (Patton, 2015). Respondents interviewed for this study represent their personal opinions, even though they are employed at a specific firm. Their answers should therefore not be perceived as official company statements. Due to the nature of this study, we faced restrictions on especially time resources, which impacted many of our choices.

Another shortcoming is that we conducted only one interview with each representative. We interviewed only one person from each company, and we only examined the perspective of an acquiring firm. However, the acquired side may have different perceptions of the same process which could have led to dissimilar results. We also did not focus on differences between mergers and acquisitions, as we focused on acquisitions only.

All respondents worked within the field of accounting and finance, which is why their focus is biased in that direction. Asking the same questions from a professional within another business area, such as HR or marketing, might have yielded different responses. Respondents might also attempt to present themselves or their companies in favourable light, nevertheless we tried to minimise this bias by treating the material anonymously.

Moreover, we used snowball method in literature review, which may bias our findings. When articles are gathered through snowball method, there is a risk that they will lead to similar results (Bryman & Bell, 2011). We might neither have found all relevant MCS studies due to the keywords that we used.

3 Literature review

In this chapter, we first provide relevant background information on the post-merger integration process, different PMI strategies, and success factors for integration (3.1). Following this overview of PMI, we define management control systems, elaborate on their role, and explain their relevance for PMI (3.2.1). This chapter also includes a review on studies that have examined PMI via MCS perspective and focuses on role, design, and use of MCS, as well as their impact on PMI success or failure (3.2.2). Moreover, our framework selection (3.3) as well as the chosen framework, Simons' LOC, will be introduced, current critique towards it, and its relevance to PMI context will be highlighted (3.4 & 3.5). This chapter ends with a presentation of our developed framework (3.6).

3.1 Post-merger integration

3.1.1 Post-merger integration process

There is no agreement in the literature concerning amount and characterisation of M&A process stages; however, it has two major components: pre- and post-merger phase (Gomes et al., 2013). It is important to consider that these two phases are highly interrelated and their transition has to be managed carefully (Gomes et al., 2013). Although stages of the pre-merger phase differ in the literature, there is broad consensus that this phase includes strategic decisions which are the baseline for M&A motives and PMI process (Bergamin & Braun, 2018; Weber, Tarba & Öberg, 2014).

Integration management consists of five components: determining clear responsibilities and assigning implementation tasks (e.g. integration office or integration team), performance transformation (degree of integration, adaptation of IT systems, priorities for post-merger value creation), customers and market communication, retention of talents and integration monitoring, and formulation of vision and mission statements (Bergamin & Braun, 2018). Additionally, DePamphilis (2011) mentions building of new corporate culture. Part of the integration process is also implementing the chosen post-merger strategy (Bergamin & Braun, 2018). Integration is usually done on a project basis (DePamphilis, 2011; Bergamin & Braun, 2018) and includes important milestones, like 100-day plans (Gomes et al., 2013; Bergamin & Braun, 2018).

Post-merger integration strategies with regards to level of integration

The most famous typology of PMI strategy is a matrix view by Haspeslagh and Jemison (1991), where they distinguish between strategic interdependence and organisational autonomy (cited in Angwin & Meadows, 2015). Strategic interdependence is the extent of knowledge transfer and sharing of resources, whereas organisational autonomy relates to maintaining an organisation's culture (Angwin & Meadows, 2015). This matrix results in four integration strategies: holding, preservation, symbiosis, and absorption (Angwin & Meadows, 2015). The choice of integration strategy differs and should be in accordance with the M&A motive (Bergamin & Braun, 2018).

Holding and preservation are characterised by low strategic interdependence. During preservation extent of autonomy is high, but in holding it is low. In both cases, the degree of integration is rather low, which makes PMI easier to manage (Bergamin & Braun, 2018). Absorption and symbiosis are based on high level of strategic interdependence and interaction between acquiring and acquired party (Angwin & Meadows, 2015). In symbiosis, the acquired firm maintains a high level of autonomy and thus this approach can only be seen as partial integration, but in absorption, a full integration takes place (Bergamin & Braun, 2018).

3.1.2 Post-merger integration success factors

Numerous reasons behind M&A failure are related to pre-merger stage such as overpriced deal, bad deal structure, acquiring far away from the core business and doubtful economic benefits, buying out of weakness (Bruner, 2005), poor due-diligence, lack of strategic vision and fit, and external factors (Epstein, 2005). These issues also have an impact on successfulness of PMI (Bruner, 2005). During PMI, integration issues arise (Björkman, Stahl & Vaara, 2007) which is one of the main dimensions affecting M&A performance (Straub, 2007). M&A transactions can succeed if the right strategy, that is clearly linked back to the motives, is used and combined with careful PMI (Hopkins, 2008).

Strong agreement prevails in the literature that commitment of top management is crucial for integration (e.g. Granlund, 2003; Jordão, Souza & Avelar, 2014). If integration is not treated as a top priority by CEOs, it has less likelihood to succeed (Beusch, 2007). It is important in PMI to establish a suitable leadership team as soon as possible after closing of the transaction (Epstein, 2005) since senior managers make choices that impact whether a merger will be successful or not (Bruner, 2005). Additionally, execution of integration plans is a critical element (Jones, 1985b; Hoque & Chia, 2012).

Success of PMI is aided by communication, speed in implementation, strong integration team (Epstein, 2004; Bergamin & Braun, 2018; Gomes et al., 2013), retention of talent, managing cultural differences (Gomes et al., 2013), presence of trust, lack of power struggles (Stahl, 2004), and adequate and aligned monitoring instruments (Bergamin & Braun, 2018; Epstein, 2004). On the other hand, burdensome complexity of the business, lack of buffers to absorb possible shocks, lack of ability to do “business as usual”, and poor governance and incentive systems lead towards PMI failure (Bruner, 2005).

3.2 Examining post-merger integration through management control systems perspective

3.2.1 Management control systems

Overall background

Management control systems have been studied widely. Numerous definitions exist, distinct terms are used, and different descriptions of types of controls can be found (Chenhall, 2003). A frequently cited definition of MCS is provided by Anthony (1965), who understands management control as a process by which management aims at adequate resource allocation and usage, to ensure that company goals are

met. This is in line with Malmi and Brown (2008), who on top of that describe MCS as a package of tools and systems that guide employee behaviour.

Both Malmi and Brown (2008) and Ferreira and Otley (2009) take a broad approach on MCS, which is in line with our understanding. When describing MCS, they include aspects such as performance evaluation, reward systems that motivate employees, financial and non-financial information, as well as formal and informal control mechanisms. While formal controls are more visible and can be explicitly expressed, informal controls are harder to grasp as they comprise unwritten policies and procedures that stem from the company culture (Langfield-Smith, 2007).

In the traditional view, MCS are seen as calculative, accounting-based practices (Chenhall, 2003). They are perceived as decision support tools concerned with the implementation of a chosen strategy, and with ensuring that employee behaviour follows organisational objectives (Anthony & Govindarajan, 2007; Merchant & van der Stede, 2007). However, the role of MCS has expanded from being primarily internal and backward-looking towards an external and future-oriented focus (Lord, 2007; Langfield-Smith, 2008). In the course of this development risk analyses have been added, financial information has been complemented by non-financial KPIs (Langfield-Smith, 2008), and focus has moved from pure strategy implementation to identifying necessary adaptations that foster strategic change (Anthony & Govindarajan, 2007).

Relevance of management control systems for post-merger integration

Corporate M&A activities are important phases for firms since they often lead to alterations in company strategy, organisational setup, power structures, and competitive environment (Hoque & Chia, 2012; Jones, 1985b). Especially the PMI phase is characterised by uncertainties (Jones, 1985b) which may raise concerns among staff (Larsson & Lubatkin, 2001). In the light of these changes and challenges, use of MCS has to be reconsidered and adapted accordingly (Hoque & Chia, 2012; Jordão, Souza & Avelar, 2014). MCS are focused on managing the integration efficiently and effectively once the deal has been closed (Bergamin & Braun, 2018).

Design and use of MCS differ depending on planned degree of integration, holding, preservation, absorption, and symbiosis (Angwin & Meadows, 2015). As M&As are undertaken for different reasons and every deal is unique (Bower, 2001), these idiosyncrasies have to be taken into account when setting-up and using MCS for PMI (Jordão, Souza & Avelar, 2014). This corresponds to the contingency approach of MCS which advocates that there is no “one size fits all” (Chenhall, 2003).

3.2.2 Management control systems in post-merger integration

Literature that examines PMI processes explicitly through MCS lens remains scarce (Beusch, 2007). Nevertheless, some authors have chosen to focus on the role of MCS, their design and use in PMI, and

they also touch upon possible impact MCS have on success or failure of the integration. A few studies were conducted quantitatively; however, most authors employed qualitative case studies. Details regarding these conducted studies, including method and study focus, can be found in Appendix 3. Main results concerning role, design and use of MCS, as well as impact on success or failure of PMI will be presented below.

Our understanding of role, design, and use remain as follows: “role” corresponds to function and/or purpose (why?), while “design and use” refers to arrangements and implementation to fulfil the assigned role (how?). Thus, when examining role, we concentrate on reasons for employing MCS. When elaborating on design and use, we focus on decisions regarding overall set-up, different control devices, and how MCS is employed over time during PMI.

Role

In general, use of MCS fulfils different roles for distinct groups and individuals during different times of PMI (Puhakka, 2017). Broad agreement prevails regarding the role of MCS in facilitating corporate integration (Jones, 1985b; Granlund, 2003; Hoque & Chia, 2012). MCS assist in undertaking changes following a takeover, and especially financial measures can have a purpose of making the organisational members feel uneasy with the prevailing norms (Jones, 1985b). Simultaneously, MCS can be critical elements in achieving stability during PMI as they maintain routines (Granlund, 2003) and ensure that day-to-day operations are carried out efficiently (Jones, 1985b). Moreover, MCS serve to guide employees (Hoque & Chia, 2012) and encourage desired behaviour (Jordão, Souza & Avelar, 2014). Relationships of stakeholders within the organisation are shaped by MCS (Roberts, 1990), and although not explored in detail in his study, Granlund (2003) assumes that trust between the acquired and acquiring company can be established and enhanced with use of MCS, thus facilitating PMI.

Another pivotal function of MCS during PMI is to provide information for decision-making purposes (Nilsson, 2002; Jordão, Souza & Avelar, 2014). Their role is also to exercise control (Granlund, 2003) as well as to coordinate and communicate (Nilsson, 2002) strategy, new vision, and corresponding goals - ideally throughout different hierarchical levels (Jordão, Souza & Avelar, 2014). Thus, MCS fulfil an important function in creating meaning, common understanding and commitment (Granlund, 2003). Especially in early phases of PMI, one of the primary objectives of MCS is to create and maintain momentum (Hoque & Chia, 2012) and to produce a beneficial atmosphere for interaction between different actors which is the basis for synergy realisation (Gates & Very, 2003; Beusch, 2007). Building shared common values, and corporate language is relevant in PMI context due to prevailing uncertainty and ambiguity (Puhakka, 2017). Accounting, being a common language for companies, has the ability to reduce complexity (Puhakka, 2017) and thus can be useful in transnational M&A where language barriers exist (Beusch, 2017).

The role of MCS is to motivate (Jones, 1985b), maintain focus on what is perceived important by management (Hoque & Chia, 2012) and to achieve organisational goal alignment (Roberts, 1990) in order to ensure that value creation forecasted in the pre-merger stage is actually realised (Gates & Very, 2003).

Next to motivational and alignment purposes, budgets and planning serve for resource allocation (Beusch, 2007). They also facilitate delegation of authority, thereby empowering certain organisational members and establishing accountability (Beusch, 2007; Jones, 1985b). Moreover, MCS have an indispensable role in implementing the chosen strategy and in operationalising strategic goals (Roberts, 1990; Nilsson, 2002). Beyond this, their task is to enable organisational learning and ensure knowledge transfer during PMI (Hoque & Chia, 2012; Gates & Very, 2003). Their functions are to identify adaptation needs of the strategy and to constantly review processes (Jordão, Souza & Avelar, 2014).

Design and use

Most researchers agree that pre-merger steps and their outcomes should be considered when designing MCS for PMI (e.g. Beusch, 2007; Puhakka, 2017). Important questions which arise are if, to what extent, and when MCS of acquiring and acquired organisation should be integrated (Nilsson, 2002; Puhakka, 2017). Major changes are usually made to the acquired firm's MCS, but those of the acquiring company are adapted only slightly (Jones, 1985b). Caulkin (1975, cited in Nilsson, 2002) argues that this is a necessary step to ensure immediate control following the acquisition.

MCS integration usually occurred within the first year in Jones' study (1985a), and the more important MCS were considered to be, the faster the changes were made (Jones, 1985b). Sometimes careful attempts towards taking best from both sides are undertaken, and alterations are deliberately postponed to not endanger the day-to-day business (Beusch, 2007). Accordingly, Gates and Very (2003) consider pros and cons of fast MCS integration. On the one hand, they are in favour of implementing and altering MCS with speed to exploit momentum and increase commitment. On the other hand, they recognise that if a new design of MCS is introduced early on, it may increase resistance among staff. It is, therefore, a learning process, and adaptations to design and use of MCS have to be considered based on new insights obtained during PMI. Consensus exists that when designing MCS for the merged company, contextual factors, like strategy and culture, should be considered (Hoque & Chia, 2012; Nilsson, 2002; Jordão, Souza & Avelar, 2014).

During PMI, MCS are used for performance evaluation and monitoring of integration activities (Jordão, Souza & Avelar, 2014). Reward and incentive schemes are usually linked to performance measures that aim to motivate and align employees (Jones, 1985b; Jordão, Souza & Avelar, 2014). But implementing performance evaluation requires that other parts of MCS are in place first, including target-setting and monitoring (Puhakka, 2017). Setting up implementation plans with tasks and milestones (Gates & Very, 2003; Nilsson, 2002) allows for follow-up on agreed objectives on a regular basis (Hoque & Chia, 2012). If deviations are detected, problems have to be analysed in order to take corrective actions (Jordão, Souza & Avelar, 2014; Puhakka, 2017). Moreover, new rules, norms, and routines are established, for example through code of conduct (Beusch, 2007), to guide employees (Hoque & Chia, 2012) and encourage desired

behaviour (Jordão, Souza & Avelar, 2014). By using MCS in these ways, companies try to implement strategy during PMI (Hoque & Chia, 2012).

As top management gets involved in conversations about strategic topics with other employees, the focus lies on fostering commitment among staff by letting them participate in discussions (Beusch, 2007). This can take place during conferences, meetings, and other forms of get-togethers (Roberts, 1990; Hoque & Chia, 2012). It is also about getting valuable insights from bottom-up (Hoque & Chia, 2012). In most cases (e.g. Beusch, 2007; Roberts, 1990), the focus lies on general exchange to begin with, and only later during PMI bottom-up input is explicitly used to develop the strategy further.

In almost half of the articles we took into account, authors clearly express that formal and informal controls work in tandem (Calori, Lubatkin & Very, 1994; Nilsson, 2002; Beusch, 2007; Jordão, Souza & Avelar, 2014; Puhakka, 2017). With regards to Calori, Lubatkin and Very (1994), using informal controls is especially important in the socialisation process during PMI. Looking at an international M&A sample, they found that national biases towards different controls (formal or informal) influenced their degree and form of utilisation.

The majority of studies emphasises use of both financial and non-financial (e.g. Nilsson, 2002; Gates & Very, 2003; Hoque & Chia, 2012) as well as short-term and long-term KPIs (e.g. Jones, 1985b; Nilsson, 2002; Jordão, Souza & Avelar, 2014). In order to evaluate the integration from different perspectives, analyses of drivers of value creation, leakage (form of risk analyses), and balanced scorecard approach can be used (Gates & Very, 2003). Since MCS are reconsidered following a takeover, this moment can be utilised for introducing new techniques that have not been used before (Hoque & Chia, 2012).

Looking at accounting-based techniques, Jones (1985b) found that the majority of MCS instruments experienced greater emphasis following the acquisition. Reporting and planning became more frequent during the early integration phase, as compared to before the pre-merger stage. His findings are not supported by Granlund (2003), who did not find significant changes with regards to increased MCS importance in PMI. Some large firms did not make use of MCS at all to monitor integration (Gates & Very, 2003), and others stress that reported KPIs might be incomparable (Beusch, 2007; Granlund, 2003).

Impact of design and use of management control systems on success or failure of post-merger integration

Success or failure of post-merger integration can appear in various ways. While some authors focus on aspects related to performance (e.g. Calori, Lubatkin & Very, 1994; Gates & Very, 2003), others point to acceptance and commitment within the organisation, or integration of systems and tools as determining factors (e.g. Beusch, 2007; Granlund, 2003).

Absence of sophisticated MCS, delays in use, and availability of resources have a strong impact on success of integration (Granlund, 2003; Puhakka, 2017). In the case Puhakka (2017) studied, MCS could not handle planned growth from M&A activity, and the organisation was falling into ad-hoc mode of action rather than managing PMI. Also, incomparability of information produced by KPIs, complexity and incompatible systems present a major challenge for managing PMI appropriately, as useful ad-hoc analyses for decision-making purposes can seldom be provided in those cases (Granlund, 2003). Another critical issue is if goals of integration remain unclear, which results in MCS being too vague, not providing clear guidance for employees on how to behave (Beusch, 2007).

In a similar vein, lack of interaction between different controls represents an obstacle to effective integration (Hoque & Chia, 2012). Successful PMI can only be achieved if all elements of MCS work together in combination (Hoque & Chia, 2012). Moreover, special emphasis on informal controls is likely to impact the success of integration, as those are powerful means for creating “real commitment” via socialisation processes (Calori, Lubatkin & Very, 1994).

Contextual factors are among most important aspects that must be considered when designing and using MCS that will support PMI (Gates & Very, 2003). They can be related to different aspects, for example industry, company, or individuals. Relevant contextual factors include strategy (e.g. Nilsson, 2002; Hoque & Chia, 2012), pre-merger phase (Gates & Very, 2003; Puhakka, 2017), size (Calori, Lubatkin & Very, 1994; Jones, 1985b) experience of top managers (Gates & Very, 2002) as well as national and corporate culture (e.g. Calori, Lubatkin & Very, 1994) and employee reactions (e.g. Jones, 1985a).

Strategy sets the overall direction for PMI as well as it determines degree of integration, and which information is needed, and to be delivered by MCS (Nilsson, 2002; Gates & Very, 2003). Both, strategy and design and use of MCS have to match to support the integration (Nilsson, 2002; Hoque & Chia, 2012). Major problems can arise during PMI if there is a misfit between the strategy of the acquirer and the acquired firm (Nilsson, 2002). This can cause difficulties when designing MCS, especially if they are to fulfil the needs of the merged organisation (Nilsson, 2002).

Company size generally has an impact on MCS as in larger firms sophisticated MCS are more likely needed to steer the operations than in smaller ones (Jones, 1985b). In PMI, company size determines degree of control exercised by the acquiring party onto the acquired firm (Calori, Lubatkin & Very, 2003). In an acquisition, the acquirer, who is usually the larger counterpart in the transaction, has the power to decide on design and use of the merged entity (Jones, 1985b). On the contrary in a merger of equal size, best of both approaches are more common (Granlund, 2003).

Pre- and post-merger phases are highly interlinked, and the pre-merger phase influences design and use of MCS as this phase concerns decisions about where to focus on in PMI (Gates & Very, 2003; Puhakka, 2017). As oftentimes different actors are involved in pre- and post-merger activities, relevant knowledge for

MCS design and use may not be passed on timely or even altogether, which represents an impediment for successful PMI (Gates & Very, 2003).

Previous experience top managers have with acquisitions usually facilitates the set-up of suitable integration processes and corresponding MCS (Nilsson, 2002). If management has no or only low practical knowledge about PMI, experts like consultants can become a valuable support in set-up and use of MCS (Jordão, Souza & Avelar, 2014).

