Essays on the Implications of an Employee-empowering Agile Management Approach on Management Control Elements

Antti Niemelä
Essays on the Implications of an Employee-empowering Agile Management Approach on Management Control Elements

Antti Niemelä
Supervising professor
Professor Teemu Malmi, Aalto University, School of Business, Finland

Thesis advisors
Associate Professor Berend van der Kolk, Vrije Universiteit, School of Business and Economics, Netherlands
Senior University Lecturer, David Derichs, Aalto University, School of Business, Finland

Preliminary examiners
Professor Marko Järvenpää, University of Vaasa, School of Accounting and Finance, Finland
Professor Michelle Carr, University College Cork, Business School, Ireland

Opponents
Professor Marko Järvenpää, University of Vaasa, School of Accounting and Finance, Finland
Professor Michelle Carr, University College Cork, Business School, Ireland

Aalto University publication series
DOCTORAL THESES 21/2024

© 2024 Antti Niemelä

ISBN 978-952-64-1649-6 (printed)
ISSN 1799-4934 (printed)
ISSN 1799-4942 (pdf)

Unigrafia Oy
Helsinki 2024

Finland
Abstract
Organizations must adapt to constant change to ensure viability. Evolving technology, the need for innovation, changing customer behavior, and unexpected events intensify the demand for responsiveness. To improve their responsiveness to changing circumstances, organizations are adopting new management approaches and practices that influence various management control (MC) elements. One such approach that has entered the mainstream of business management is the agile method. For instance, the adoption of agile methods calls for self-managing teams, a flatter hierarchy, and the delegation of decision-making authority. While agile methods suggest greater organizational agility and one of their key features is employee empowerment, they differ significantly from more hierarchical management methods and their MC configurations. Therefore, the adoption of agile methods has implications for MC elements, such as organizational structures, routines, performance measures, incentives, and value systems. Although agile philosophy and methods are attracting interest in business world and among researchers in various fields, accounting research has so far overlooked this management phenomenon. The three essays of this dissertation address following questions: How MC elements are designed and used to promote responsiveness within an employee-empowering agile context, how non-management employees deal with tensions arising from combinations of MC elements, and how different MC systems affect employees' work motivation.

Keywords Management controls, responsiveness, agility, employee empowerment, tension, work motivation, financial institution.

ISSN (printed) 1799-4934 ISSN (pdf) 1799-4942
Location of publisher Helsinki Location of printing Helsinki Year 2024
I have been fortunate to have worked on intrinsically motivating issues. My doctoral journey at Aalto University, combined with my professional role at OP Financial Group, has been immensely rewarding. This would not have been possible without the unwavering support and guidance of numerous academics, colleagues, friends, and family members. I extend my deepest gratitude to those who contributed to this journey.

To my supervising Professor Teemu Malmi—you steered me toward approaching business issues from an academic standpoint and enriched my practical perspective. You supported and encouraged me throughout the whole journey. I particularly value your ability to combine the everyday business phenomena of life with research knowledge, your perceptiveness, and your skill at posing guiding questions. Most of all, I appreciate the many conversations we had about my thesis and many other topics, your strong dedication, and your availability.

To my co-supervisor, Berend van der Kolk, I am impressed with your dedication to my dissertation process, sharp insights, and unwavering commitment. Your constructive guidance encouraged me to delve deeper into “how” and “why” questions, which challenged me to think and theorize in new ways. I admire the way you present your arguments, approach business matters from a theoretical point of view, and how you pay attention to even the smallest details.

To my second co-supervisor, David Derichs, I want to thank you for your guidance, support, and optimism during my dissertation process. Thank you for the excellent company at the conferences and the academic enlightenment. You helped me connect with the academic community in a joyful way, and your passion for teaching is inspiring. Teemu, Berend, and David, I am grateful that you have been there for me, I really enjoy working with you.

I was fortunate to have had two respected professionals from academia as pre-examiners for my dissertation. Marko Järvenpää, professor and dean of the School of Accounting and Finance, University of Vaasa, and Michelle Carr, professor of accounting (Sustainable Business) from the School of Economics, Cork University, it is a great honor for me that you took the time to assess my work, provide thorough and constructive feedback, and evaluate the publication potential of the essays. I truly appreciate your work. Furthermore, I had the privilege of having you, Marko, and Michelle, as my dissertation defense opponents. You are key players in an experience that I will always remember.
"The ability to learn is the most important working life skill of the future." This quote from my employer, OP Financial Group, describes the organization’s approach to learning and development. I am privileged to work in an organization where learning and experimentation are appreciated and where continuous learning and development are seen as essential promoters of competitiveness. For all the help and inspiration, I received, I would like to express my deepest gratitude to Timo Ritakallio, Katja Keitaanniemi, Jari Jaulimo, Hannakaisa Länsisalmi, and Pekka Puustinen. With your example, you encourage individuals and the entire organization to evolve and also use research-based knowledge. I wouldn’t have succeeded without your support, engagement, and sparring, thank you. Furthermore, I am fortunate to have collaborated with numerous outstanding colleagues, each offering diverse expertise and experience. Our fruitful discussions on various topics provided me with valuable insights that have significantly aided my dissertation. It would be impossible for me to name you all individually, but I greatly appreciate you all.

The learning journey was also supported by friends. First, David Welsh and Koen van Geesbergen, our academic foundation laid almost three decades ago in Vaasa is captured in my work. Thank you for reviewing the early drafts of the essays and offering your support throughout the process. Hannu Jaatinen, when I told you about the project, you were immediately ready to help in the process. Thank you for your encouragement and help in getting started and for your professional support. Sami Markkanen, I appreciate our discussions, sparring, and joint agile experiments. Your guidance on deeper agile thinking, and the essay revision was very helpful. Aki and Marinetta Kangasharju, your support, optimism, and positive spirit is uplifting, and I truly value our friendship. Aki, your interest in addressing economic phenomena with science-based knowledge is a constant source of inspiration for me. I appreciate our discussions.

To my parents, mother Ritva and father Aulis, you instilled in me the values and work ethic that carried me through this journey and other endeavors before it. You taught me the tenacity necessary to manage a thesis alongside a demanding work and family life. Thank you for being there to share and discuss. To my parents-in-law, Irja and Juhani Pesonen, your support and easy-going attitude have been invaluable over the years, not least during the dissertation process. Thank you for all the help and support for me and the family.

Finally, but most importantly, to my wonderful children Edith and Evert and my precious wife Jenni. To Edith and Evert, I am so proud of your courage to communicate, question, and form your own ideas and views. You are more capable than you know. Thank you for being supportive and understanding, even when I couldn’t explain well enough why I was intrigued by these topics, and I still spent hours on them. Jenni, you are the most caring mother, my best friend, and my wife. You supported me along the way to make this endeavor possible. For three decades, you have been my partner, enriching my life, making me a better person. During my dissertation journey, you not only supported and enabled me to do the work I found meaningful, but you also
participated in intellectual reflection and gave me valuable insights into the content of the dissertation. Together as a family we live and grow, I love you dearly.

I have had the unique opportunity to combine my work as a banking professional with my academic knowledge in a fascinating way. I see research-based information as a tool that is useful to me when dealing with issues related to organizations. Thank you all for giving me the opportunity to continue my learning journey.

Porvoo, January 2024
Antti Niemelä
Acknowledgements........................................................................................................1
List of Abbreviations and Symbols........................................................................... 7
List of Essays ............................................................................................................. 8
Author’s Contributions ............................................................................................. 9
1. Introduction ........................................................................................................... 10
  1.1 Essay 1 ............................................................................................................ 13
  1.2 Essay 2 ............................................................................................................ 15
  1.3 Essay 3 ............................................................................................................ 18
References .................................................................................................................. 20
Original Research Essays ......................................................................................... 25
# List of Abbreviations and Symbols

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPI</td>
<td>Key performance indicator</td>
</tr>
<tr>
<td>OKR</td>
<td>Objectives and Key results</td>
</tr>
<tr>
<td>QBR</td>
<td>Quarterly Business Review</td>
</tr>
</tbody>
</table>
List of Essays

This doctoral dissertation consists of a summary and the following three essays, which are referred to in the text by their numerals:

**Essay 1.** Niemelä, Antti. *Transforming a traditional financial institution into a more responsive organization: The design and use of agile-inspired MC elements.* Unpublished manuscript.