When companies merge, this can lead to a collision of cultures, which negatively impacts acceptance and effectiveness of MCS (Granlund, 2003). MCS design and use following an acquisition can reduce but also intensify these cultural clashes (Granlund, 2003; Jordão, Souza & Avelar, 2014). Being conscious of culture and own preferences is therefore helpful when designing and using MCS in PMI (Calori, Lubatkin & Very, 1994).

Employee reactions can range from departure, resistance, blocking, resignation, scepticism to acceptance, cooperation, and commitment (Jones, 1985b; Granlund; 2003; Gates & Very, 2003). The more radical changes in MCS and management philosophies are, the more intense the reactions can be expected to be (Jones, 1985b). MCS are powerful as their set-up and use can increase “we vs. they” feelings, thus they have to be designed carefully for integration purposes (Beusch, 2007). Participation of lower-level management and employees in design of MCS can increase commitment among workers and increase operational usefulness of MCS (Jones, 1985b; Jordão, Souza and Avelar, 2014). Moreover, key individuals play an important role in setting up new MCS and their acceptance is pivotal (Granlund, 2003; Beusch, 2007). Top management has to give MCS a priority to support PMI success, and if opponents of change leave the organisation, this is usually favourable for integration (Beusch, 2007).

Consensus prevails that contextual factors have to be considered (e.g. Jones, 1985b; Nilsson, 2002; Jordão, Souza & Avelar, 2014). But there is no “one size fits all” approach for PMI (Nilsson, 2002; Beusch, 2007) and MCS should include flexible and adaptive components (Gates & Very, 2003; Beusch, 2007) to make PMI a success.

A summary of above-mentioned literature findings regarding role, design and use of MCS, as well as their impact on PMI success or failure, is presented in Table 2 below.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact on PMI success / failure
<ul style="list-style-type: none"> ▪ Facilitate integration and assist change <ul style="list-style-type: none"> ▪ Achieve stability via rules and routines, ensure efficiency in day-to-day operations ▪ Guidance for employee behaviour, encourage desired behaviour ▪ Shape relationships between stakeholders ▪ Establish trust ▪ Assist decision-making and achieve goal alignment <ul style="list-style-type: none"> ▪ Provide information for decision-making purposes ▪ Control, communication, coordination ▪ Signal priorities ▪ Commitment and complexity reduction <ul style="list-style-type: none"> ▪ Create meaning, common understanding, shared values, corporate language ▪ Create and maintain momentum ▪ Planning and motivation <ul style="list-style-type: none"> ▪ Ensure value creation ▪ Resource allocation ▪ Delegate authority ▪ Achieve accountability ▪ Strategy implementation and development <ul style="list-style-type: none"> ▪ Operationalise strategic goals ▪ Support organisational learning ▪ Ensure knowledge transfer 	<ul style="list-style-type: none"> ▪ Decisions about MCS changes / integration <ul style="list-style-type: none"> ▪ If any, extent, when, speed ▪ Often: major changes made to acquired company ▪ Sometimes: best of both approaches ▪ Design attributes and design process <ul style="list-style-type: none"> ▪ Adaptations based on new insights ▪ Consideration of contextual factors ▪ Introduction of new techniques ▪ Instruments <ul style="list-style-type: none"> ▪ Codes of conduct ▪ Planning guidelines ▪ Vision and mission statements ▪ Financial and non-financial KPIs ▪ Short- and long-term KPIs ▪ Balanced Scorecard, risk analyses ▪ Formal and informal controls ▪ Processes in use <ul style="list-style-type: none"> ▪ Performance evaluation, including reward schemes and target setting ▪ Monitoring of integration activities, including corrective actions ▪ Establish new rules, norms and routines ▪ Discussion of strategic topics ▪ MCS importance and issues <ul style="list-style-type: none"> ▪ Greater emphasis on reporting during early integration phase ▪ Comparability of KPIs ▪ Absence of MCS and KPIs 	<ul style="list-style-type: none"> ▪ Adequateness of design and use of MCS <ul style="list-style-type: none"> ▪ Absence of sophisticated MCS, delays and availability of resources have strong impact on PMI successfulness ▪ Complexity, incomparability and incompatible systems impede PMI ▪ Lack of clear integration goals creates confusion ▪ "No one size fits all", flexible and adaptive components necessary ▪ Use of different MCS elements <ul style="list-style-type: none"> ▪ All MCS have to work together in combination ▪ Informal controls can create "real commitment" ▪ Consideration of different contextual factors as critical element for PMI success <ul style="list-style-type: none"> ▪ <u>Strategy</u> <ul style="list-style-type: none"> ▪ Match with MCS indispensable ▪ <u>Pre-merger phase</u> <ul style="list-style-type: none"> ▪ Missing link between pre- and post-merger phase severe impediment ▪ <u>Size</u> <ul style="list-style-type: none"> ▪ Determines need of MCS and degree of exercised control ▪ Affects decision-making power in PMI ▪ <u>Top manager's experience</u> <ul style="list-style-type: none"> ▪ Experience & consultants can facilitate PMI ▪ <u>National and/or corporate culture</u> <ul style="list-style-type: none"> ▪ MCS can reduce or intensify cultural clashes ▪ <u>Employee reactions</u> <ul style="list-style-type: none"> ▪ Reactions towards MCS vary ▪ Participation can increase commitment ▪ Key players important for effectiveness of MCS (opponents or promoters of change)

Table 2: Summary of role, design and use of MCS in PMI

3.3 Choice of management control systems framework for data collection

We considered four MCS frameworks that are perceived relevant in theory and practice as potentially useful for our data collection. We present them below in Table 3. All of these frameworks take a broad view on MCS that extends the traditional one which, as pointed out in the literature review, is also relevant for PMI. Moreover, all focus on design and use, which makes them especially applicable for our research purpose. The majority includes formal and informal controls which, with respect to literature, can both impact PMI and were thus part of our criteria.

Based on our findings from the literature review, we decided to focus on top management perspective because they are identified as key players in PMI. We furthermore strived for a low degree of complexity as well as high practical relevance and previous application in PMI contexts. Except for informal controls, Simons' LOC framework fulfilled all of the above. Therefore, we chose Simons' LOC as a starting point and developed it further via our framework.

Considered management control frameworks				
	Simons (1994)	Ahrens & Chapman (2004)	Malmi & Brown (2008)	Ferreira & Otley (2009)
Control elements	<ul style="list-style-type: none"> ▪ Belief systems ▪ Boundary systems ▪ Diagnostic control systems ▪ Interactive control systems 	Enabling: <ul style="list-style-type: none"> ▪ Repair ▪ Internal transparency ▪ Global transparency ▪ Flexibility Coercive: <ul style="list-style-type: none"> ▪ Centralisation ▪ Pre-planning 	<ul style="list-style-type: none"> ▪ Cultural controls ▪ Planning ▪ Cybernetic controls ▪ Rewards and compensation ▪ Administrative controls 	<ul style="list-style-type: none"> ▪ Vision & Mission ▪ Key success factors ▪ Organisation structure ▪ Strategies & Plans ▪ Key performance measures ▪ Target setting ▪ Performance evaluation ▪ Reward systems ▪ 4 measures of features and mechanisms of PMS ▪ Contextual factors
Form of control	Formal	Formal and informal	Formal and informal	Formal and informal
Focus	Design and use	Design and use	Design and use, package approach	Design and use, Performance management
Perspective	Top management	Employee perceptions	Organisation as a whole	Organisation as a whole
Degree of complexity	Low	Medium	Medium	High
Context of development	Organisational change and strategic renewal	Analysis of processual uses of MCS	Interconnections of MCS	Research tool for PMS
Form of development	Case study	Case Study	Literature review	Literature review, observations and experience
Previously applied in PMI context	Yes	Not to our knowledge	Not to our knowledge	Not to our knowledge

Table 3: Considered MCS framework alternatives

3.4 Simons' levers of control framework

Framework development and its relevance for post-merger integration

Simons (1994) explored how ten newly appointed CEOs used management control as a way to introduce their new strategies over 18 months following their appointments. Simons defined management controls as “the formal, information-based routines and procedures used by managers to maintain or alter patterns in organizational activities” (Simons, 1994, p.170). He distinguished between whether CEOs came from within or outside the organisation, and whether they aimed at achieving strategic turnaround or targeted at incremental strategic change. His framework of four LOC and corresponding key design variables included belief systems (core values), boundary systems (risks to be avoided), diagnostic control systems (critical performance variables) and interactive control systems (strategic uncertainties). Most importantly, Simons

(1994) stressed that all four different LOC are interdependent and must be considered jointly. The LOC framework is shown in Figure 3.

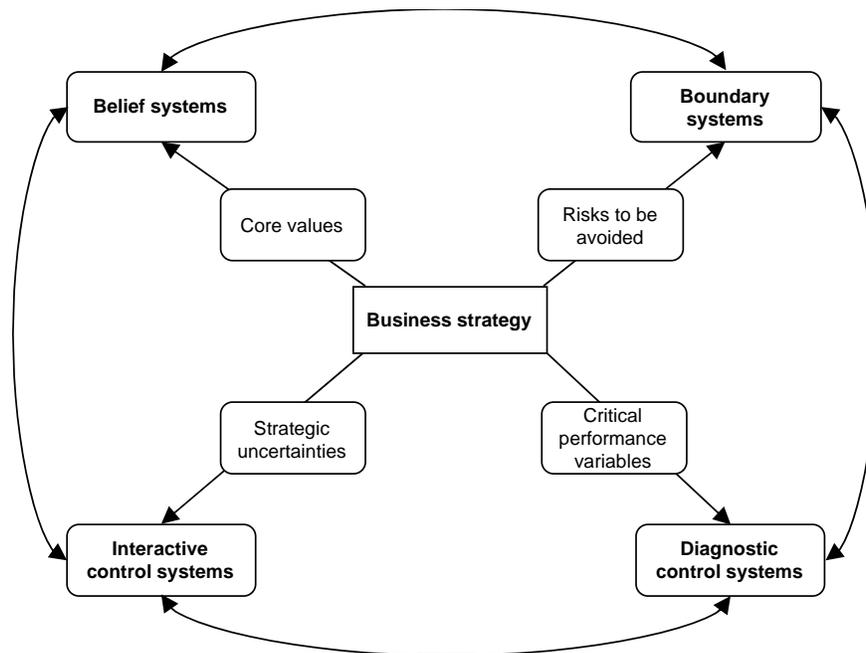


Figure 3: Levers of control framework based on Simons, 1995, p. 159

The framework appears to be particularly useful for practical application (Martyn, Sweeney & Curtis, 2016; Mundy, 2010) due to its emphasis on actual use of MCS rather than merely investigating existing techniques and structures (Mundy, 2010). Its focus lies explicitly on strategic topics which are a major concern of top management (Bedford, Malmi & Sandelin, 2016). It has proven valuable when exploring situations of organisational change and times of strategic renewal, such as innovation (e.g. Davila, 2005; Revellino & Mouritsen, 2009) or PMI (Hoque & Chia, 2012). However, the LOC framework remains rarely applied in PMI context.

Critique on Simons' LOC

Despite its generally broad application and acceptance in literature and among researchers, there is also some critique on Simons' LOC reflecting upon major strengths and weaknesses (Martyn, Sweeney & Curtis, 2016). While simplicity makes the framework attractive, it also leads to some drawbacks (Tessier & Otley, 2012). Among the main weaknesses are ambiguity, vagueness, and overlapping in definitions in key concepts, such as core values and interactive controls (Tessier & Otley, 2012). In consequence, varying interpretations yield inconsistent and partially incomparable results, thus hindering a coherent development within research (Curtis, Lillis & Sweeney, 2017).

Another main critique is the exclusion of informal controls (e.g. Collier, 2005; Ferreira & Otley, 2009). Companies studied by Simons were large (Martyn, Sweeney & Curtis, 2016) and may have a tendency to

emphasise formal controls more than smaller firms that rely more on informal control mechanisms (Ferreira & Otley, 2009). However, studies using the LOC framework have found strong links between formal and informal controls (e.g. Collier, 2005; Mundy, 2010).

Some authors have complained about the sole top management focus (e.g. Ferreira & Otley, 2009; Tessier & Otley, 2012), whereas others deemed it appropriate. Nonetheless, suggestions to extend the framework to lower levels of management exist (Ferreira & Otley, 2009) as well as proposals to include employee perceptions (Tessier & Otley, 2012). Further critique concerns the connotation of positive and negative controls (Tessier & Otley, 2012). Tessier and Otley (2012) stress that controls themselves are impartial, but employee perceptions are not necessarily as they can recognise MCS as positive, negative, or neutral. Though strategy is explicitly incorporated into the framework, other contingent aspects like top managers' experience and background or environmental factors are discussed in Simons' (1994) article but not reflected in his LOC illustration that serves as a backbone for conducted studies. Simons (1995) claims that the four levers should be used in a "balanced way" to achieve compliant behaviour and encourage creativity among staff, but his concept of balance remains vague and unclear (Kruis, Speklé & Widener, 2016).

3.5 The four levers of control

In this section, the four levers of control will be introduced. Definition, role, design and use, as well as further findings in the literature regarding each lever, are presented. We will also reflect upon the relevance for PMI in particular, the connections to MCS studies on PMI, and the relation between the different LOC.

3.5.1 Belief systems

Role

Simons (1994) defined belief systems as formal mechanisms employed by top management to determine, spread and reinforce basic principles within the organisation. In this sense, belief systems are a composition of shared beliefs that next to providing basic values have the role to establish purpose and guidance for employee behaviour and actions (Simons, 1994). Belief systems aspire to provide momentum and by using inspirational expressions motivate employees to search for opportunities (Simons, 1994). They are furthermore employed to ensure commitment and goal alignment among staff (Marginson, 2009). They signal priorities and provide a common ground for employee behaviour (Mundy, 2010).

Design and use

Belief systems are constructed through formal documents like credos, mission, vision, and statements of purpose (Simons, 1994). The underlying key design variable is organisational core values, and hence belief systems are usually related to company culture (Simons, 1994). Beliefs and values incorporated into MCS are often deliberately stated in vague terms in order to make them appealing for all organisational levels (Simons, 1994). Belief systems play an important role and are temporarily stressed by top management

when undergoing changes (e.g. new visions), but receive less focus on a continuous basis (Marginson, 2009).

According to Chenhall, Hall and Smith (2010) belief systems are already communicated in recruitment processes to applicants. As M&A activities can be seen as a form of “mass-recruitment”, selection of individual employees by values is heavily restricted. However, screening and selecting for compatible partners with regards to values and culture (Anderson, Christ, Dekker & Sedatole, 2015) could be a way to mitigate cultural clashes and ultimately may facilitate integration.

There is a strong link to informal controls due to cultural aspects reflected in belief systems (Collier, 2005). Marginson (2009) indicates that top managers may consciously use informal controls and utilise internal “promoters of core values” to enhance acceptance and awareness within the company, and describes informal mechanisms as powerful forces which can be critical if left unmanaged.

Role, design, and use in PMI

In PMI, belief systems play a significant role in introducing the new culture to employees in formal ways, for instance via motto expressions as well as vision and mission statements (Hoque & Chia, 2012). Studies that investigate PMI through an MCS lens do not use the term belief systems but make reference to them as they include similar descriptions of role, design and use of MCS. For example, Jordão, Souza and Avelar (2014), as well as Beusch (2007), find that communication of the vision and establishing shared core values were important for employee commitment towards integration efforts. Building shared common values as a main role of MCS is also highlighted by Puhakka (2017) who perceives this as a critical element for PMI success, as this can reduce cultural clashes.

Table 4 summarises our findings regarding belief systems, which correspond to role, design and use, and relevance for PMI context.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Role, design & use in post-merger integration
<ul style="list-style-type: none"> ▪ Determine, spread and reinforce basic principles ▪ Establish purpose and guidance ▪ Provide momentum and motivate for opportunity-seeking behaviour ▪ Commitment and goal alignment ▪ Signal priorities ▪ Establish common ground 	<ul style="list-style-type: none"> ▪ Credos, mission, vision and statements of purpose ▪ Stated in vague terms ▪ Temporarily stressed when undergoing changes ▪ Already used during recruitment processes ▪ Strong link to informal controls, can be supported by informal power structures (“promoters of core values”) ▪ Selecting compatible partners 	<ul style="list-style-type: none"> ▪ Used in PMI to introduce new culture via mottos, vision and mission statements ▪ Establish core values to increase commitment towards integration ▪ Reduce cultural clashes through establishing common values

Table 4: Role, design and use of belief systems

3.5.2 Boundary systems

Role

Boundary systems are formal arrangements utilised by top managers to determine precise limits and rules that have to be followed, and can be understood as minimum standards (Simons, 1994). The role of boundary systems is to permit for employee inventiveness within defined restrictions of autonomy (Simons, 1994). They have a constraining role and include how different stakeholders, like customers, are to be approached (Bruining, Bonnet & Wright, 2004). When they reflect legal requirements, they form a compulsory part of the organisation's set-up (Widener, 2007).

Since boundary systems are aiming at ensuring compliance with directives, they allow transferring decision-making processes to lower levels (Bruining, Bonnet & Wright, 2004). Boundary systems target to prevent that employees misuse or waste company's resources (Mundy, 2010).

Design and use

Boundary systems are often expressed in negative terms and are communicated through codes of conduct, strategic planning, and capital budgeting guidelines, as well as via instructions for lower levels (Simons, 1994). Consequently, risks to be avoided are the principal design variable for boundary systems (Simons, 1994). Boundary systems state unambiguously which activities are acceptable and which ones are not, thus leaving no room for interpretation and making expectations clear (Simons, 1994).

Boundaries can be separated into operational and strategic aspects, and are used on both of these levels (Tessier & Otley, 2012). Reports and plans going down to project levels can contain explicit guidelines, minimum expectations, and timetables for implementation (Mundy, 2010). Informal controls such as training and socialisation make clear which behaviours are deemed unacceptable and complement formal boundary systems (Tessier & Otley, 2012).

Role, design, and use in PMI

Following strategic change, boundary systems describe what is no longer tolerated, thereby aiming at hindering that old habits not in line with new strategic direction prevail (Simons, 1994). Hoque and Chia's (2012) PMI study employing the LOC framework indicates that boundary systems determined exit plans for business activities that were no longer wanted, and refer to use of code of conducts during PMI to clarify acceptable behaviour. PMI studies with MCS focus that have not adopted the LOC perspective also indicate aspects related to boundary systems. Beusch (2007) emphasises that CEOs tend to select their close management group carefully to ensure loyalty and compliance with requirements, and refers to use of code of conduct as it made rules and instructions transparent. Planning systems and corresponding guidelines are also important parts of PMI (Jones, 1985b; Nilsson, 2002). Additionally, potential sources of value

leakage or destruction have to be considered in PMI, thereby figuring out which risks exist and are to be avoided (Gates & Very, 2003).

In Table 5 below, main findings of boundary systems regarding role, design and use as well as significance for PMI are presented.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Role, design & use in post-merger integration
<ul style="list-style-type: none"> ▪ Permit for employee inventiveness within defined restrictions of autonomy ▪ Constraining role, including how to approach different stakeholders ▪ Reflect legal requirements ▪ Ensure compliance with directives ▪ Delegation of authority ▪ Prevent misuse of resources 	<ul style="list-style-type: none"> ▪ Expressed in negative terms, minimum standards ▪ Codes of conduct, strategic planning, capital budgeting guidelines, instructions ▪ Unambiguously stated ▪ Used on operational and strategic levels ▪ Guidelines, minimum expectations, timetables for implementation ▪ Complemented by informal mechanisms (training and socialisation) 	<ul style="list-style-type: none"> ▪ Indicate what is no longer tolerated ▪ Hinder old habits to prevail ▪ Determine exit plans ▪ Codes of conduct to clarify acceptable behaviour ▪ Transparent rules and instructions facilitate PMI ▪ Selection of close management group to ensure compliance ▪ Risk analyses used to prevent value destruction

Table 5: Role, design and use of boundary systems

3.5.3 Diagnostic control systems

Role

Diagnostic control systems represent channels for formal feedback, and their role is to monitor organisational performance (Simons, 1994). Diagnostic control systems assess achievements and reward them (Simons, 1995), are used for motivation, and are often financial (Bruining, Bonnet & Wright, 2004). Diagnostic control systems can also be used for monitoring asset acquisitions (Simons, 1995) and their focus lies on strategy implementation (Bruining, Bonnet & Wright, 2004; Simons, 1995). Receiving feedback is fundamental to diagnostic control systems and enhances organisational learning (Ferreira & Otley, 2009).

Design and use

Examples of diagnostic control systems are budgets, business and profit plans, and project monitoring systems (Simons, 1994). When designing diagnostic control systems, critical performance variables play an important role (Simons, 1994). To allow for a straightforward selection of suitable measures, objectives and strategies have to be sufficiently clear (Tuomela, 2005). Simons (1994) elaborates further that in case any deviations are detected, they can be corrected by management. In order to make use of diagnostic control systems, the following elements are necessary: target setting, alignment of performance measures, incentive schemes, review of exception reports, and follow-up (Simons, 2000).

Diagnostic control systems are usually seen as rather traditional and restrictive (Ferreira & Otley, 2009). Consequently, they might be perceived by employees as distant, inflexible, too standardised, and enforced (Bruining, Bonnet & Wright, 2004). However, using diagnostic control systems might have a positive effect on employee motivation (Adler & Chen, 2011), especially when linked to rewards (Simons, 1995).

Role, design, and use in PMI

During organisational change, diagnostic control systems can be used to make the company feel uneasy with current performance, thereby increasing the likelihood of acceptance of planned changes (Simons, 1994). KPIs, performance monitoring, and analysis of critical success factors are important elements of MCS in PMI (Hoque & Chia, 2012). This is supported by all studies looking at PMI without the LOC lens. For example, Gates and Very (2003), Beusch (2007) as well as Nilsson (2002) mention target setting, follow-ups and variance analyses as necessary elements to ensure value creation during PMI. Feedback helps to track previously agreed targets as well as to minimise possible surprises during processes of organisational change (Bruining, Bonnet & Wright, 2004) such as PMI. Moreover, introduction of incentive policies during PMI is beneficial if made transparent and linked to performance evaluation (Jordão, Souza & Avelar, 2014).

Table 6 below condenses role, design and use of diagnostic control systems, and includes the relevance for PMI.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Role, design & use in post-merger integration
<ul style="list-style-type: none"> ▪ Monitor organisational performance ▪ Provide motivation, resources and information to ensure target achievement ▪ Monitor asset acquisitions ▪ Implementation of strategy ▪ Feedback function ▪ Organisational learning 	<ul style="list-style-type: none"> ▪ Budgets, business and profit plans ▪ Monitoring asset acquisitions ▪ Clear definition of goals and strategy necessary for selecting measures ▪ Corrective actions if deviations are detected ▪ Performance evaluation, including target-setting, alignment of measures, reviews and follow-ups ▪ Link to rewards 	<ul style="list-style-type: none"> ▪ Make company feel uneasy with current performance, thereby increasing likelihood of acceptance of planned changes ▪ KPIs, performance monitoring, and analysis of critical success factors ▪ Target setting, follow-ups and variance analyses to ensure value creation ▪ Track previously agreed targets as well as to minimise possible surprises during processes of organisational change ▪ Incentive policies beneficial if made transparent and linked to performance evaluation

Table 6: Role, design and use of diagnostic control systems

3.5.4 Interactive control systems

Role

Interactive control systems are concerned with the personal involvement of top management with lower level employees in decision-making processes (Simons, 1994). They aim at fostering dialogue and organisational learning and development of new ideas and strategies (Simons, 1994). Additionally, interactive control systems manage strategic uncertainties (Simons, 1995), direct focus towards key goals (Gond, Grubnic, Herzig & Moon, 2012), and can increase employee motivation (Adler & Chen, 2011). Interactive controls can provide managers with private and detailed information that can help in developing competitive advantage and recruitment of the right people (Bruining, Bonnet & Wright, 2004).

Like diagnostic control systems, interactive control systems are important for organisational learning and are seen as integral and practical (Ferreira & Otley, 2009) but their use might make employees frustrated, as meetings can consume a lot of time (Tuomela, 2005).

Design and use

Any control system can be made interactive for example through face-to-face meetings, continuous discussion and debate, or by adjusting the focus of managers in the desired direction (Simons, 1994). Interactive control is achieved naturally since lower level employees continuously direct their attention towards top management and their activities (Simons, 2010).

Based on information gathered through interactive control systems, managers can challenge not only thinking, but also actions of their subordinates (Simons, 2000). Top management can use interactive controls to hear explanations about any unforeseen changes, and in return offer action plans (Simons, 2010). Interactive controls have strong links to informal controls, as they are based on social interaction processes (Mundy, 2010).

Role, design, and use in PMI

MCS studies that focus on PMI mention some aspects related to interactive control systems. Conferences (Roberts, 1990), meetings, and get-togethers (Hoque & Chia, 2012) are described as possible ways in which top managers get involved with lower levels during PMI. Frequent discussion and involvement take place between all hierarchical levels at the start of PMI, which could be beneficial for the integration and ensure competitive advantage after the acquisition (Hoque & Chia, 2012). At the beginning of PMI, top management interacts with lower levels mainly in order to get to know each other (Beusch, 2007; Roberts, 1990).

Findings of interactive control systems with respect to role, design and use, as well as their relevance for PMI, are presented in Table 7.

<p>Role (Why?) <i>Function and/or purpose</i></p>	<p>Design & use (How?) <i>Arrangements & implementation to fulfil role</i></p>	<p>Role, design & use in post-merger integration</p>
<ul style="list-style-type: none"> ▪ Foster dialogue and organisational learning ▪ Development of new ideas and strategies ▪ Manage strategic uncertainties ▪ Direct focus towards key goals ▪ Increase employee motivation ▪ Provide managers with private and detailed information that can help in developing competitive advantage and recruitment of the right people ▪ Organisational learning 	<ul style="list-style-type: none"> ▪ Face-to-face meetings, continuous discussion and debate, or adjusting focus of managers in the desired direction ▪ Achieved naturally, since lower level employees continuously direct their attention towards top management and their activities ▪ Managers can challenge not only thinking but also actions of their subordinates ▪ Managers can hear explanations about any unforeseen change, and in return offer action plan ▪ Strong links to informal controls as based on social interaction processes 	<ul style="list-style-type: none"> ▪ Conferences and meetings used as forums for exchange ▪ Focus on getting to know each other ▪ Frequent discussion and involvement on all levels can increase chance of achieving competitive advantages ▪ At the beginning of PMI, top management interacts with lower levels mainly in order to get to know each other

Table 7: Role, design and use of interactive control systems

3.5.5 Balanced approach: relations between the four levers

Role

As seen above, each control lever fulfils a different role within an organisation. However, Simons (1995) emphasises that all levers have to be used and support each other in order to align organisations, strategy, and human behaviour successfully. For Simons (1995) the interplay of the levers is about creating dynamic tensions between innovation that allows for experimentation and creativity, and predictability of achieving objectives, to ultimately create value for the company. His view has strong links to organisational ambidexterity, an ability to simultaneously explore new alternatives by the firm (i.e. innovation) and exploit current capabilities (i.e. stability and efficiency) to ensure long-term success (O'Reilly & Tushman, 2013; Kruis, Speklé & Widener, 2016).

Design and use

Simons (1995) sees belief systems and interactive control systems as positive controls that present the “yang” of Chinese philosophy, and on the contrary boundary and diagnostic control systems as negative controls representing the “yin”. He does not necessarily see a specific order of levers, but highlights that managers have to analyse all four key variables jointly to get a complete picture of the business. They then have to decide consciously with respect to situational context which levers to emphasise during certain times.

Belief and boundary systems can be seen as the overall foundation for the business (Simons, 1995), since belief systems represent the basis for a firm's identity and value systems, and thus impact all other LOC (Widener, 2007). Boundary systems can be considered a counterpart to belief systems, while diagnostic and boundary reinforce each other (Simons, 1995). Additionally, diagnostic control systems provide the structure needed for proper implementation of interactive control (Widener, 2007). The interdependencies that exist between the different levers are complementary, and insights gained from one of them can lead to changes or reinforcements in other levers (Widener, 2007). Informal controls, such as power relations, also play a role in creating a balance, but there is a need for further research to investigate their impact (Mundy, 2010).

Role, design, and use in PMI

The different levers work in tandem during PMI (Hoque & Chia, 2012), and informal controls work as complementary forces to strengthen formal MCS (e.g. Calori, Lubatkin & Very, 1994; Jordão, Souza & Avelar, 2014). MCS studies with a focus on PMI also refer to a balanced use of controls. They touch upon the challenge of simultaneously exploiting synergies (e.g. Jones, 1985b; Gates & Very, 2003; Bergamin & Braun, 2018) and increasing knowledge sharing to enhance innovation (Nilsson, 2002; Puhakka, 2017). This is linked to obtaining new capabilities through M&A activities (O'Reilly & Tushman, 2013), which

ultimately result in value creation, and relates to organisational ambidexterity. During PMI, top management is tasked with achieving this ambidexterity as it is a key factor for successful integration (Nemanich & Vera, 2009).

Table 8 summarises the role of balanced approach, how it can be designed and used, and highlights connections to PMI context.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Role, design & use in post-merger integration
<ul style="list-style-type: none"> ▪ Successfully align organisations, strategy, and human behaviour ▪ creating dynamic tensions between innovation allowing for experimentation and creativity, and predictability of achieving objectives, to ultimately create value for the company 	<ul style="list-style-type: none"> ▪ Belief systems and interactive control systems as positive controls (“yang”) ▪ Boundary and diagnostic control systems as negative controls (“yin”) ▪ Not necessarily a specific order of levers ▪ Analysis of all four key variables jointly to get a complete picture of the business ▪ Decide consciously with respect to situational context which levers to emphasise during certain times ▪ Belief and boundary systems as overall foundation for the business ▪ Diagnostic control systems provide structure for proper implementation of interactive control ▪ Levers are complementary ▪ Insights gained from one of them can lead to changes or reinforcements in other levers ▪ Informal controls for creating a balance 	<ul style="list-style-type: none"> ▪ Different levers work in tandem during PMI ▪ Informal controls work as complementary forces to strengthen formal MCS ▪ Challenge of organisational ambidexterity during PMI (simultaneously exploiting synergies and increasing knowledge sharing to enhance innovation)

Table 8: Role, design and use of balanced approach

3.6 Development of our framework

Taking into account findings from literature and critique on Simons’ LOC, we decided to prioritise the following issues when developing our framework: exclusion of informal controls, contextual factors, positive vs. negative controls, and balanced approach.

Informal controls are excluded from Simons’ LOC, but their importance is discussed heavily in literature, both general MCS literature as well as PMI specific. Following Curtis, Lillis and Sweeney (2017) who suggest including informal controls in the LOC framework for commensuration, we integrated informal controls into our research to find out about their relevance and connections to the formal levers. In particular, we wanted to understand whether they are used consciously by top management, and how they are linked to different levers.

As we included informal controls, we also developed our definition of them. We understand informal controls as “softer” and more indirect control mechanisms that are connected to social procedures, company culture and group norms (Sundberg, 2014). As such, they are not documented but still impact employee behaviour via socialisation processes (Sundberg, 2014). They also include recruitment of the right people (Ouchi, 1979; Malmi & Brown, 2008). Malmi and Brown (2008) recognise that they may at times be out of managers’ control. This is supported by Sundberg (2014) who describes the substantial impact of informal power

structures. Informal controls are often expressed through reliance on self-monitoring and can be strengthened by group rewards (Merchant & van der Stede, 2007). Informal controls also include leading by example and “tone at the top” (Merchant & van der Stede, 2007, Goebel & Weissenberger, 2017).

With respect to positive and negative connotations of different controls in the LOC framework, we agree with Tessier and Otley (2012) who stress that controls per se are neither positive nor negative, but employee perceptions of them may be. For this reason, we added a question about employee reactions towards exercised management control during PMI and included them below “contextual factors” in our framework.

Regarding contextual factors, we also decided to broaden the focus from business strategy to the concept of strategy in more general terms, and we included for example integration strategy and speed as relevant drivers. Furthermore, we included other potentially relevant contextual factors for PMI identified in the literature. These are pre-merger phase, size, top managers’ M&A experience, and culture (national and corporate). The aim was to find out if and how these contextual factors impact on MCS and successfulness of PMI, and whether there were other important situational aspects to consider.

Some researchers have criticised that Simons’ LOC framework is too vague on the concept of balance, both in terms of definition and how it should be approached from a theoretical as well as a practical viewpoint (e.g. Kruis, Speklé & Widener, 2016; Mundy, 2010). We therefore developed our understanding of “balance” based on insights from Widener (2007) and Mundy (2010), who approach this topic thoroughly. Our view of balance includes focusing on the following aspects in PMI: a) are all levers used?, b) is there consistency among levers and do insights in one lever result in adaptation of other levers?, c) is there a specific order of levers?, d) are formal and informal controls combined?.

Table 9 below shows in more detail the considerations taken into account when deciding on our framework, and Figure 4 is a visual presentation of our framework.

Criteria / Issue	Critique	Our framework
Simplicity	<ul style="list-style-type: none"> Easy to understand. Leads to ambiguities. 	<ul style="list-style-type: none"> Keep framework as simple as possible.
Ambiguity in definitions	<ul style="list-style-type: none"> Different interpretation of levers and key variables yields incomparable research results. Overlapping definitions. 	<ul style="list-style-type: none"> Clarification of key concepts not in primary focus. Investigate if concepts can be made more clear through cases and analysis of results.
Top management focus	<ul style="list-style-type: none"> Top management perspective chosen for investigation. Exclusion of lower level management. Exclusion of employee perceptions. 	<ul style="list-style-type: none"> Focus on top management as they are decision-makers and exercise control. Include question about employee perceptions towards exercised controls.
Focus on use of MCS	<ul style="list-style-type: none"> Understanding use of MCS gives insights for design. 	<ul style="list-style-type: none"> Keep focus on use of MCS. Understand importance of different levers.
Practice orientation	<ul style="list-style-type: none"> High relevance for practitioners. 	<ul style="list-style-type: none"> Maintain strong practice orientation.
Exclusion of informal controls	<ul style="list-style-type: none"> Exclusion of informal controls in LOC framework. Importance of informal controls recognised in contemporary research, however harder to measure. 	<ul style="list-style-type: none"> Investigate relevance of informal controls in PMI and conscious execution of management. Understand relevance and connection to formal levers
Contextual factors	<ul style="list-style-type: none"> Focus on business strategy as determining factor. Contextual factors regarding CEO (insider vs. outsider, experience) included in Simons' work but not explicitly into further used framework. 	<ul style="list-style-type: none"> Extended focus on concept of strategy. Include employee reactions as contextual factor. Extended to other relevant PMI contextual factors like pre-merger phase, size top managers' M&A experience and culture (national and corporate).
Positive vs. negative controls	<ul style="list-style-type: none"> Controls themselves impartial. Perception of employees: positive, negative or neutral. 	<ul style="list-style-type: none"> Include question about employee perception (see above).
Balanced approach	<ul style="list-style-type: none"> Create tension between predictability and growth, but concept of balance and how to approach it left unspecified. Interrelations of different levers not enough understood. 	<ul style="list-style-type: none"> Investigate whether all levers are used during PMI, incl. order of levers. Understand interrelations of different levers (consistency and adjustments). Investigate on use of formal and informal controls.

Table 9: Considerations for framework development

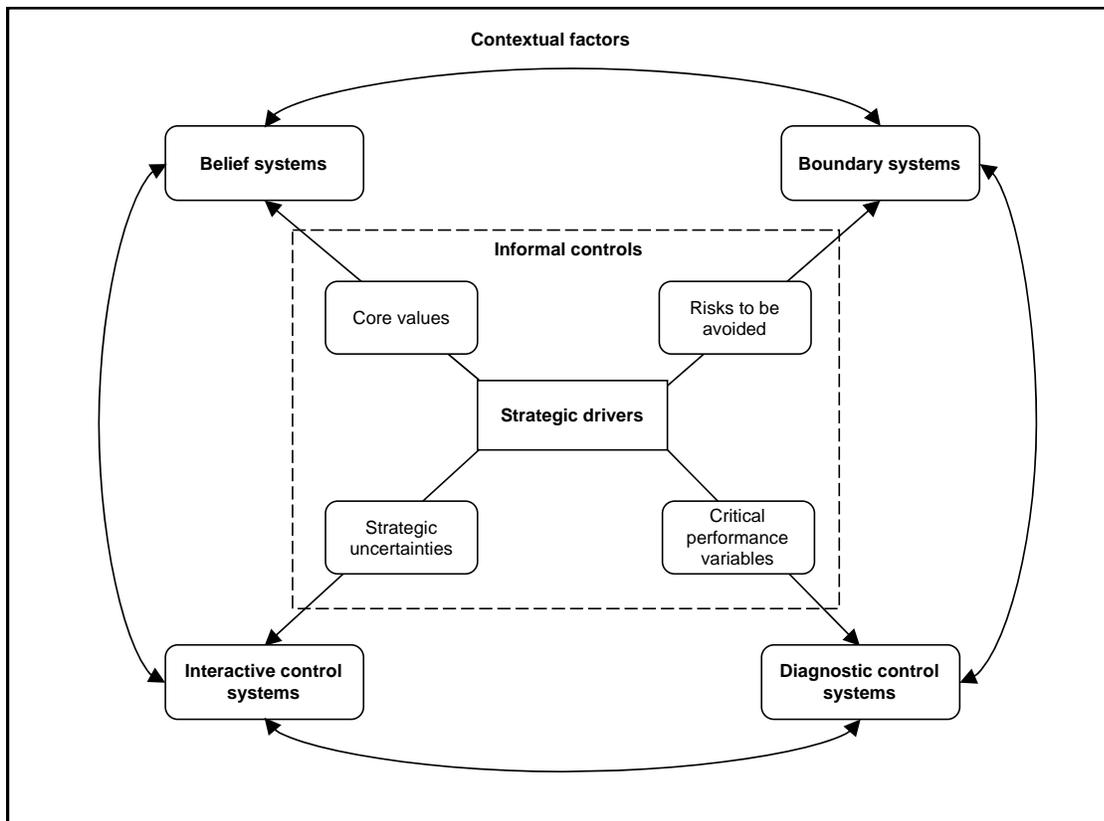


Figure 4: Framework for data collection

4 Presentation of empirical material

In this chapter, we will present our empirical findings gained from interviews. First, we provide the context by presenting the companies, briefly providing background on their acquisitions strategy, PMI approach, and experience. In addition to company cases, we include two experts that worked as consultants and who had more of an outsider perspective. We also present all interviewees' understanding of success and failure regarding PMI.

To present our empirical material we use the structure of our framework, which was introduced in chapter 3.6, in the following sequence: strategic drivers (4.3), belief systems (4.4), boundary systems (4.5), diagnostic control systems (4.6), interactive control systems (4.7), informal controls (4.8), balanced approach (4.9), contextual factors (4.10). In the chapters concerning the four levers, informal controls and balanced approach, we structure findings with regards to role, design and use, as well as impact and differences between successful vs. unsuccessful PMI. The chapter concludes with a summary of our main findings (4.11), in which the results are put into broader context.

4.1 Introduction of case companies and experts

In the table below, we present the four case companies. All of them are mostly experienced with acquisitions as mergers occur only rarely, and therefore our empirical material is focused on acquisitions only. More details regarding background and role of each respondent can be found in Table 1 in chapter 2.4.