**Essay 2.** Niemelä, Antti; Malmi, Teemu; Van der Kolk, Berend; Derichs, David. *When and how non-managerial employees navigate tensions: Insights from an ‘agile’ bank.* Unpublished manuscript.

Author’s Contributions

**Essay 1:** Transforming a traditional financial institution into a more responsive organization: The design and use of agile-inspired MC elements.

*Niemelä* was the sole author of this manuscript.

**Essay 2:** When and how non-managerial employees navigate tensions: Insights from an ‘agile’ bank.

*Niemelä* was the lead author of this manuscript. He developed the research idea, chose the theoretical framework, performed the literature review, and planned the interviews and data collection. He did not participate in the interviews, as he was working on the case organization at the time the study was being conducted. He planned the procedure and the data analysis method, performed the data analysis, drew conclusions from the research material, developed the discussion and contribution sections, and integrated the results into the existing body of research.

*Malmi* was the second author. He supported the development of the theoretical framework, interpretation of the results, and construction of the discussion and contribution sections as well as the placement of the results in existing research. In addition, he helped to integrate the results with existing research. He conducted interviews and offered feedback on the work throughout the study.

*Van der Kolk* was the third author. He supported the development of the theoretical framework, interpretation of the results, and construction of the discussion and contribution sections as well as the placement of the results in existing research. In addition, he helped to integrate the results with existing research. He conducted interviews, developed the manuscript, and offered feedback on the work throughout the study.

*Derichs* was the fourth author. He supported the development of the theoretical framework, interpretation of the results, and construction of the discussion and contribution sections as well as the placement of the results in existing research. In addition, he helped to integrate the results with existing research. He conducted interviews, developed the manuscript, and offered feedback on the work throughout the study.

**Essay 3:** The effects of employee-empowering MC elements on autonomous motivation: A study in a financial institution.

*Niemelä* was the sole author of this manuscript.
1. Introduction

This dissertation is based on the idea that the role of management control (MC) elements is to ensure that employee behavior and organizational activities are aligned with the organization’s goals (cf., Chenhall, 2003; Malmi and Brown, 2008; Merchant and Van der Stede, 2017; Simons, 1995) and that the strength of MCs lies in the combinations of these elements (Bedford, 2020; Grabner and Moers, 2013; Friis et al., 2015; Van der Kolk et al., 2020). Given the necessity for organizations to adapt to constantly evolving circumstances (Adler and Borys, 1996; Ahrens and Chapman, 2004; Simons, 2010), some of which may arise unexpectedly (Delfino and Van der Kolk, 2021; Hall, 2016), management must consider practices and control configurations to ensure the effectiveness of MC elements in achieving organizational goals (Bedford, 2020; Malmi and Brown, 2008; Mundy, 2010).

To this end, this dissertation focuses on the implications of an employee-empowering agile management approach on MC elements. The agile approach seeks to enhance an organization’s responsiveness, with one of its key features being employee empowerment (Beck et al., 2001; Rigby et al., 2016). Although agile methodology, which includes features such as a flatter hierarchy, self-managing teams, and delegation of decision-making authority, has generated interest in academic and business circles (cf., Birkinshaw, 2018; Denning, 2018; Tallon et al., 2019; Stettina and Hörz, 2015; Vidgren and Wang, 2009; Repenning, 2018), it has received limited attention in accounting research. The agile approach appears to be a significant management phenomenon (Denning, 2018; Rigby et al., 2020; Ross, 2018), and this methodology raises questions of interest to management accounting research that remain unanswered. This dissertation explores three such questions: 1) How MC elements are designed and used to promote responsiveness (e.g., Adler and Borys, 1996; Chenhall, 2003; Gibson and Birkinshaw, 2004; Henri, 2006), 2) How can combinations of MC elements impact each other’s effectiveness? (e.g., Bedford et al., 2019; Friis et al., 2015; Grabner and Moers, 2013; Van der Kolk et al., 2020), and 3) How do the design and use of MC elements influence employee motivation? (e.g., Chen et al., 2020; Groen et al., 2017; Merchant and Van der Stede, 2007; Van der Kolk et al., 2019). The primary objective of this dissertation is to address these theoretically and practically pertinent issues in management accounting and to offer novel innovative insights into management accounting research and theory.
This dissertation explores the implications of the employee-empowering agile approach on MC elements through three distinct essays. Each essay stands as an independent entity, shedding light on how an agile approach affects MC elements. The first essay describes how MC elements are designed and used to promote responsiveness within an employee-empowering agile context. It employs the theory of enabling and coercive formalization (Adler and Borys, 1996). This study is the first to provide a comprehensive description of the effects of agile methodology on MC elements in the field of management accounting. It serves as a necessary foundation for exploring the more nuanced effects of MC elements in subsequent essays. The essay illustrates, for instance, that the design and use of “agile” MC elements promote employees’ use of enabling MC characteristics (cf., Cäker et al., 2021). This discovery prompts further examination of how employees navigate control-related issues, such as tension, within an employee-empowering environment.