	Country and industry	Company's M&A experience	General M&A approach	PMI approach
Company 1 (respondent 1)	Sweden, industrial	<ul style="list-style-type: none"> On average 4-5 acquisitions per year since mid-'90s 	<ul style="list-style-type: none"> Impulses for M&A activities usually from bottom-up Undertaking M&A requires board approval 	<ul style="list-style-type: none"> Very standardised PMI process Centrally provided checklist that must be completed within first 100 days Central headquarter support provided if necessary Full responsibility moves to operations which reflects decentralised business
Company 2 (respondent 2)	Sweden, natural resources	<ul style="list-style-type: none"> On average 2-3 acquisitions per year since the 1980s 	<ul style="list-style-type: none"> Acquisitions standardised, part of strategy (yearly growth targets for M&A) Two steps: 1. gain majority stake, 2. whole ownership in subsequent years Top management picks deal targets and conducts entire negotiation process 	<ul style="list-style-type: none"> No separate PMI office or alike Top management constantly engaged in PMI Full PMI responsibility remains in local operational units Emphasis on treating acquired firms well (due to own experience when once selling firm was considered)
Company 3 (respondent 3)	Germany, TMT	<ul style="list-style-type: none"> Various acquisitions since late-'90s, on average 1 acquisition per year since 2010 	<ul style="list-style-type: none"> Centralised, separate M&A office for screening takeover candidates Board approval required 	<ul style="list-style-type: none"> Centralised PMI process, which was established around 10 years ago (after noticing that desired results were not achieved with integrations) Overall responsibility for PMI stays with operational entity
Company 4 (respondent 4)	Norway, natural resources	<ul style="list-style-type: none"> On average 1-3 acquisitions per year since early 1970s 1 merger experience 	<ul style="list-style-type: none"> Standardised M&A strategy Board approval required 	<ul style="list-style-type: none"> Very standardised, structured PMI process Full PMI responsibility remains on a local, operational level

Table 10: Case companies

In addition, we present two expert respondents, a management consultant and a researcher, in Table 11 below. They too focused mainly on acquisitions, and both reflected on their general experiences with PMI.

While the management consultant additionally selected two specific PMIs (one successful and one less successful), the researcher reflected on cultural aspects and MCS.

	Expert's M&A experience / background	Expert's role in PMI	Expert's general experience with companies doing M&A
Management consultant	<ul style="list-style-type: none"> ▪ Approx. 15 M&A transactions, mostly international ▪ Engaged in pre- and post-merger stages ▪ Worked with different industries ▪ Consults large companies 	<ul style="list-style-type: none"> ▪ Usually a supportive role ▪ On occasion can also act as a project manager 	<ul style="list-style-type: none"> ▪ In most cases the companies he works with tend to have established processes for PMI, which was also his preference as it made the integration easier
Researcher	<ul style="list-style-type: none"> ▪ Researched and worked with topic since 1980s ▪ Research focus in PMI <ul style="list-style-type: none"> - at first: culture and identity - later on: also MCS ▪ Various industries, private and public sector 	<ul style="list-style-type: none"> ▪ Advised in several public projects, where he held a role of an external consultant during 80's and 90's. ▪ Private sector: researcher (not consulting) 	<ul style="list-style-type: none"> ▪ M&A experienced companies tend to have a task force which sets some sort of implementation plan (objectives and milestones) ▪ PMI tends to run as a project

Table 11: Experts

4.2 Successful vs. less successful post-merger integrations

Respondents have different experiences with regards to successful and less successful post-merger integrations, however in all cases, the success or failure is related to the process of PMI, and not so much to the final outcome of it. Therefore, the process is the main lens through which the successfulness of integration is evaluated by them. Table 12 shows the different understandings of respondents with respect to successful and less successful PMI, including some examples.

	Successful PMI	Less successful PMI
Company 1 (respondent 1)	<ul style="list-style-type: none"> ▪ Acquired party adapts into existing company structures and is aligned to corporate culture ▪ Financial performance corresponds to or surpasses expectations 	<ul style="list-style-type: none"> ▪ Link to contextual factors and pre-merger phase ▪ Example: operational decisions made shortly after closing of the transaction are not communicated in pre-merger stage which leads to employee resistance
Company 2 (respondent 2)	<ul style="list-style-type: none"> ▪ Related to careful selection of acquisitions / pre-merger phase: top management gets to know acquired company and its management team very well already in pre-merger stage ▪ Keeping management team of acquired company and using their expertise important for PMI success 	<ul style="list-style-type: none"> ▪ Related to pre-merger stage ▪ Example: insufficient due-diligence.
Company 3 (respondent 3)	<ul style="list-style-type: none"> ▪ Keeping the customer base during PMI ▪ Centralised approach can support inexperienced local managers who are responsible for PMI ▪ Aligning everyone to make them feel as "one company" ▪ Lessons learned are transferred to future PMI projects 	<ul style="list-style-type: none"> ▪ Related to pre-merger state, and PMI process itself ▪ Examples: <ul style="list-style-type: none"> - Insufficient due diligence and risk analyses lead to surprises in PMI - Problems in PMI monitoring and tracking of synergies (KPIs not defined properly) - Too much focused on internal activities, forget about customers - Execution of MCS not professional enough
Company 4 (respondent 4)	<ul style="list-style-type: none"> ▪ Structured and quick way of doing PMI important ▪ Written documents needed to support PMI ▪ Frequent communication and deep discussions during PMI 	<ul style="list-style-type: none"> ▪ Not structured enough ▪ Example: not having written down documents leads to abundant discussion
Management consultant	<ul style="list-style-type: none"> ▪ Maintaining customers a key during PMI ▪ Following "best of both" approach and proactively communicating it increases commitment and acceptance among workforce 	<ul style="list-style-type: none"> ▪ Failure linked to pre-merger phase ▪ Leadership and MCS issues after closing of the transaction ▪ Examples: <ul style="list-style-type: none"> - Communication not stringent - Follow-up less professional - Commitment fades over time - Underestimation of complexity
Researcher	<ul style="list-style-type: none"> ▪ Human factors considered during PMI, trust especially important ▪ Appropriate degree of control exercised ▪ Carefully chosen design of MCS 	<ul style="list-style-type: none"> ▪ Unclear M&A motives and vague objectives lead to problems during PMI ▪ Informal power structures not considered and managed

Table 12: Successful vs. less successful PMI

4.3 Strategic drivers

Strategic drivers impacting PMI that we identified via literature and that were confirmed in interviews are integration strategy, speed of integration (if predetermined), level of integration, and type of transaction.

Integration strategy

All respondents agree that PMI is a continuous process and that it is done in a project mode. Different integration strategies are usually used for different businesses and acquisitions. All respondents agree and highlight that though they follow a very standardised approach, a completely uniform strategy cannot be used for all acquisitions and slight adaptations must be made on case by case basis, for example due to local conditions. The management consultant confirms this, and observes the phenomenon of choosing different strategies both across different companies, but also when it comes to acquisitions done by the same firm. Additionally, the researcher mentions that strategy must be clearly linked to the motives of the transaction.

Speed of integration

Respondent 1 describes that in his firm, the first phase of PMI is concerned with a predetermined list of activities, like legal, finance and HR, that must be completed within the first 100 days. Responsibility for completing the different tasks is assigned on a personal level and tracked through sharepoint. The firm does not move forward with further integration and synergy realisation until these activities are completed, even if they stretch over the 100-day period. After 100 days, the responsibility for PMI is transferred to operations.

Respondents 1, 2 and 3 state that PMI is usually 18 months which is confirmed by the management consultant, however some processes such as IT integration can take longer than this. In company 4, the centralised part of PMI is short and in general, would be completed in under six months. However, the total process is longer than that, but it is usually less than 18 months.

All respondents state that in general, they aim to have the integration process as short as possible in order to not lose momentum along the way. This view is also shared by the management consultant who considers speed as a key success factor for PMI as it keeps the organisation focused on the integration. The researcher emphasises that depending on the motives behind the transaction (achieving synergies or gaining knowledge), you might choose different speed: going all in at once, or doing PMI slowly over time.

Level of integration and type of transaction

All respondents mention that the acquired firms are kept as separate, fully consolidated subsidiaries. Biggest differences concern level of control the parent has after the acquisition, as well as change of name. In companies 1 and 4, acquired firms have to adapt 100 percent to the parent's way of doing things. In firm

2, the acquired firms keep their independence and continue running their operations as before. In company 3, level of integration depends on the motive of the transaction. The researcher agrees with company 3 and adds that it is important to explore what the acquiring party wants; that is whether they want to maintain autonomy or not. All respondents describe international acquisitions. In addition, the researcher refers to the public sector.

4.4 Belief systems

*“Guiding principles is something which always supports the integration process and they are established early on – they are about introducing ways of thinking and guide the whole integration.”
(management consultant)*

Role

All respondents describe belief systems as being of high importance and give them a ranking of 4 or 5. They all agree that belief systems set the stage. These systems provide an overall basis, guide, indicate priorities, and help to integrate the acquired party into the community. They also increase transparency and facilitate communication. Respondent 3 explains in more detail that core beliefs and mission statement have an assistant role for PMI. The management consultant adds that belief systems introduce new ways of thinking, and confirms that their role is to provide guidance throughout the whole integration process.

Design and use

Core values, mission, vision, and guiding principles are used by all companies and they are available on intranet, printed on posters, and communicated by top management. The name of the acquired company, which constitutes a symbol, is changed only in some cases depending on whether the acquiring companies want to keep the existing brand name or not. In companies 2 and 3, maintaining or changing the name and logo is a conscious decision that is decided on case by case basis, as if they are acquiring a strong brand with wide recognition, it might do more harm if the name is changed. On the contrary, in companies 1 and 4, it is very important to use coherent symbols and pictures after the acquisition, as the firms want to reflect that the acquired company is now an embedded part of their corporate group. Both companies have special PMI documents that describe the values within the group. Core beliefs and their fulfilment are monitored (respondent 3). Additionally, core values are present in all types of discussions, also already in the pre-merger phase (all respondents). In all cases, belief systems are something the companies have at all times and their use is not restricted to PMI only. At the same time, all explain that belief systems are especially used and stressed at the beginning of PMI. All of these aspects regarding design and use of belief systems are confirmed by the management consultant.

Impact and differences between successful vs. unsuccessful post-merger integration

All respondents describe that there is no difference in use of belief systems in successful vs. unsuccessful PMI processes they experienced, but their effectiveness differs. Respondent 3 mentions that in unsuccessful PMI, belief systems did not achieve the desired alignment when it comes to values and beliefs during the process. Respondent 4 highlights that written documents about core values are helpful and contribute to the success of PMI, as they allow for being very clear, known by every employee, and can be referred to easily. Local managers are expected to distribute these written documents to everyone in the acquired company, and to act according to their content.

The management consultant relates success of PMI to stringent communication of core values throughout the integration. Moreover, the researcher points out that belief systems are more than only about core values, and that they are particularly linked to identity which is very fundamental for people. Taking this aspect into account when designing and using MCS for PMI, contributes to success of the integration process. He stresses that a new logo can create many issues, as it is linked to personal and corporate identity, and that top managers need to be aware of these impacts. He gave an example where an acquiring firm (large company) changed the logo of the small firm they acquired. Instantly when the new logo was displayed at a corporate event, it created clear polarisation between the employees of the two firms, as they sought to stay within their old group of peers instead of socialising with everyone.

Table 13 below summarises our main findings regarding role, design and use of belief systems, and refers to impact on PMI success.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ "Set the stage" (all) ▪ Set an overall basis, guide, indicate priorities (all) ▪ Help to integrate the acquired party into the community (all) ▪ Increase transparency (all) ▪ Facilitate communication (all) ▪ Core beliefs and mission statement have an assistant role for PMI (respondent 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Introduce new ways of thinking (management consultant) ▪ Guide the whole integration (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Core values, mission, vision, guiding principles are used (all) ▪ Available on intranet, printed on posters, communicated by top management directly (all) ▪ Change name of acquired company a strategic decision, dependent on specific acquisition (respondents 2, 3) ▪ Use coherent symbols and change name of acquired company (respondents 1, 4) ▪ Special written PMI documents that state values within the group (respondents 1, 4) ▪ Monitoring of core beliefs (respondent 3) ▪ Core values part of discussions, also during pre-merger (all) ▪ Used at all times, also beyond PMI, but especially emphasised at beginning of PMI (all) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Confirms use of mentioned controls, their availability on different forums, and function (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ No difference in use in successful vs. unsuccessful PMI (all) ▪ Belief systems did not achieve the desired alignment in unsuccessful PMI (respondent 3) ▪ Written documents key success factor, managers expected to distribute them and show example (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Stringent communication of core values important for PMI success (management consultant) ▪ Recognising link to identity fundamental for PMI success (researcher)

Table 13: Summary empirical findings belief systems

4.5 Boundary systems

“By having these written procedures and directives, it was much easier to say that this was something that top management has decided, and it’s not really open for arguments. It is a very tough way of doing things but I think in the end it helped us to proceed and not to end up in endless discussion on how to do things.” (respondent 4)

Role

All respondents rank boundary systems as important, giving them a rank of 4 or 5. However, there is no agreement among them whether they are more or less important than belief systems. For example, respondent 2 and 3 mention they are less important than core values, which is supported by the management consultant. However, respondent 4 claims them to have top priority due to his experience with less successful PMI.

The role of boundary systems in PMI is to clarify policies and expectations (respondent 1 and 4), indicate priorities (respondent 2), increase awareness, and aligning and educating employees about compliance, ethics, and accepted vs. unaccepted behaviour (all respondents). The management consultant confirms all of these roles. Respondent 1 elaborates further that role of boundary systems is also to state why certain things are not being done, for example child labour.

Design and use

All companies use code of conduct, policies, legal norms, planning and financial guidelines, business directives and procedures during PMI. Respondent 3 and 4 state that planning also includes risk analyses. Like core values, code of conducts and business directives are published on the intranet (all respondents). On top, respondent 4 highlights that top managers are expected to distribute policies and make these guidelines available to everyone in the newly acquired organisation. Everyone is required to act according to them, and top managers have to serve as good examples. Company 3 includes HR guidelines in their boundary systems and considers them important during PMI. As they give everyone equal recruitment opportunities, they want to make clear that there is not one winner or one loser after the acquisition.

Respondent 3 mentions that even though boundary systems are used in PMI, they are not limited to that phase and their intention of use is more general. On the other hand, respondent 2 elaborates that boundary systems are equally important at all times. Over time, boundary systems move from being more high level to being broken down to operational level. Thus, they become more specific, for example via planning processes (respondent 4, management consultant). The management consultant explains that it is important first to understand the big picture, and then make changes. On occasion, the acquired company can be given flexibility or more time to comply with certain standards and rules, though there are some “musts” that have to be in place from day one (all respondents).

Impact and differences between successful vs. unsuccessful post-merger integration

Respondent 4 notices a distinction between successful and less successful PMI, and elaborates that once they started to use written documents, PMI process was facilitated. Due to an approach of full integration, company 4 might face objections from the acquired firm as they were used to doing things differently before, “we do it another way”. To ensure success in these situations, they have to listen to arising complaints and make possible exceptions, such as deadline extensions. Overall, everyone deemed having written documents during PMI important as when things are written down, they are easier to explain and there is less room for interpretations. This increases acceptance, and it also facilitates integration. Moreover, all respondents and the management consultant emphasise that it is crucial to have the same “feel” about business and ethics to make PMI a success. Respondent 2 gave a concrete example and explained that they try to investigate on this “feel” already in the pre-merger stage, since if there is no match, PMI and the entire transaction will likely not succeed.

Our results of boundary systems can be found in Table 14 below.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Increase awareness, aligning and educating employees about compliance, ethics, and accepted vs unaccepted behaviour (all) ▪ Clarify policies (respondent 1, 4) ▪ Indicate priorities (respondent 2) ▪ State why certain things are not being done (respondent 1) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Increase awareness, aligning and educating employees about compliance, ethics, and accepted vs unaccepted behaviour (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Planning and financial guidelines, business directives and procedures (all) ▪ Published on the intranet (all) ▪ Acquired company can get flexibility or more time to comply with certain standards (all) ▪ Risk analyses (respondents 3, 4) ▪ Top managers expected to make guidelines available for everyone (respondent 4) ▪ Top managers serve as “good examples” (respondent 4) ▪ HR guidelines ensure equal chances, e.g. in recruitment (respondent 3) ▪ Intention of use more general, not limited to PMI (respondent 3) ▪ Equally important at all times (respondent 2) ▪ Become more specific with time, broken down for operationalisation (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Become more specific with time, broken down for operationalisation (management consultant) ▪ Important to first understand the big picture, and then make changes (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Written documents help to facilitate PMI (all) ▪ “Feel” about business and ethics help make PMI a success (all) ▪ No differences in use in successful vs. unsuccessful PMI (respondent 1, 2, 3) ▪ Listen to complaints and consider certain exceptions (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ “Feel” about business and ethics help make PMI a success (management consultant)

Table 14: Summary empirical findings boundary systems

4.6 Diagnostic control systems

“It is something that is quite intensive in the first months in order to make sure that the integration is on the right track. There are a lot of reports and checkings until it is on a good way, and then it will be less and less. If the company is then fully integrated, it will be very difficult to track individual synergy

targets because you cannot distinguish at a certain point of time if it is from your former company or because of the target you acquired.” (respondent 3)

Role

Diagnostic control systems are ranked with high importance (ranking 5), but all respondents admit that they are biased in this response by their finance background. Role of diagnostic control systems is to assign responsibilities and tasks (respondent 1 and 4), ensure accountability and measurability, foster organisational alignment, coordination of activities (all respondents), and to track PMI status (respondent 3 and 4). Both, the management consultant and researcher confirm all of these roles. Respondent 3 adds that diagnostic control systems present the basis for integration as the purchase price has to be justified, which is also an important aspect when communicating with stakeholders, especially shareholders.

Respondent 2 mentions that diagnostic control systems have a motivational role in their company. Company 2 pays for their acquisitions in two rounds, one at the closing of the transaction and one at a chosen future date (e.g. in two years time). Therefore, the second payment is tied to the financial performance of the acquired firm during PMI and beyond, which is why tracking of financial KPIs becomes important. Diagnostic control systems can also motivate when linked to reward schemes (all respondents).

Design and use

“If you chose something that is not trackable, then your whole exercise is useless.” (respondent 3)

In all companies business plans, budgets, target setting, follow-ups (which may lead to corrective actions), as well as financial and non-financial KPIs are used in PMI. Whereas financial KPIs concern for example return on investment and synergy realisation, non-financial KPIs track number of full time equivalents (FTEs), employee satisfaction, productivity and customer-related KPIs (all respondents; management consultant). During PMI, a set of common KPIs are used for both acquiring and acquired companies to allow for comparison and consolidation (all respondents). While companies 1, 3 and 4 use KPIs focusing on PMI specifically, company 2 does not undertake additional tracking for integration purposes. Instead, their reporting process is set up in a manner that makes it easy to identify if the acquired company is having trouble adjusting to the new systems, and so they can take corrective actions.

Respondents 3 and 4 stress that the acquiring firm decides how diagnostic control systems will change after transaction has closed. This often results in many changes for the acquired firm, but only small ones for the acquiring company. Sometimes the acquired company's MCS processes are maintained deliberately. For example, company 3 once acquired a small firm explicitly for their know-how and agility. They were worried that if the smaller firm was integrated into group MCS, they would be buried in bureaucracy instead of focusing on day-to-day activities and staying innovative. This is also supported by the researcher.

Short and long-term KPIs are important and are used in complementary ways (all respondents). Respondent 2 and 4 explain that in the beginning of PMI, you need some short-term targets to keep the organisation focused, but an underlying business plan with three to five-year horizon is indispensable. Additionally, the management consultant mentions that use of different KPIs depends on the stage of synergy realisation. He further describes target setting as a learning process: during pre-merger stage, a high-level view exists, and once the deal has closed, more information becomes available. Based on these new insights, targets can be revised, and one can formulate concrete activities and how their follow-up should be done.

Tracking was mentioned as essential, even though it is perceived as time-consuming (respondent 1). It might be difficult to track synergy effects (all respondents). Tracking is necessary in order to document to the board of directors that what was promised during pre-merger stage is actually delivered (respondent 3). During PMI, it needs to be carefully decided what will be tracked, as well as how it will be tracked (respondent 3 and 4). Respondent 4 recommends using few but focused KPIs, and respondent 3 further elaborates that KPIs need to be trackable to fulfil their purpose.

Tracking KPIs is not always easy during PMI due to several reasons. Since PMI often stretches over several years, follow-up becomes harder with time as managerial focus shifts, and people forget what was agreed upon (management consultant). Respondent 3 describes that once the two companies are combined, it becomes difficult to separate source of target achievement (coming from acquired or acquiring firm).

The management consultant adds that in the beginning, diagnostic controls add a lot of extra workload and respondents 1, 3 and 4 emphasise that frequency of reporting can be intense during this period. However, once the integration has been completed and steady-state is achieved, reporting follows the regular cycle. Overall, all respondents agree that whatever the final design of diagnostic control systems, their use during PMI should always have value creation in focus.

Design and use of reward schemes

Reward systems are used in all companies, and they are adjusted during PMI taking into account local standards and level of seniority. In all instances, the managers ultimately responsible for the integration have targets they need to fulfil. Those are linked to bonus schemes and meant to motivate, align, and show managerial commitment. Company 2 tries to keep reward schemes of acquired companies as is, unless they are unreasonably high.

The management consultant describes that if targets are not met, reasons for deviations are discussed during performance evaluation. If windfalls or effects out of managerial control are identified, this can be taken into account and reflected in degree of target achievement. Based on this input, future targets can be adjusted. In the end, reward systems will eventually be adjusted and aligned, but it is a difficult and cumbersome process, as it is a sensitive issue and comprises review of current payment schemes.

Impact and differences between successful vs. unsuccessful post-merger integration

As respondent 3 points out, success of PMI process is related to properly defining KPIs in the beginning of PMI. The company noticed that a majority of their integrations did not yield the results they expected when PMI was executed solely to the local level, which was partially due to lack of proper monitoring. Therefore, company 3 established a centralised mechanism which clearly focuses on tracking of synergies and lessons learned from previous PMI projects. They experience that this increased centralisation results in more successful PMI processes.

When a large firm acquires a small one, the smaller company will often represent only a minor reporting line within the merged organisation. Thus, managers may lack understanding about the acquired firm or what they are doing, and cannot realise the whole value of the acquisition, which impacts PMI negatively (researcher). According to the management consultant, in unsuccessful PMIs follow-up is less professional, it is not taken seriously, and not enough time and resources are put into it. Top management does not make sure that the process will make it until the end. For example, if PMI process takes 18 months, and even though commitment is high to start with, the excitement fades with time once managers notice how much work it is all going to take. They clearly underestimate the complexity of PMI, and while commitment fades so does success of the integration process. The researcher mentions that use of the different control systems can only work if people within an organisation want them to work. Otherwise, problems like cheating on KPIs and delays in follow-ups can sabotage PMI.

Table 15 below represents a summary of our main findings of diagnostic control systems.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Ensure accountability and measurability, foster organisational alignment, coordination of activities (all) ▪ Assign responsibilities and tasks (respondent 1, 4) ▪ Track PMI status (respondent 3, 4) ▪ Basis for integration as the purchase price has to be justified (respondent 3) ▪ Motivational role; connected to compensation and reward schemes (respondent 2) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Ensure accountability and measurability, foster organisational alignment, coordination of activities, assign responsibilities and tasks, track PMI status (management consultant and researcher) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Business plans, budgets, target setting, follow-ups as well as both financial and non-financial KPIs, tracking and corrective actions (all) ▪ Common KPIs are used for both acquiring and acquired companies for comparison and consolidation (all) ▪ Short-term and long-term KPIs (all) ▪ Reward schemes used and adjusted (all) ▪ Focus on value creation (all) ▪ Use of KPIs focusing on PMI specifically (respondent 1, 3, 4) ▪ Acquiring makes decisions about changes - small vs. big change (respondent 3, 4) ▪ No tracking for integration purposes, only usual reporting (respondent 2) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Business plans, budgets, target setting, follow-ups as well as both financial and non-financial KPIs are used (management consultant) ▪ Target setting a learning process (management consultant) ▪ Reward schemes used, cumbersome change process (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Proper definition of KPIs at the beginning of PMI indispensable (respondent 3) ▪ Central PMI process facilitates success (respondent 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Unsuccessful: follow-up is less professional, it is not taken seriously, and not enough time and resources are put into it (management consultant) ▪ Making it until the end can be tough since process is long – needs managerial commitment (management consultant) ▪ Underestimating complexity (management consultant) ▪ If lack of understanding about the acquired firm, value of the transaction cannot be realised (researcher) ▪ People must want MCS to work, helps with PMI (researcher) ▪ Cheating on KPIs, and delays in follow-ups can sabotage PMI (researcher)

Table 15: Summary empirical findings diagnostic control systems

4.7 Interactive control systems

“At time of integration, there is a higher degree of discussion, meeting and communication as you have a novel business environment.” (respondent 3)

“Interaction was about both, giving information and discussing strategy, but that was depending on the level of the meeting. In a large meeting it was about giving information and if it was a small meeting with management, then it also included discussion of future strategy and so on.” (respondent 4)

Role

Interactive control systems are ranked of high importance by all respondents (rank 4 to 5), with key roles being learning and education. Respondent 4 highlights that interaction between top management and lower levels is especially important in the beginning of PMI, and respondent 3 mentions that this is due to new business environment. Respondent 2 explains that meetings are about creating commitment, and focus on making clear that everyone in the organisation plays an important role in making the acquisition a success.

At the beginning of PMI, the role of interactive controls is mainly about getting to know each other (all respondents), but with time, the focus moves to developing strategy further (respondent 1). Likewise, respondent 3 highlights that in the first place priority is on delivering what was promised in the pre-merger phase, but once a steady state is reached, the company's position in the market is analysed thoroughly and strategic changes may take place. The management consultant confirms these findings and mentions that interactive controls might collect bottom-up input that can later lead to adaptations.

The management consultant refers to the difference in importance between manufacturing and knowledge-based industries. In knowledge-based firms retention of talent is particularly crucial, which is why it is important that employees understand the strategy, and everyone is on board.

Design and use

In all companies, top management uses meetings, larger events (e.g. a big lunch), town hall meetings, intranet, and newsletters as means to get involved with lower levels. All mention dialogue, discussion and debate as parts of use of interactive control systems. All respondents agree that content of discussion varies, depending on whether top managers get involved with other managers or employees. Nevertheless, they all say it is important to show presence and meet each and every one. All respondents mention that early on in PMI, top management arranges “who we are” presentations to introduce themselves, the firm, and deal motives to all employees.

Discussions can go down to a very detailed, operational level and concern debate about how to best integrate different parts of the organisation (respondent 4). Respondent 2 mentions that dialogue and discussion are used when developing the new three to five-year strategic plan. This way, they ensure that

local management is on board with strategy as for them it is important to achieve “1+1=3” with the acquisition. Interaction takes place over time, and both during as well as after PMI, meetings take place at least four times a year to ensure continuous exchange and to show presence.

Impact and differences between successful vs. unsuccessful post-merger integration

Respondent 4 highlights that in order to have a successful PMI process, it is important to have frequent communication and deep discussions. Respondent 2 adds that transparency and being clear in the discussions is a success factor for PMI. He describes that in case any major changes need to be made during the integration, such as downsizing or closing of operations, company 2 discusses these already in pre-merger stage so that they do not come as a surprise and yield negative reactions later on. Respondent 1 gave an example which reflects this and describes an unsuccessful PMI where company 1 closed half of the operations of the acquired firm without giving any indication of it in pre-merger stage. This resulted in outrage across employees, creating tensions from the start and setting entire PMI process on a bad course. The management consultant mentions dialogue and transparency are important too, as in unsuccessful PMIs lack of them leads to underestimation of the process, its complexity, and time it takes to complete, giving the same example as in diagnostic control systems.

Our main findings regarding interactive control systems are summarised in Table 16.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Learning and education (all) ▪ Getting to know each other (all) ▪ Creating commitment (respondent 2) ▪ Making clear everyone in the organisation plays an important role for making the acquisition a success (respondent 2) ▪ In beginning about getting to know each other, later developing strategy further (respondents 1, 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ In beginning about getting to know each other, later developing strategy further (management consultant) ▪ Use feedback from bottom-up for adaptations (management consultant) ▪ Retention of talents (management consultant) ▪ Explain strategy to employees and ensure everyone is on board (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Meetings, larger events, town hall meetings, intranet publications, newsletters (all) ▪ Dialogue, discussion and debate (all) ▪ Presentations on “who we are” (all) ▪ Explain motives of the deal (all) ▪ Varying content, depending on level of meeting (managers vs. employees) (all) ▪ Discussions down to operational level about best ways of integration (respondent 4) ▪ Dialogue and discussion used for developing strategic plan (respondent 2) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Meetings, larger events, town hall meetings, intranet publications, newsletters (management consultant) ▪ Dialogue, discussion and debate (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Frequent communication and deep discussions enable necessary understanding to make PMI a success (respondent 3) ▪ Transparency and being clear in discussions a key success factor for PMI (respondent 2) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Lack of dialogue leads to underestimation of the process, complexity and reduced speed of integration (management consultant)

Table 16: Summary empirical findings interactive control systems

4.8 Informal controls

“That is more on a very soft and personal level, people need to interact in a good way.” (respondent 1)

*“It is all about the people, if we don’t have the people on board and can work together, it’s nothing.”
(respondent 2)*

Role

All respondents were of the opinion that informal controls play a significant role during PMI, and ranked them from 4 to 5. Respondents 1 and 4 state that informal controls may help in achieving common agreement. For example, it increases managerial credibility if they live up to what they are saying, thus building relationships and trust (respondent 2). Informal controls might also play a role in giving orientation during times of uncertainty in PMI (respondent 3). Additionally, they can communicate and synchronise different parts of an organisation (researcher). As informal controls are also related to recruitment of the “right people”, they may affect talent retention (respondent 3). The researcher agrees and highlights that there are some informal power structures within organisations that should be controlled, and connecting with people on a more informal level is one way to establish trust.

Design and use

Respondent 1 mentions that informal controls are used on a “soft” and personal level. Informal controls concern the “tone at the top”, socialisation processes, and leading by example (all respondents). As top managers tend to act according to beliefs, rules, guidelines and systems, which they usually decide and establish themselves for the whole organisation, they are effectively leading by example (respondent 4). The management consultant agrees with this view.

Company 2 connects people from both firms, as they work in the background to achieve synergies. Respondent 2 considers this to be an informal control mechanism, as it provides an infrastructure for information exchange. For example, once the deal is closed, purchasing managers of acquiring and acquired firm are brought together to find solutions. Many things during PMI are voluntary, such as trips to other offices to meet with new colleagues, but respondent 2 explains that people tend to participate as they perceive co-operation with their new colleagues useful. These exchanges are consciously promoted through informal mechanisms by top managers, as they try to encourage people to participate.

Respondent 3 highlights that active use of informal controls depends on the people involved, as some managers perceive them as important while others do not. The management consultant believes that informal controls are sometimes used unconsciously by top managers, but he also thinks that their unintentional use has an impact on PMI. The researcher agrees but elaborates that he could observe in some PMIs that top managers were actively making use of informal power structures.

Impact and differences between successful vs. unsuccessful post-merger integration

All respondents find it difficult to describe differences in use of informal controls in successful vs. unsuccessful PMI processes, as they notice that they are less observable than formal controls and happen on a more personal level. However, all agree that informal control mechanisms have an impact on successfulness of the integration process.

Leading by example is important during PMI, as employees look out for managerial reactions and behaviour in times of increased uncertainty, since their environment or even job might change completely as a result of the acquisition (respondent 3). The management consultant confirms this, explaining that during PMI top managers are well-informed about what is going on and what the next steps will be, whereas lower level employees get much less information. Respondent 3 notes this situation might make employees insecure and can prompt people to leave, as they think that “what is coming now? I will move on”. He explains that having certain informal controls in place, like a strong “tone at the top” supported by transparent communication, may help to reduce anxiousness across employees. He also thinks that talent retention has a positive impact on performance during PMI, which is why it is worth it to take steps that increase chances that people stay.

For company 2, continuous contact on a personal and informal level during PMI is a success factor. Even several years after closing of the acquisition, top managers still visit the acquired companies every now and then, in order to remind employees that “they are still there” and that they are committed to them. The researcher highlights that although creating connections between people takes time, it supports PMI success.

Respondent 1 mentions that success of PMI is linked to individuals. He gives an example about good personality fit between the management team of the acquired and acquiring company, as in unsuccessful cases it contributed to PMI failure. Unfortunately getting to know each other takes time, and if some people do not fit together, this might become evident first after several months. Respondent 4 adds that if managers have different opinions and show different “tone at the top”, integration is likely to become more difficult. Because of that, company 4 prefers to replace the management team of the acquired company with their own people.

In Table 17 below, we recap our empirical findings of informal controls.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Common agreement (respondents 1, 4) ▪ Increase credibility (respondent 2) ▪ Give orientation in times of uncertainty (respondent 3) ▪ Recruitment of the “right” people, talent retention (respondent 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Communication (researcher) ▪ Synchronisation of different parts of an organisation (researcher) ▪ Establish trust (researcher) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Tone at the top, socialisation processes, leading by example (all) ▪ Used on “soft” and personal level (respondent 1) ▪ Top managers living up to own set standards (respondent 4) ▪ Being clear and transparent in discussion (no hidden agenda) (respondent 2) ▪ Connecting experts from both sides (respondent 2) ▪ Promote exchange through informal means ▪ Use of informal controls depends on managerial preferences (respondent 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Tone at the top, socialisation processes (management consultant) ▪ Sometimes used unconsciously by top managers (management consultant) ▪ In some cases informal power structures actively managed by top managers (researcher) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Informal controls less observable, but have an impact on PMI success (all) ▪ Leading by example supported by transparent communication helps reduce employee concerns (respondent 3) ▪ Continuous contact on a personal, informal level facilitates PMI success (respondent 2) ▪ Top managers showing presence and commitment important success factor (respondent 2) ▪ Good fit between management team of both sides contributes to PMI success ▪ Socialisation and same “tone at the top” important for PMI success (respondent 4) ▪ Replacement of prior management team with own people a means to decrease resistance to change (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ “Tone at the top” supported by transparent communication helps reduce employee concerns (management consultant) ▪ Creating connections between people and using informal power structures consciously supports PMI success (researcher)

Table 17: Summary empirical findings informal controls

4.9 Balanced approach

“On a day-to-day basis, once the company is on board, then it is the diagnostic and interactive control systems that are continuously worked with in a way, the belief and boundary systems are more there in the background as a guiding star.” (respondent 2)

Role

All respondents perceive the different formal controls as important, which can be seen from Likert scale rankings as all controls received a four or a five. Respondents 1, 2 and 3 highlight that belief and boundary systems work in a complementary way, and that they represent the overall fundament for PMI (all respondents). Respondent 1 mentions that values and discussion are very important, as without them it is not possible to achieve the desired financial outcomes during PMI. He stresses that all controls, formal and informal ones, are interconnected. Respondent 4 saw strong links of informal controls to belief and boundary systems in which leading by example play an important role for credibility and acceptance. All respondents mention that the different formal and informal controls aim to focus, align, and commit employees to making PMI a success. Both experts confirm this.

Design and use

All respondents note that belief systems, boundary systems, diagnostic control systems, interactive control systems as well as informal controls are in place during PMI. The management consultant highlights that insights from one control system can yield changes to others. For example, feedback from meetings can be used to adjust diagnostic controls. Controls should also be adapted to each other. Respondent 3 highlights that it is important to maintain focus on both, managing the integration and running the day-to-day business efficiently.

Respondent 1, 3, and the management consultant do not observe any particular order in which the controls are used. However, respondent 2 elaborates that order of use comes naturally in the sequence of belief, boundary, diagnostic, and interactive. On a day to day basis, they mostly work with diagnostic systems, but belief and boundary systems are there in the background. Interactive systems are also actively used, as they meet and talk regularly with the acquired firm. Informal controls are used alongside these formal controls.

Impact and differences between successful vs. unsuccessful post-merger integration

All respondents state that all controls are used in PMI, regardless whether the process turns out to be successful or not, but that there are differences in effectiveness of MCS. For example, respondent 3 highlights that in an unsuccessful PMI, even though all controls were in place, they were not properly communicated and executed. This is also observed by the management consultant. Respondent 4 emphasises that success of PMI process is affected by how MCS are designed and interconnected. Since integrations include a lot of changes, management strength and more informal ways of control have to be used to make them happen. The researcher supports this view.

Table 18 summarises our main findings of balanced approach with regards to role, design and use, as well as impact on PMI success.

Role (Why?) <i>Function and/or purpose</i>	Design & use (How?) <i>Arrangements & implementation to fulfil role</i>	Impact and differences between successful vs. unsuccessful post-merger integration
<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ Belief and boundary systems represent overall fundament (all) ▪ Different formal and informal controls aim to focus, align, and commit employees to making PMI a success (all) ▪ Belief and boundary systems complementary (respondents 1, 2, 3) ▪ Values and discussion needed to achieve desired financial outcomes (respondent 1) ▪ Formal and informal controls are interconnected (respondent 1) ▪ Credibility and acceptance (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Different formal and informal controls aim to focus, align, and commit employees to making PMI a success (management consultant and researcher) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ All controls (formal and informal ones) in place during PMI (all) ▪ No particular order (respondents 1, 3) ▪ Natural order: Belief systems, boundary systems, diagnostic control systems, interactive control systems (respondent 2) ▪ Belief and boundary systems in the background, diagnostic and interactive control systems used more on a daily basis (respondent 2) ▪ Maintain focus on both, managing the integration and running the day-to-day business efficiently (respondent 3) <p>Experts:</p> <ul style="list-style-type: none"> ▪ No particular order of controls (management consultant) ▪ Adaptation in control systems based on gained insights in other control systems (management consultant) 	<p>Company respondents:</p> <ul style="list-style-type: none"> ▪ All controls used regardless of PMI success, but differences in effectiveness of MCS (all) ▪ Lack of proper communication and execution of controls in less successful integrations (respondent 3) ▪ Success of PMI is affected by how MCS are designed and interconnected (respondent 4) ▪ Informal controls needed to make formal changes happen (respondent 4) <p>Experts:</p> <ul style="list-style-type: none"> ▪ Lack of proper communication and execution of controls in less successful integrations (management consultant) ▪ Informal controls needed to make formal changes happen (researcher)

Table 18: Summary empirical findings balanced approach

4.10 Contextual factors, their impact on MCS and success or failure of post-merger integration

Pre-merger phase

All respondents agree that PMI has a strong connection to the pre-merger phase. Respondent 3 explains that for example if due-diligence is not done properly, it will have an impact on future integration as most problems arise first after the acquisition has taken place. Due-diligence helps to identify these problems and allows to make action plans and decide on how to tackle them; thus, if they are not identified at that point in time, they will come up as a surprise later on. Respondent 2 confirms this and gives an example of an unsuccessful PMI process where due-diligence was sloppy, and did not uncover that the company they were buying made profit only because of government subsidies. Once these were taken away during PMI, both integration, as well as entire transaction, turned into fiasco. The researcher adds that if there is no clear motive for the transaction in pre-merger phase, the entire MCS and PMI setup might be inappropriate.

Size

All respondents mention that the acquiring firm can usually decide on how MCS will look during PMI. Respondent 3 gave an example where a small firm was acquired, and they had to think thoroughly how their MCS will look like during PMI and beyond. Company 3 feared that if they impose their complex systems upon the newcomer, they will simply drown in administrative work instead of focusing on their day to day operations. Management consultant mentions that usually if a bigger firm acquires a smaller one, the larger company has more control systems in place. These MCS can, after closing of the acquisition, be scaled up to the new, larger size of the combined firm. Smaller firms often cannot afford these expensive MCS, and aspects such as profitability or internal transfer prices constitute a problem. The researcher elaborated on

a hierarchy gap: some managers who are high up in the corporate hierarchy of the large firm might not understand anything about the acquired, very small firm. Thus, the small firm becomes only a line item on a report and an addition to the profit line, and the manager does not necessarily get what they are doing on a daily basis.

Professional background and M&A experience of the CEO

In all cases, the group CEO signs off on the final decision whether the deal is going to happen or not. All CEOs hold a business degree, some of them have an additional technical background, and all of them are experienced with acquisitions. The management consultant states that the CEO's experience with acquisitions can have an impact on PMI success, but does not necessarily have to. He elaborates that when CEOs are not experienced with PMI and do not listen to the guidelines from consultants and experts even though they are hired to provide them, integration ends up being unsuccessful.

In all companies, responsibility for PMI process is transferred to local top managers once the deal is closed. These managers tend to be internally recruited, coming either from acquired or acquiring firm. In companies 1, 3 and 4, the new top manager is from the acquiring party; though there may be exceptions due to local requirements. In company 2, the approach is different because of their strategy, and the entire management team of the acquired party is kept as before.

The local top managers then regularly report to the CEO and board of directors on PMI status. Their experience with PMI differs, but lack of it does not necessarily impact the success of PMI as they tend to receive necessary support from headquarters in case they need help. Companies 1 and 3 have specific PMI teams they use during integration process, and they have noticed that it helps to achieve success. On top, respondent 3 mentions that they adapt their MCS for PMI based on lessons learned from previous acquisitions, since they do not want to repeat mistakes. The researcher elaborates that most firms that are experienced with PMI will have some sort of task force for that purpose.

Culture

All respondents agree that culture, both national and corporate, plays an important role that has to be taken into account when designing and using MCS. Likewise, all of them are convinced that culture impacts on success of PMI.

Respondent 1 includes management philosophies as part of the corporate culture since there has to be a personal fit between the managerial teams. Respondent 4 and the management consultant emphasize that culture impacts on speed of integration. Respondent 4 gives an example of an acquisition made in Brazil, where PMI took much longer than the usual six months and is still ongoing even though the transaction was completed several years ago. He therefore highlights that it is important to learn from the acquired company and understand and adjust to local ways of doing things including local legislation, history, and

political and economic situation of the region. Respondent 2 gave an example of an acquisition they made in the US, where American managers were trying to manipulate financial KPIs in order to increase their personal payout from the transaction. The management consultant adds that there might be mistrust between managers if they come from different cultures. He observed this in a case where an American firm acquired a Swedish one, and the entire management team of the Swedish company left as they did not want to do things the American way. He states that mistrust makes it difficult to use MCS in an efficient way, which ultimately impacts on success of PMI process.

The researcher elaborates on aspects related to identity, which he considers to be more fundamental than culture. He mentions that during an acquisition, employees start focusing on in-group symbols, and simultaneously concentrate on differences between acquiring and acquired company. This can lead to cultural clashes which have to be managed during PMI. Another aspect the researcher stresses is that in many cases, MCS that are used for PMI are chosen based on power games rather than on an analysis of what the merged organisation actually needs. For example, the acquirer might impose their systems on the acquired firm simply to show that they are now in charge. This negatively impacts the acceptance and usefulness of MCS, which in turn affects PMI success.

Employee reactions

Respondent 1 mentions that they do not experience employees of the acquired firm leaving the organisation during PMI. He states that people seem to like being acquired by company 1, as a “bigger world is opening up” to them and they gain access to all of their resources. He reflects that this positive reaction facilitates PMI process and acceptance of MCS. Respondent 2 highlights that keeping the old management along after the acquisition makes people feel secure, and that they also experience positive employee reactions towards their acquisitions. Respondent 4 and the management consultant emphasises that employee reactions impact PMI success, and that they differ depending on where in the corporate hierarchy people are, as they have access to different amount of information.

When it comes to reactions towards MCS, respondent 1 is not aware of any specific ones. Respondent 2 notices that acquired employees understand the necessity of MCS, like reporting requirements, which helps to make PMI process smoother. On the other hand, he is also aware that increased workload can lead to frustration. This is also supported by respondent 3, 4, and the management consultant. These employee reactions have to be considered to make PMI a success, and the management consultant mentions surveys as possible means to investigate employee attitudes.

4.11 Summary of empirical findings

Our empirical data presented above included three distinct strategic drivers: 1) integration strategy, 2) speed of integration, and 3) level of integration and type of transaction. With regard to type of transaction, we only looked at acquisitions. The corresponding results indicate that integration strategies as well as level

of integration are adjusted to each company's overall strategy, and to individual deal characteristics. In general, strategic drivers are identified as an influential component for design and use of MCS, but they are also shaped by employing MCS. Additionally, our results show that international acquisitions are the main type of transactions undertaken, while mergers are rare events that were not described by our respondents.

Being fast in integrating the acquired firm into the corporate ways of doing things is perceived favourable for PMI success, as speedy integration ensures that momentum is maintained, and the organisation stays focused on value creation. The success or failure is related to the process of PMI, and not to the final outcome of it. The integration process includes different tasks, which are for example related to HR and IT. It also encompasses adaptation and introduction of different MCS to manage PMI.

When it comes to different levers of control and their role, design and use, it became clear during the interviews that each lever has a particular purpose during PMI. For example, belief systems provide employee guidance, boundary systems ensure compliance, diagnostic control systems are concerned with tracking status and motivating the workforce, and interactive control systems foster learning and education. Moreover, our empirical data shows it is pivotal that different controls, both formal and informal ones, work together and support each other in order to make PMI process a success. We can also derive from the results that setting-up and using MCS in PMI in a way that will be best for the integration is a learning process.

Table 19 below shows how the different respondents ranked importance of each lever of control for PMI. Results indicate that the distinct levers are all considered to be crucial for PMI (rankings from 4 to 5). It can also be seen that diagnostic controls are deemed particularly important by respondents, which may be due to their finance background.

	Belief systems	Boundary systems	Diagnostic control systems	Interactive control systems	Informal controls
Company 2 (respondent 2)	5	5	5	5	5
Company 3 (respondent 3)	4 to 5	4 to 5	5	4 to 5	4 to 5
Company 4 (respondent 4)	4	5	5	5	4
Management consultant	5	4	5	5	4 to 5

* Ranking index: 1 to 5, 1 = "low", 3 = "medium", 5 = "high"

** Company 1 (respondent 1) and researcher did not answer the ranking questions and are therefore excluded from the table.

Table 19: Likert scale ratings on importance of different control levers

Importance and use of levers changes over time, and which control mechanisms are emphasised more and which ones less depends on previous PMI experience, the company's strategy, and type of transaction, which in our study are acquisitions. Results also show that different controls are already important and used during the pre-merger phase, which includes activities like assessment of cultural fit and selection of KPIs for PMI.

Use of belief and boundary systems is not restricted to PMI, but they are mainly stressed in the beginning of integration, and later on serve as a support function in the background. On the contrary, diagnostic control systems, interactive control systems and informal controls are used more continuously throughout the process. Reporting intensity varies, but usually it is more frequent in the beginning and less recurrent once PMI reaches a steady state. Focus of dialogue between top managers and lower levels changes over time as well, as it is about getting to know each other in the beginning, and later about developing strategy further. Informal controls are less observable and sometimes used unconsciously by top management; nevertheless, they prevail during the whole integration and complement more formal controls.

Contextual factors represent the broader environment in which the company is embedded, and we learned that factors such as pre-merger phase, size, top managers' experience with PMI, culture, and employee reactions are important to consider in PMI. They influence role, design and use of MCS and also successfulness of PMI process. Hence, they can impact on PMI success either directly or indirectly, via impacting design and use of MCS. For example, negative employee reactions or cultural clashes may sabotage PMI and impede MCS to function properly, as might lack of experience by CEO or other top managers in charge. On the contrary, CEOs who are experienced with PMI might have better ability to build MCS that will support PMI. The same holds for decisions made in the pre-merger state.

Differences in successful and unsuccessful PMIs are related to contextual factors, like pre-merger phase, or occurrences during the integration process that can, but do not necessarily have to be, related to design and use of MCS. In conclusion, strategic drivers, formal and informal control levers, as well as contextual factors are highly interdependent, and all of them can influence success of PMI process. Strategic drivers and contextual factors impact on role, design and use of MCS during PMI, but they are also shaped by MCS.

5 Analysis and discussion

In the following chapter, we analyse and discuss our findings and possible patterns we could derive from our empirical material by comparing it with existing literature. At first, we examine the different strategic drivers that we identified as relevant for PMI. These are integration strategy, speed, as well as level and type of integration (5.1). Based on our empirical material, the only type of transaction that we focus on is acquisitions. In order to focus on our three research questions, we then organise the text following the structure of role, design and use, as well as impact of design and use of MCS on success or failure of PMI. We do that when assessing the different formal and informal levers of managerial control and their balance (5.2). In this way, we ensure that we are using our framework, while simultaneously focusing on the research questions. Additionally, we scrutinise different contextual factors. These are pre-merger phase, size, professional background and M&A experience of CEO, culture, and employee reactions (5.3).

5.1 Strategic drivers

Integration strategy

Our findings suggest that large companies that are experienced with acquisitions follow a standardised approach for post-merger integration. All companies under study have an integration strategy they use for acquisitions and adapt it only slightly, for example as they consider local conditions. Even though standardised, the approach allows for leeway in execution because it takes into consideration factors such as deal motives, which can vary a lot between different transactions. This helps to make integration process a success but might also give an impression that every PMI is very different, even though it is technically done following very similar procedures. All companies run the integration as projects and transfer overall PMI responsibility to local managers, but there are differences in execution between firms.

Taking into account deal idiosyncrasies is in line with contingency theory in literature, stating that there is “no one size fits all” for integration strategy (Angwin & Meadows, 2015; Bergamin & Braun, 2018). Literature (e.g. DePamphilis, 2011; Bergamin & Braun, 2018) confirms that integration is most frequently done on a project basis and Epstein (2004) highlights strong, experienced integration teams, like centralised PMI offices, as a key success factor for PMI.

Speed of integration

Results from the empirical material indicate a preference for fast integration to make PMI a success. Company respondents do not reflect upon any shortcomings of speed, neither general nor MCS specific. Our findings indicate that trust, which takes time to establish, is important to ensure sharing of knowledge during PMI. Here, MCS have potential to provide necessary infrastructure. Consequently, if the deal motive is to gain access to know-how, reduced speed of integration should be preferred alongside using MCS in

less formal and restricting ways. There is consensus that PMI takes on average around 18 months, however there might be exceptions with shorter PMI processes.

Preference for fast integration is also supported by general M&A literature findings that present speed as one major key success factor (e.g. Epstein, 2004; Bergamin & Braun, 2018). Gomes et al. (2013) and Puhakka (2017) reflect upon shortcomings that result from PMI speed, which were not mentioned by respondents. These could be increased resistance among staff, lack of trust, or sufficient understanding of the deal in the beginning of the PMI, which may lead to the choice of inappropriate performance measures, as well as decreased effectiveness of MCS. Speed plays a different role in mergers, as it is perceived necessary to take time to understand both systems, which implies that the integration usually takes longer than in acquisitions (Granlund, 2003), which we studied. We had difficulties finding evidence of usual integration time in the literature, as this also seems to be very dependent on the complexity of the specific deal.

Level of integration and type of transaction

The companies under study pursue different PMI strategies when it comes to level of integration. We found that companies either tend to pursue a similar strategy for all acquisitions, or choose it on a more case-by-case basis depending on deal motives. Based on the matrix typology by Haspeslagh and Jemison (1991) including holding, preservation, symbiosis and absorption, the case companies can be categorised as shown in Figure 5. The matrix was introduced in chapter 3.1.1.

Autonomy (of acquired firm)	High	Company 2 (Preservation)	Company 3 (Symbiosis)
	Low	- (Holding)	Companies 1, 3, 4 (Absorption)
		Low	High

Strategic interdependence (synergies)

Figure 5: Integration strategies of case companies

Companies consciously decide on how to integrate the acquired firm best. Their choice depends on the motive of the deal, as well as their overall strategy. Hence, some companies allow the acquired firm to remain autonomous and use them as a means to diversify (preservation), while others go after a partial (symbiosis) or full integration (absorption) with a stronger focus on synergy realisation, which requires a

high degree of interaction. These findings are in line with literature (e.g. Angwin & Meadows, 2015; Bergamin & Braun, 2018).

As MCS fulfil a coordinative function in PMI, we expected MCS to be more important and/or sophisticated in companies pursuing symbiosis or absorption, compared to companies following a preservation strategy. Our findings do not reveal any notable differences in importance of MCS. However, the fact that the company following a preservation strategy did neither have separate PMI monitoring nor a central PMI office or integration team is in accordance with our expectations. Overall, our findings suggest that companies adjust their MCS to their integration strategies, and that they are an important contextual factor that has to be considered for MCS design and use. This is also in line with previous PMI studies (e.g. Hoque & Chia, 2012; Nilsson, 2002).

5.2 Different levers of managerial control during post-merger integration

We have chosen to organise this chapter according to three main sections: role, design and use, as well as differences between successful and unsuccessful PMI process. This choice was made in order to structure the material according to our research questions. In each section, we include belief systems, boundary systems, diagnostic control systems, interactive control systems, informal controls, as well as balanced approach.

5.2.1 Role

In general, we found many similarities between our empiricals and literature. This applies to both PMI specific literature as well as to more general insights we gained via reviewing Simons' LOC. As expected, our results indicate, and confirm findings from literature, that the main role of MCS during PMI is to facilitate corporate integration, in a way working as an "assistant" for top managers in manifold ways (Jones, 1985b; Granlund, 2003; Hoque & Chia, 2012).

Belief systems

All respondents mention belief systems have a role in providing overall basis for principles, signalling priorities, guiding employees, and giving them purpose during PMI. In addition, respondents mention that belief systems increase transparency and facilitate communication. Creating shared meaning and values, common understanding, and developing a corporate language are also main functions of MCS in PMI mentioned in the literature (Granlund, 2003; Hoque & Chia, 2012).

Boundary systems

According to our empirical material, boundary systems clarify policies and expectations, indicate priorities, increase awareness, and align and educate employees about compliance, ethics, and accepted vs. unaccepted behaviour. This is in line with findings from literature, highlighting that the role of boundary

systems is to ensure compliance and providing explicit rules about desired and undesired actions (e.g. Simons, 1994; Bruining, Bonnet & Wright, 2004). These roles are also described by MCS literature looking at PMI, as Hoque and Chia (2012) as well as Jordão, Souza and Avelar (2014) mention guidance and encouragement of desired behaviour as important MCS functions.

Diagnostic control systems

Respondents highlighted that during PMI, diagnostic control systems assign responsibilities and tasks, ensure accountability and measurability, foster organisational alignment, coordination of activities, and track PMI status. Establishing and transferring accountability was also important for respondents. Full responsibility for integration is handed over to local operations, which appears logical as the acquired part has to be integrated into the running operations. Value creation was mentioned by all respondents as a key goal that diagnostic controls should focus on during PMI. Another key objective mentioned by respondents is delivering what was promised in pre-merger phase.

Roles of diagnostic control systems mentioned by respondents are in accordance with MCS literature as coordination is mentioned by Nilsson (2002), delegation of authority and accountability is discussed by Beusch (2007) and Jones (1985b), while constant review of processes and tracking is highlighted by Jordão, Souza and Avelar (2014). Other relevant roles mentioned in literature are that MCS provide relevant information to top managers, achieve goal alignment, and ensure value creation (e.g. Gates & Very, 2003; Jordão, Souza & Avelar, 2014). As M&A activities are undertaken in order to increase firm value (Melewar & Harrold, 2000; Haspeslagh & Jemison, 1991), it did not surprise us that respondents focused on value creation.

Interactive control systems

Respondents highlight the importance of interaction between top management and lower level employees at the beginning of PMI, due to a new business environment. These interactions help to clarify that everyone is important and plays a role in making PMI a success, thus impacting employee commitment. Additionally, interactive controls teach and educate. Respondents highlight that in PMI, interactive controls are about getting to know each other and only with time, the focus moves to developing strategy further. These findings seem logical, as PMI is a process of many adaptations and it makes little sense to discuss strategy on top of all other tasks and complexities.

Focusing on strategy during later stages of integration is in line with PMI literature such as Beusch (2007) and Roberts (1990), as both authors emphasise that in the beginning of PMI it is about getting acquainted, and only later it is about discussing strategy and using bottom-up feedback for adaptation.

Informal controls

Respondents mention that in PMI, informal controls achieve common agreement and increase managerial credibility if they live up to what they say. Additionally, informal power structures within organisations need to be controlled. Since informal controls are also related to recruitment of the “right people”, they have a pivotal function in talent retention. They also play an important role in giving orientation during times of uncertainty in PMI, as they complement formal control mechanisms. Also, Calori, Lubatkin and Very (1994), Nilsson (2002), and Jordão, Souza and Avelar (2014) talk about their important role during PMI as uncertainty is increased in this time.

Balanced approach

We find that the different formal and informal controls aim to focus, align, and commit employees to making PMI a success. This is inter alia reflected in the corresponding roles of providing guidance for employees, creating shared meaning, as well as establishing and achieving commitment. In this way, MCS can facilitate corporate integration. While guidance was in focus in belief and boundary systems that set the overall stage for integration, informal controls played a special role in establishing trust. We understood from respondents that it is essential to use the different MCS for their various purposes, in a joint way that creates consistency. This seems relevant during PMI as inconsistent and contradictory communication or information can increase uncertainty among staff, which is already high in times of integration.

All of these results are in line with the literature, which mentions that different forms of control work in tandem during PMI (e.g. Calori, Lubatkin & Very, 1994; Jordão, Souza & Avelar, 2014). For example, Calori, Lubatkin and Very (1994) point out that via informal controls “real socialisation” can be achieved, which is favourable for successful integration. Moreover, Mundy (2010) states that when exercising the different levers of control and conveyed messages, they need to be in harmony.

5.2.2 Design and use

Since we collected the empirical material with the help of our framework that explicitly gave examples of design and use of all the levers, it was not a surprise to us that all respondents referred to the same aspects in their answers. Thus, they confirmed what is already stated in the literature related to design and use of Simons' LOC. These were for example core values, mission and vision in belief systems; code of conduct, guidelines, and risk analyses in boundary systems; budgets, KPIs and reward schemes in diagnostic controls; and meetings and get-togethers in interactive control systems.

We could also find all of these elements in the literature about MCS that looked at PMI in particular, as they amongst others highlighted code of conducts (e.g. Beusch, 2007), planning, target setting and budgets (e.g. Jones, 1985b; Nilsson, 2002), and get-togethers like meetings (Hoque & Chia, 2012) and conferences (Roberts, 1990).

Belief systems

Companies make their core values available on the intranet, posters, and via managerial communication. In addition, some respondents mentioned changing the name of the acquired firm and use of coherent symbols and pictures. These actions indicate that the newcomer is now a part of the larger corporate group. Since acquisitions can be seen as a mass-recruitment activity, respondents highlighted that especially core values are discussed and assessed already in the pre-merger stage. It is only natural that people and companies might hold different values. This way, a certain level of screening for the right partners can be achieved in order to mitigate issues in PMI. Belief systems, even though used at all times, are stressed more at the start of PMI. We find it especially noteworthy that our findings suggest that core values might have a deeper meaning since they relate to identity, which is very fundamental for people.

The majority of our findings are also confirmed by literature, for example Anderson et al. (2015) refer to screening of candidates in partnership settings. Marginson (2009) states that belief systems play an important role when companies undergo changes, and that they are less emphasised when business is “as usual”. Relation of core values to identity was only discussed by Chenhall, Hall and Smith (2010), but not examined in any other MCS literature we found, neither LOC nor PMI related. However, we recognise it as an important factor to consider when designing and using MCS in integrations.

Boundary systems

Respondents highlight that guidelines, directives, and code of conducts are communicated to the whole organisation via intranet and distributed by managers. Respondents stress that it is important that everyone acts according to them, that managers serve as good examples to the rest of the organisation, and that guidelines are expressed very clearly. Respondents stated that over time, boundary systems move from general to being broken down to the operational level. They become more specific, for example via planning processes. We also found that it might be important to include HR policies in boundary systems. This ensures equal opportunities for everyone when it comes to recruitment in PMI processes. We found this is a relevant aspect, with possible impact on effectiveness and acceptance of MCS instruments during PMI.

Also, Beusch (2007) emphasises that being very clear in expectations and rules during PMI is important. He stresses that giving room for interpretation may lead to rumours and to confusion, which can be harmful in times of increased uncertainty during PMI. Mundy (2010) supports the view of breaking boundary systems to more detailed reports and plans. This is also supported by PMI studies that describe planning processes, which later on lead to more operational plans and budgets (e.g. Jones, 1985b; Nilsson, 2002). Inclusion of recruitment policies during PMI was not highlighted in any of the MCS literature we examined. This can be due to the fact that HR topics may be perceived as a different research field and hence be included in other research streams, like HR and organisational studies.

Diagnostic control systems

Respondents mention budgets, business and profit plans, target setting, project monitoring systems, financial and non-financial KPIs, as well as short-term and long-term measures as elements of diagnostic control systems. Tracking was important for all respondents. Non-trackable measures were stated to be obsolete, and tracking has several functions during PMI such as monitoring synergy realisation and reporting to the board of directors. However, sources of achieved outcomes may be hard to detect (acquired or acquiring firm).

How to identify source of achieved outcome is an issue that remains under-investigated in the PMI studies we examined. But to us, it represents a practical challenge and an important aspect to elaborate on, as synergy realisation is one of the main motives for M&A activities (Haspeslagh & Jemison, 1991). Moreover, Hoque and Chia (2012) suggest that as PMI includes a lot of changes, this moment can be actively used to introduce new MCS techniques and KPIs unrelated to PMI. However, that is not mentioned by our respondents. We relate this to the fact that they choose not to increase PMI complexity even more by establishing, for example, new accounting techniques.

Our findings indicate that reward schemes, which are a part of diagnostic controls, increase alignment and motivation during PMI. However, they constitute a sensitive issue, and their alignment during PMI is a cumbersome process. Namely, it includes several steps like reviewing existing compensation schemes in both companies. Changes in reward schemes are a sensitive issue as they directly impact employee wages. Respondents also highlight that reward schemes are adjusted during PMI in order to take into consideration local standards and seniority level. In line with our results, Jordão, Souza and Avelar (2014) mention that performance evaluation needs to be transparent in order to have a positive impact on PMI. However, adjustment of reward schemes to local conditions is something that was not described in PMI literature.

Respondents state that diagnostic controls, including target setting and rewards, are a way to make the organisation very focused and feel uneasy if targets are not achieved, as pressure is applied through frequent monitoring. We cannot draw any general conclusions of patterns, but there seemed to be a tendency that frequency and focus on reporting increased during PMI. With respect to frequency and importance of reporting, there was no agreement in PMI literature whether it generally increases during PMI (Jones, 1985) or not (Granlund, 2003). Jones (1985b) as well as Simons (1994) mention that especially financial KPIs can be used to make the organisation feel uneasy with the current status. This increases corresponding willingness to change, which may facilitate integration. That matches our results.

Our findings indicate that the acquiring party has the decisive power over MCS changes. This often results in large changes for the acquired firm, but only small ones for the acquiring company. Company respondents explain that “must haves” need to be in place early on, while deadlines for complying with less important standards and rules can be extended. These findings are also supported by Jones (1985b) who

accounts for the fact that the acquiring firm decides how MCS will look post-acquisition, that MCS integration tended to happen within the first year of PMI, and changes were made faster when MCS were seen as important.

Interactive control systems

Top managers get involved with lower levels via meetings, larger events, and forums like intranet publications and newsletters. The interviews reveal that during discussions deal motives were explained to employees. We consider this an important aspect of communication to employees as it fosters understanding and commitment towards the integration. Respondents explain that content of discussion varies depending on the level of meeting and that debates can go down to operational issues concerning questions about best ways to integrate certain organisational parts.

Meetings and discussions are also elements of interactive control systems mentioned in the literature (e.g. Roberts, 1990; Hoque & Chia, 2012). However, we could not explicitly find evidence of explaining deal motives to employees in PMI studies we looked into. Literature highlights that interactive controls are, especially at the start of PMI, mostly used for general exchange and not going down to very detailed levels (Beusch, 2007; Roberts, 1990). The latter finding contradicts our results.

Informal controls

Informal controls are used during PMI and they are perceived as important, but nevertheless it appears that they are not always used consciously. Respondents mention that they were used on a “soft” and personal level, and thus are generally harder to grasp. We also noticed that making sense of informal controls is challenging. Informal controls that were observed by respondents during PMI are leading by example, “tone at the top”, and other socialisation processes. Additionally, informal power structures have to be managed, and active use of informal controls assists the integration. Our findings suggest that acceptance and compliance with MCS requirements can be increased by replacing top management with employees from the acquiring firm during PMI. This form of replacement, as it belongs to recruitment of the “right people”, can thus be seen as an aspect of informal controls.

Malmi and Brown (2008) recognise that informal controls may at times be out of managerial control, and Sundberg (2014) describes the influential impact of informal power structures, which is in line with our findings. In general, informal controls are perceived as powerful devices, both by our respondents as well as by literature (e.g. Calori, Lubatkin & Very, 2003; Jordão, Souza & Avelar, 2014). For example, Marginson (2009) as well as Calori, Lubatkin and Very (1994) support the view that informal controls help during times of organisational change, and integration efforts. Likewise, PMI literature also confirms our result that it is indispensable that key players support MCS in order to make the integration a success. For example, Beusch (2007) refers to the fact that PMI is facilitated if opponents of change leave.

Balanced approach

All levers, both formal and informal, are used during PMI and beyond. Some controls work in the background, like belief and boundary systems, but some were used on a daily basis, like diagnostic controls. Even though frequency of use is different across the levers, it is important that they are all in place. For instance without belief and boundary systems, diagnostic controls cannot function properly. There was no agreement regarding the order in which the levers are used. Moreover, we can observe a connection of informal controls to all four formal levers during PMI, as respondents emphasise that for instance leading by example is coupled to all of them. Further links between the levers can be seen, as based on insights gained from one lever, other can be adjusted.

Simons (1995) points to the fact that belief and boundary systems are the overall foundation for the business. He also states that managers have to decide what levers to stress when based on the specific situational context, which is confirmed by our findings. Only some PMI studies mention that formal and informal controls work in tandem during PMI (e.g. Calori, Lubatkin & Very, 1994; Beusch, 2007; Puhakka, 2017), but we find them in all of our cases. In line with our results, implementation of MCS is described as a learning process by Gates and Very (2003) and Widener (2007). In the literature, the concept of organisational ambidexterity is closely linked to the balanced approach of levers of control. We did not explicitly ask about organisational ambidexterity in our interviews, as even though the concept is closely related to PMI it was too complex to incorporate into our questionnaire. Thus, our empirical material does not reveal any insights towards this aspect.

5.2.3 Impact of design and use of MCS on success or failure of post-merger integration

Definition of and reasons for success and failure of post-merger integration

Our respondents have different views on what can be determined as a successful integration, however, performance during the integration is the main focus. Therefore, it is more about the PMI process rather than the final outcome of it. There is no clear view on this in the literature either. All respondents were able to talk about at least one unsuccessful PMI, although not all unsuccessful PMIs had the same characteristics. Oftentimes, it could be just about one thing that went wrong, but it still made an impact severe enough to make the whole integration process less successful. All companies clearly learned from their mistakes, as it appears that reasons that led to unsuccessful PMIs were then adjusted during next integration in order to avoid the same pitfalls. This might well be the reason why respondents had more successful than unsuccessful examples. All respondents highlight value creation as being the overall objective for their acquisitions. As could be expected, value creation with corresponding performance is also mentioned in the literature as the ultimate goal (e.g. Calori, Lubatkin & Very, 1994; Gates & Very, 2003).

Keeping customers, having high speed, and clearly defined objectives are key success factors mentioned by our respondents and experts, whereas reasons behind failure are related to pre-merger problems, weak leadership, and MCS issues. We also find some of these explicitly mentioned in the literature covering key success factors, as for example Epstein (2005) mentions strong leadership, and speed is recommended by Gomes et al. (2013). Moreover, critical role of execution is highlighted by Stahl (2004), Jones (1985b), and Hoque and Chia (2012).

“Best of both” approach seems to be rare, as it was referred to by only one of our respondents who found that such process takes time and includes a lot of discussions in order to arrive at the right solution. We anticipate that “best of both” might be something that is done more in mergers of equals than in acquisitions, which is why our respondents barely discussed it. This makes sense as in mergers, the two firms are treated equally and one cannot just impose its system on to the other. On the other hand, being the acquirer, one has the power to make any desired changes. Jones (1985b) finds that it is rare that best of both is undertaken in acquisitions, and Granlund (2003) describes use of “best of both” in a merger which supports our assumption given above.

Belief systems

Respondents stated that having clear written documents allows for clarity and ability to refer to them, which contributed to PMI success as there was no need to discuss their meanings. Written documents were a key success factor, and it is expected that managers not only distribute them to the entire organisation, but also show example and own commitment by following their content. In a way, this is linked to stringent communication of core values, which is important for success of PMI process. Not surprisingly, in unsuccessful PMIs belief systems did not achieve the desired alignment. As core values are linked to employee identity, alignment helps to mitigate cultural clashes. Nevertheless, we did not expect significance of written documents to be so high for belief systems, as we expected this to be highlighted rather for rules, boundaries, or diagnostic controls. But it emphasises the importance of shared values and common understanding in PMI even more.

Simons (1994) talks about belief systems being stated in vague terms, as opposed to our findings. We also did not find much in MCS literature about the importance of having written documents concerning core values in PMI. However, as belief systems play a significant role in introducing the new company culture (Hoque & Chia, 2012), communicating new vision and establishing common core values in order to commit employees to PMI efforts is seen as important by literature (Jordão, Souza & Avelar, 2014; Beusch, 2007), which corresponds to our findings. Furthermore, Puhakka (2017) mentions that shared common values mitigate effects of cultural clashes, which is also supported by our results.

Boundary systems

Respondents mentioned that in case of full integration, possible objections might emerge from the acquired firm as they are used to doing things “another way”. Once again, respondents deemed written documents as key success factors in such situations. Respondents stated that when things are written down, they are easier to explain and there is less room for interpretation. This increases acceptance and facilitates PMI process. In line with this, respondents emphasised that it is crucial to have the same “feel” about business and ethics to make PMI a success, to listen to possible complaints, and to consider making exceptions if necessary.

With regards to literature, use of code of conduct makes rules and instructions transparent (Beusch, 2007). Being very clear is important, as having vague goals affects PMI success (Granlund, 2003). Beusch (2007) emphasises that CEOs tend to select their close management group carefully, to ensure loyalty and compliance with requirements. He also highlights that MCS need to be made visible and clearly communicated in order to increase understanding and acceptance, and thereby ultimately supporting PMI. All of these aspects correspond with our findings from interviews.

Diagnostic control systems

Respondents described that success of PMI process is related to proper definitions of KPIs, good monitoring, and managerial understanding of the acquired company. In unsuccessful PMIs follow-up is less professional, it is taken less seriously, and not enough time and resources are put into it. Managers should further ensure that PMI makes it until the end, as it is easy to lose focus and commitment during integration since it is a long and complex process. There can neither be cheating, sabotage, or delays in KPI reporting.

KPIs, performance monitoring, and analysis of critical success factors are important elements of MCS in PMI mentioned in the literature (Hoque & Chia, 2012). Role of target setting, follow-ups, and analyses in ensuring PMI success is confirmed by Gates and Very (2003), Beusch (2007) as well as Nilsson (2002). Delays and insufficient resource management are also mentioned as impediments for successful PMI by literature (Granlund, 2003; Puhakka, 2017). In sum, all of our results are in line with literature.

Interactive control systems

Transparency and clarity in discussions are key success factors in PMI, and their importance starts already in the pre-merger stage. It is easy to underestimate the complexity of PMI process when there is no dialogue, and thus frequent discussions enable to gain understanding necessary to make PMI a success. Jordão, Souza and Avelar (2014) support our findings, as they mention that CEO engagement and communication throughout hierarchical levels were success factors for post-merger integration.

Informal control systems

Respondents agree that even though informal controls may be harder to observe than formal controls, they still have an impact on success of PMI process. In successful integrations, “tone at the top” is supported by transparent communication. In combination, these two aspects ensure continuous and personal contact, which facilitates PMI success and helps to reduce employee concerns as well as anxiousness. Thus, it is good if top managers show presence and commitment during PMI. Since personal fit between management team from acquiring and acquired company also plays a big role, some companies consciously create connections between people to support PMI. However, some replace prior management with their own people to create this good fit.

Some of the literature agrees with our results that informal controls support PMI (e.g. Calori, Lubatkin & Very, 1994; Puhakka, 2017), and that clear communication is an important aspect (Nilsson, 2002). It is necessary to have both formal and informal discussions about various aspects of PMI, thus combining the use of the two types of control (Puhakka, 2017). Replacement of managers was one possible means to achieve the same tone at the top and to make organisational changes happen in Simons’ (1994) study.

Balanced approach

No matter whether PMI process was successful or not, all controls are used in all companies. However, there are differences in the effectiveness of MCS, and success of PMI is affected by how MCS are designed and interconnected. Informal controls are needed in order to make formal changes happen, and all controls should be properly communicated and executed, as especially lack of the latter two aspects can be observed during unsuccessful PMI.

Also, in the literature, informal controls support formal ones (Calori, Lubatkin & Very, 1994; Nilsson, 2002; Puhakka, 2017). Hoque and Chia (2012) find that different formal levers have to interact to make PMI a success, which is supported by Simons (1995) who emphasises that the strength of each lever lies in combined use. This is in line with our findings.

5.3 Contextual factors

Our findings suggest that contextual factors hold an important role, because they need to be considered in design and use of MCS during PMI. This is also supported by previous literature (e.g. Nilsson, 2002; Jordão, Souza & Avelar, 2014).

Pre-merger phase

Overall, we found a strong link between the activities undertaken during pre-merger stage and PMI. Decisions in pre-merger impact on successfulness of PMI process, as for example an incomplete due-diligence in pre-merger stage might lead to severe problems during integration. In line with our findings,

Puhakka (2017) highlights that pre- and post-merger stages have to follow the same logic and that they should be linked, which is also supported by Gomes et al. (2013).

Size

Our empiricals indicate that since the acquiring firm holds decision-making power during PMI, they will decide on how MCS will look like for the acquired company. But especially when acquiring small firms, it is beneficial to think through what systems they will need to comply with during PMI, as unproportionally large amount of bureaucracy can hinder them from running their day-to-day operations.

Likewise, literature highlights that size influences the degree and form of control that is exercised during PMI (Calori, Lubatkin & Very, 1994). Granlund (2003) studied a merger where due to equality in size, one party could not impose its own system onto the other. Jones (1985b) found in his case, all acquiring and acquired firms were large enough to have sophisticated MCS, and technically either one could be suitable for the new organisation. Nevertheless, it was still the acquiring firm that made the final decision. Findings from Granlund (2003) clearly differ from our empirical material, which is more in line with Jones (1985b). We attribute this to differences in mergers and acquisitions, and that we only obtained empirical data on the latter.

Professional background and M&A experience of the CEO

We found lack of experience with acquisitions and/or PMI does not necessarily have to mean bad news for the integration process. Inexperienced CEOs and managers can receive support from headquarter functions, integration teams, or external consultants. However, what is crucial in these cases is that managers listen to the advice they are given. In unsuccessful PMIs, inexperienced managers did not follow the advice, which contributed to PMI failure. Beusch (2007) highlights, in line with our findings, that behavioural issues contribute to MCS issues during PMI, and Jordão, Souza and Avelar (2014) mention that consultants may be hired to support PMI.

Culture

Both national and corporate culture play an important role during PMI and impact on the success of integration process. This is why they also need to be taken into account when designing MCS, as it is important to give thought to local standards, history, and ways of doing things. Culture also includes personal fit between the managers at the two firms, and if they do not get along well, success of PMI will likely be impacted negatively. It neither makes things easier if new MCS are chosen based on power games, instead of rational analysis. Finally, identity - corporate and personal - will impact integration, as it is rooted into symbols and group behaviour that occur throughout the entire integration.

With regards to literature, preference to use a certain form of control, informal or formal, is rooted in national culture; therefore, being conscious about own cultural preferences helps to anticipate problems during PMI

(Calori, Lubatkin & Very, 1994). Additionally, alterations to MCS of acquired company are often based on cultural preferences of acquiring company (Jordão, Souza & Avelar, 2014). Dominant individuals that play a key role might cause cultural clashes and affect PMI success (Granlund, 2003). Collision of two different cultures affects a common tone in the new organisation, which makes management of the new company difficult (Granlund, 2003). All of these literature findings match our results.

Employee reactions

Employee reactions impact on the successfulness of PMI process, and they can be related either to the deal itself, or to MCS used in PMI. Employees might leave the organisation, which has a crucial impact especially if the logic behind the deal was to acquire new knowledge. Reactions differ depending on where in the organisation people are as lower levels have access to less information, which might make them feel insecure. On the one hand, implementation of new MCS often means additional work, which can lead to frustration. However, employees understand the necessity of MCS, which helps to achieve a smoother PMI process. Overall, employee reactions should be considered during PMI and when making changes to MCS.

It appears from literature that the larger the changes, the more intense responses can be expected from employees, which could impact success of PMI (Jones, 1985b). However, we cannot draw any conclusions on this based on our empirical material. Negative reactions can likely be mitigated if alterations of MCS are discussed within the organisation, and promoted by top management (Beusch, 2007). Our interviews confirm the latter two aspects mentioned by Beusch (2007).

6 Conclusions

In this chapter we will present our main findings and conclusions. First, we answer our three research questions (6.1). We then evaluate the usefulness of our framework and our contributions (6.2), reflect upon limitations of this study (6.3), and give recommendations for future research (6.4).

6.1 Answering our research questions

What is the role of management control systems in post-merger integration?

According to both literature and respondents, MCS have a support function for top management during the entire PMI process, as they facilitate and guide integration. MCS provide information for decision-making purposes, and they create and maintain momentum. They also guide, educate employees, and encourage desired behaviour. All of these aspects can be used as a form of achieving alignment within the organisation. MCS also communicate, control, commit, coordinate, and they indicate priorities. Additionally, they establish trust and shape relationships between stakeholders. Empirical material highlighted that while working in the background, MCS always have value creation in mind, which is related to implementation of chosen PMI strategy.

Both respondents and literature mention that MCS also create common understanding and shared values within an organisation and as they are transparent, there is no ambiguity. MCS also ensure accountability and measurability during PMI, and give orientation in times of uncertainty. Furthermore, MCS have a motivational role, especially when connected to compensation and reward schemes. They also help in talent retention and recruitment of the right people into the organisation. There is some difference in the role of MCS over time, as in the beginning of PMI their role is more about getting to know each other across the two companies, whereas later on they are also used to develop strategy further. This is seen in the literature but was especially emphasised during our interviews. Literature highlights that rules and routines help to achieve stability during the integration, and they ensure efficiency in day-to-day operations.

How are management control systems designed and used in post-merger integration?

Both empirical data and literature suggest that contextual factors, such as pre-merger phase, size, previous experience, culture, and employee reactions, should be taken into account. Our empirical findings reveal that when designing MCS for PMI, it is important first to understand the big picture, and only then make changes. Design of MCS is not restricted to PMI only and controls are used at all times, although they might be used differently at different points in time.

Literature and empirical findings both agree that decision on use and design of MCS during PMI often comes from the acquirer, and major changes tend to be made to MCS of the acquired company. However, the acquired company can be given flexibility or more time to comply with certain standards if that is required to ensure smooth integration. In general, adaptations are made to MCS based on new insights that emerge

during PMI, or have happened in previous integrations. This results in “learning by doing” and corrective actions when things are not proceeding as expected. Therefore, it is also important to exercise monitoring during PMI. Reporting is often intense during early integration phase.

Formal as well as informal controls are used during PMI. This is highlighted throughout our empirical material; however, we find there is less consensus in the literature. But both, literature and empiricals, find that comparability of KPIs is important. If KPIs cannot be tracked and compared, they will essentially be useless. Financial, non-financial, short-term and long-term KPIs are all used during PMI, and they are linked to performance evaluation. An important empirical finding concerns use of documents written for PMI, as records that state values within the new organisation are often used.

How can design and use of management control systems in post-merger integration contribute to its success or failure?

Empirical material strongly pointed out that rather than attributing success to the final outcome of PMI, it is considered to be related to the process of integration instead. There is a firm agreement between literature and our empirical findings that consideration of contextual factors is indispensable for success of PMI, and that some of these factors related to PMI failure are linked to pre-merger phase. It is important that communication and goals are unambiguous, and that things are clearly stated. In general, key players and their commitment increase effectiveness of MCS, and thereby success of PMI process. It is also important that enough resources are allocated to implementation of MCS during PMI. Additionally, our empirical findings uncovered the importance of written documents as key PMI success factor. Top managers are expected to distribute them across the organisation, as well as act according to them. When top managers serve as “good examples” to the rest of the organisation, they contribute to PMI success. Since making it until the end of the integration can be tough as the entire process is long, not only managerial commitment but also formal and informal dialogue are needed to make formal changes happen.

Both literature and empiricals mention that in unsuccessful PMIs follow-up is less professional, it is not taken seriously, and not enough time and resources are put into it. Managerial experience with PMI, support from headquarters, and use of consultants can facilitate PMI process. Complexity, incomparability, and incompatible systems also impede on PMI success. Since MCS are powerful devices, they can provoke strong reactions among employees. These reactions, especially when they are negative, should be taken into account during PMI and when designing MCS. Empirical material elaborates further on the above, highlighting that if managers lack experience and do not listen to advice given, this will have a negative impact on PMI success. Top managers should also listen to complaints and consider certain exceptions to avoid entering onto an unsuccessful PMI path. Finally, there are not necessarily differences across design and use of MCS during PMI, but less successful integrations show that there are differences in MCS effectiveness.

So, is there a key to how to design and use MCS in order to support PMI? It would appear that there is no specific key to succeed in PMI. Every deal and corresponding PMI is unique, but there seem to be patterns that make success or failure of the integration more likely.

6.2 Contribution and evaluation of usefulness of our framework

In this paper, our framework was applied for data collection, presentation of empiricals, and in analysis and discussion. Employing the framework resulted in a multifaceted picture on role, design and use, as well as impact of MCS on success or failure of PMI. This consequently allowed us to answer our research questions. Therefore, we consider our framework to be a useful tool for studying MCS, and believe it can be a valuable concept for future research on PMI or other contexts of organisational change and strategic firm renewal. A major strength we identified when analysing and discussing our findings was its simplicity. Though we added a control lever (i.e. informal controls) and expanded Simons' LOC by including different strategic drivers and contextual factors, our framework remained manageable in use and made our inquiry comprehensive. Moreover, it seems like a tool that is also very approachable for practitioners, a characteristic we attribute to the fact that we used Simons' LOC as underlying basis.

Comparing our framework with existing ones, we realise some aspects in which our framework surpasses them. For example, it yielded more insights and results than Simons' (1994) LOC framework would have been able to, as he excludes informal controls and the focus in his model is primarily on business strategy, ignoring other potentially relevant contextual factors. Our framework also provided more information than MCS frameworks merely focusing on employee perceptions, like the one by Ahrens and Chapman (2004), and we included this aspect into our framework as well. Though Malmi and Brown's (2008) MCS package structure covers several relevant aspects, like informal controls, we are apprehensive about the fact it was developed based on literature review and not through practical field studies. Thus, we feel it would have been too normative and descriptive for our purposes. Even though Ferreira and Otley's (2009) framework is very comprehensive, it would have been too complex to apply it in relatively short interviews like the ones we conducted. It is also too focused on performance measurement. Finally, we noticed our framework was broad enough to capture characteristics that were not covered by previous PMI studies, as for instance Gates and Very (2003) noticed that even some large companies did not use MCS to monitor integration. But since they had a strong focus on performance measurement, they may have missed other relevant MCS elements, like for example belief and boundary systems.

Using our framework also helped in learning more about the relationship of the different elements it encompasses. Based on our findings and analysis, we conclude that the relationships are reciprocal and highly interrelated. For example, strategic drivers as well as other contextual factors both shape, and are shaped by MCS. We also concluded that different levers are greatly interconnected. With respect to informal controls, we discovered that they seem to play a more general role ("standing above"). They influence and complement all formal levers, rather than being only connected to individual ones.

We also became aware that informal controls are hard to grasp. We recognise that since informal controls are less observable and challenging to investigate, this may be the main reason why Simons (1994) decided to exclude them. We learned that informal controls seem to be powerful devices, that they relate to managerial preferences, and that they can sometimes be beyond managers' control or are used unconsciously. Though we got some insights on how informal controls manifest themselves in PMI, our study is not exhaustive and this topic undeniably requires further research.

Overall, we increased the understanding of role, design and use of MCS in post-merger integration and how MCS contribute to its success or failure, both by a comprehensive literature review and collected empirical material. This added understanding is also helpful for practitioners. Being aware of the implications that role, design and use of MCS have on successfulness of PMI process can help managers to design them in a best possible way that ensures smooth integration process. Our developed framework presents a new theoretical approach, and will help future studies to elaborate on PMI, especially the role, design, and use of MCS in this phase. With slight adaptation, our framework can also be used for studies outside of PMI context, and the questionnaire that we used for data collection can be used as is by researchers.

6.3 Limitations

In our study, we only look at acquisitions and we do not discuss any mergers. As Granlund (2003) points out, mergers may pose different challenges than acquisitions. Therefore, our results are limited in that sense. We also have a respondent bias, since all of them have background within finance or accounting, thus impacting on given answers. Our sample of six respondents is small, and alongside the fact that we only look at acquisitions, our conclusions cannot be generalised. We observed a slight bias towards successful PMIs as well, as our respondents gave more successful than unsuccessful examples. One possible reason behind this might be that companies learn from their mistakes and do not repeat them over time. When collecting empirical material, we only conducted one interview with each respondent. Additionally, we only relied on their statements, and we did not include any observations.

Any kind of framework, since it provides a certain type of structure, is limited and entails a risk of missing important information. Therefore, we might not have uncovered all important aspects by using our framework. For example, our findings on informal controls are not exhaustive, and these controls have to be studied more. Once again, as our interview number is limited to six, our ability to gain general insights on informal controls is limited.

6.4 Suggestions for future research

With regards to future research, it would be interesting to look at a similar setting as in our study but by using a much larger sample size to make the results generalisable. Since we only look at acquisitions, it could be interesting to look at PMI either in both mergers and acquisitions, or in mergers only. This can

help in discovering if there are any differences across the two types of M&A transactions, regarding strategic drivers (e.g. speed), design and use of MCS (e.g. “best of both” approach), as well as contextual factors (e.g. size).

In our study, we focus on selected contextual factors that impact MCS in PMI. Our list is not comprehensive, and since these factors play an important role in design and use of MCS for PMI, it would be worthwhile to examine other contextual factors such as financial status of the company or investigate in more detail the impact of size. One could also focus on investigating the impact of MCS on identity in PMI, or look into organisational ambidexterity which is linked to balanced use of the different controls. We uncovered that tracking synergies was important in PMI, and thus it poses a practical problem that is worth further researching.

We also identified a need for more thorough studies on informal controls, and how they complement different formal control levers. Informal controls remain under-investigated, both in general but especially in PMI setting. Perhaps one reason for this is that they are less observable, but as they play an important role in integrations, better understanding of them would be beneficial. Our developed framework can be used to investigate the topic of informal controls further, for example if used in an in-depth single case study conducted over longer period of time. Such research could also include observations to make it even more comprehensive, since informal controls are not as measurable as formal ones.

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Appendix

Appendix 1: Interview instructions

Thank you for participating in our thesis interview. We want to understand how top management used management control during post-merger integration (PMI). We are using a simple framework based on four different aspects:

- **Belief systems**
 - o Emphasises core values of the company.
 - o Expressed through documents such as vision and mission statements.
- **Boundary systems**
 - o Emphasises compliance.
 - o Expressed through codes of business conduct, strategic planning systems, and guidelines.
- **Diagnostic systems**
 - o Emphasises performance evaluation, such as organisational outcomes.
 - o Expressed through target-setting, business plans, budgets and follow-up activities.
- **Interactive systems**
 - o Emphasises interaction of top management with lower-level employees.
 - o Expressed through dialogue, discussion and meetings.

The aspects above are formal (e.g. written down, standardised, information-based) but we also want to ask questions about informal systems such as informal power structures, tone at the top, and recruitment of the “right” people (more indirect, often less evident things), which may be influenced by top management.

First, we want to go through a successful PMI and follow with the less successful one. We will also ask some general questions, and why you think these integrations were successful or not.

We would like to hear of examples:

- Related to management control (see four aspects above)
- Happened recently (among your latest deals)

If grading questions are used:

- We will ask you to choose a number from 1 to 5.
- 1 represents low, 3 medium and 5 high. Please let us know if it does not apply.

We look forward to speaking with you!

Appendix 2: Interview questions

Background

- How long was the PMI? Why do you consider the PMI successful / less successful?
- What type of transaction was this? National or international?
- What was the degree of integration, a separate subsidiary or full integration?
- Please tell us a bit about the CEO and their background.
- To what degree was top management (both firms) experienced with PMI? 1-5.

Management control

Belief systems (core values, vision and mission)

- Were any of the following used: e.g. change name of the company, visions, mission, guiding principles, other? How were they used over time?
- How important were these? Please rank 1-5.
- What were the main goals of top management when using these?

Boundary systems (risk management, guidelines, code of conducts)

- Were any of the following used: e.g. code of conduct, planning guidelines, other? How were they used over time?
- How important were these? Please rank 1-5.
- What were the main goals of top management when using these?
- How did top management make sure that undesired, old habits did not prevail?

Diagnostic systems (performance evaluation, target-setting, budgets)

- Were any of the following used: Business plans, budgets, target setting, follow-ups, balanced scorecard, financial KPIs, non-financial KPIs, other? How were they used over time?
- How important were these? Please rank 1-5.
- What were the main goals of top management when using these?
- Did you have main KPIs (financial and non-financial)? Name a few.
- Were reward schemes adjusted to new KPIs and employee targets? Yes or no.
 - How and why were reward schemes used?
 - Did the CEO put performance targets for him-/herself?

Interactive systems (dialogue, discussion, meetings, develop strategy further)

- Were any of the following used: dialogue, discussion, meetings, roadshows, other? How were they used over time?
- How important were these? Please rank 1-5.

- How did top management get involved with employees during PMI? Why?

Informal aspects (socialisation, tone at the top, "sitting in the walls")

- Did you observe any of them and which ones?
- How important were these during PMI? Please rank 1-5.
- How did top management use these? Why?

General questions

- In which order were the four controls (belief, boundary, diagnostic, interactive) used by top management?
 - Were there differences with regard to successful and less successful integration?
- Please rank the four controls from most important to least important.
- How much did the strategy change in both firms during PMI?
- How did employees (both firms) react towards controls during PMI?
- Did management control become more important during PMI compared to before? (also consider frequency of reporting)
- How much did management control change between pre- and post-merger phases?
- Were different post-merger integration strategies used in the different transactions?
- In your view, is the success of PMI affected by management control?
- What is the relevance of the four controls (belief, boundary, diagnostic, interactive) in relation to
 - other factors?
 - different periods of time?
 - each other? (did they influence each other)

Additional questions to consultants

- Tell us a bit about the PMI process.
- How are management controls used in general during PMI?
- Can you observe differences between successful and unsuccessful PMIs?
- Are there any key success factors for successful PMI?
- What are main challenges top managers face during PMI?

Appendix 3: Literature review main findings MCS for PMI

Study	Method	Type of transaction	Perspective	Study focus	Main findings
Jones, 1985b	<ul style="list-style-type: none"> Quantitative Surveys with 41 senior executives (30 UK firms), done via interviews 	<ul style="list-style-type: none"> Large acquisition 	<ul style="list-style-type: none"> Acquiring and acquired 	<ul style="list-style-type: none"> Management control relationships between acquiring and acquired companies during first two post-acquisition years Use of management accounting, financial instruments and their effects 	<ul style="list-style-type: none"> Management accounting became more important after acquisition. In most cases acquirer changed acquired company's management control systems, only rarely were changes made to acquirer's management control systems. Management control systems had motivational function, provided guidance for short-term decision-making and was used for performance evaluation. Draws on post-merger integration problems and that dysfunctional effects caused by management control systems could negatively impact post-merger integration.
Jones, 1985a	<ul style="list-style-type: none"> Follow-up study with data from Jones 1985b 			<ul style="list-style-type: none"> Relevance of contingency theory in post-acquisition context Willingness of acquirers to accept differences in management control systems between acquiring and acquired firm Possible effects on M&A success / failure 	<ul style="list-style-type: none"> Selection and design of management control systems can be subject to political processes, but most companies also consider important contingencies. The more fundamental changes in management philosophies reflected in management control systems alterations were, the strongest reactions were provoked. These reactions could impact success / failure. Some acquirers allowed partial compliance to management control systems for a relatively short time (usually not more than one year). Pressure to conform remained as speed of compliance was seen as an indication of the ability of financial executives in the acquired company.
Roberts, 1990	<ul style="list-style-type: none"> Qualitative Single case study 	<ul style="list-style-type: none"> International acquisition 	<ul style="list-style-type: none"> Acquiring and acquired 	<ul style="list-style-type: none"> Relationship between use of accounting information for performance reporting and control as well as formulation and implementation of business and corporate strategy 	<ul style="list-style-type: none"> Accounting measure conceal as much as they reveal. Accounting shapes activities and relationships. Period of socialisation takes place in which trust and mutual knowledge is established. Informal structures in place and used. Conferences used as means to build shared understanding and commitment.
Calori, Lubatkin & Very, 1994	<ul style="list-style-type: none"> Quantitative Surveys with 161 with top managers (75 firms: France and UK) 	<ul style="list-style-type: none"> International acquisition 	<ul style="list-style-type: none"> Acquiring 	<ul style="list-style-type: none"> Influence of national culture on integration procedures exercised in international acquisitions and resulting effects on post-acquisition performance 	<ul style="list-style-type: none"> Preference to use a certain form of control, informal or formal, is rooted in national culture. Consciousness of own cultural preferences helps anticipate cultural problems in the integration process. Informal controls likely to be beneficial for post-merger integration performance.
Nilsson, 2002	<ul style="list-style-type: none"> Qualitative Case study: 4 cases (Swedish companies) Interviews with corporate management, business-unit management, other employees 	<ul style="list-style-type: none"> Acquisition 	<ul style="list-style-type: none"> Acquiring 	<ul style="list-style-type: none"> Design and use of management control following takeover Focus on financial and non-financial information 	<ul style="list-style-type: none"> Two factors explain how management control systems were designed and used after acquisition: corporate strategy of the acquirer and the business strategy of the acquired company. Successful implementation likely requires balance between integrated control, and a control system totally suited to the needs of the acquired company. As such, there is no standardised approach.
Gates & Very, 2003	<ul style="list-style-type: none"> Quantitative and qualitative Survey with 53 top managers (US, Europe) Complementary interviews with integration specialists at experienced acquirers 	<ul style="list-style-type: none"> Acquisition 	<ul style="list-style-type: none"> Acquiring 	<ul style="list-style-type: none"> Development of a contingency framework for measuring progress of M&A integration, based on Balanced Scorecard view Focus on selection and timing of measures 	<ul style="list-style-type: none"> There is no "one size fits all" for performance measurement in post-merger integration. Integration should be an adaptive process, include specific objectives for different post-merger integration stages, and encompass deal's context. Based on strategic analysis measures for value creation and value leakage should be developed.
Granlund, 2003	<ul style="list-style-type: none"> Qualitative Single case study: financial disclosures, internal company reports, interviews, and participative observation 	<ul style="list-style-type: none"> International merger 	<ul style="list-style-type: none"> Acquiring 	<ul style="list-style-type: none"> Management control problems in corporate merger of equal size with different cultures and management accounting systems Focus on merger process, cultural conflict, process of management control systems integration and role of different individuals 	<ul style="list-style-type: none"> Goal ambiguity, cultural conflicts, and dominant individuals played a key role and affected post-merger integration success. Collision of two totally different cultures impeded a common tone to be found which made management of the new company difficult. Integration process of accounting was complicated and long. Many differences in mergers compared to studies of acquisitions.
Beusch, 2007	<ul style="list-style-type: none"> Qualitative Multiple case study: 2 cases Interviews with middle and top-management, complemented by internal and external material 	<ul style="list-style-type: none"> International acquisitions 	<ul style="list-style-type: none"> Acquiring and acquired 	<ul style="list-style-type: none"> Changes in management control systems after acquisition and corresponding effects and reactions of key actors Focus on impediments to implement management control systems and elements of conflict resolution during post-merger integration 	<ul style="list-style-type: none"> Management control issues were behavioural problems. Rational integration models seldom help if conflicts arise, for real integration and implementing changes legitimacy is needed. Management control systems need to be made visible and clearly communicated in order to make the organisation understand and accept it. Conflicts likely to be solved if alterations of management control systems are made gradually, negotiation strategies are used and if important key players participate.
Hoque & Chia, 2012	<ul style="list-style-type: none"> Qualitative Single case study: interviews with different managers, complementary archival data 	<ul style="list-style-type: none"> International acquisition 	<ul style="list-style-type: none"> Acquired 	<ul style="list-style-type: none"> Impact of strategic change following acquisition on nature and extent of use of management control systems, with particular focus on performance management systems 	<ul style="list-style-type: none"> Acquisition resulted in changes in competitive forces which led to changes in performance management system. Management control systems had a support function and needed to be changed during post-merger integration to create and maintain competitive advantage.
Jordão, Souza & Avelar, 2014	<ul style="list-style-type: none"> Qualitative Single case study: interviews with managers and employees, complemented by observation and published information 	<ul style="list-style-type: none"> National acquisition 	<ul style="list-style-type: none"> Acquiring and acquired 	<ul style="list-style-type: none"> Effect of organisational culture on post-acquisition management control systems 	<ul style="list-style-type: none"> Alterations in acquired company's management control systems were based on cultural preferences of acquiring company. CEO's engagement, clear objectives, and communication throughout hierarchical levels were success factors for post-merger integration. Management control systems included both, formal and informal control mechanisms.
Puhakka, 2017	<ul style="list-style-type: none"> Qualitative Single case study: interviews with top managers and external advisors 	<ul style="list-style-type: none"> National acquisition 	<ul style="list-style-type: none"> Acquiring and acquired 	<ul style="list-style-type: none"> Role of accounting in making sense of post-acquisition integration 	<ul style="list-style-type: none"> Sensemaking important in post-merger integration as it increases commitment. Sensemaking has to take place in both, pre- and post-merger stages and it needs to be linked. Accounting is a useful means to achieve sensemaking as it includes symbols. Sensemaking it is based on social interaction and happens in formal and informal arenas.