The second essay, co-authored with Teemu Malmi, Berend Van der Kolk, and David Derichs, focuses on how non-management employees handle tensions arising from combinations of MC elements. It draws from the literature on the impact of MC combinations on control effectiveness (e.g., Bedford et al., 2019; Demartini and Otley, 2020; Grabner and Moers, 2013; Fris et al., 2015; Malmi and Brown, 2008) and particularly on the concept of control-related tensions (cf., Jørgensen and Messner, 2009; Lewis et al., 2019; Lövstål and Jontoft, 2017; Smith and Lewis, 2011; Van der Kolk et al., 2020; Simons, 1995). Although prior accounting research mainly addressed how managers deal with tensions (cf., Mundy, 2010; Van der Kolk et al., 2020; Simons, 1995), our research highlights the crucial role played by non-managers in navigating control-related tensions within an employee-empowering agile environment.

The third essay examines the impact of employee-empowering MC elements on work motivation. This essay adopts the analytical concepts of MC interplay (cf., Bedford, 2020; Grabner and Moers, 2013) to examine the implications of MC elements on the three basic psychological needs identified in self-determination theory i.e., autonomy, competence and relatedness (Baard, 2004; Deci and Ryan, 2000; Deci et al., 2017; Gagné et al., 2005). The third essay enhances our understanding of previous MC research (cf., Chen et al., 2020; Groen et al., 2017; Matsuo et al., 2021; Van der Kolk et al., 2019) by demonstrating how MC elements fulfill the three basic psychological needs. It also illustrates the diverse roles of MC elements and their interplay in satisfying the needs that constitute the quality of work motivation.

The empirical data for this dissertation were gathered from a prominent Northern European financial institution (referred to as ScanBank). This institution, traditionally operating in a regulated industry, recently transitioned to an agile management approach to enhance responsiveness. This organizational context provides an ideal foundation for empirically investigating the implications of the employee-empowering agile approach on MC elements. The choice of methodology, namely in-depth case analysis, aligns with the inquiries posed by each essay and facilitates a thorough examination of MC elements and their effects (cf., Flick, 2009). Additionally, this research methodology
aligns with recommendations from prior accounting studies (e.g., Bedford, 2020; Hall, 2016) advocating for the use of a case approach in studying relatively new phenomena (Yin, 2008).

The primary data for the first essay comprises interviews with the “architects” of MC elements, i.e., senior management members who initiated the agile change and played a pivotal role in its design. It also includes approximately 120 pages of company documents. These data provide profound insights into how MC elements are designed and utilized to foster responsiveness within an agile-inspired organization, as perceived by top management.

For the second and third essays, interview data were collected simultaneously but with distinct sets of questions tailored to address the research problems of each study. The semi-structured interviews encompassed a total of 25 hours of fully transcribed recorded video interviews with employees chosen based on predefined selection criteria to ensure representativeness and minimize bias. In addition to the interviews, the second essay’s research material consists of approximately 130 pages of company documents and observations, whereas the third essay utilizes approximately 100 pages of company documents. The research materials for the second and third essays provide deep insights into the experiences of employees, including both managers and non-managers, regarding the effects of MC elements.

In summary, the unique research material presented in this dissertation offers a valuable glimpse into organizational life, shedding light on the impact of an employee-empowering agile approach on MC elements. Employee-empowering management approaches, such as agile methods (cf., Beck et al., 2001; Rigby and Ryan, 2018), grant non-managers a more active role that is characterized by greater autonomy, opportunities for self-management, and increased decision-making authority. This dissertation’s findings indicate that in an agile organization, the role of coercive formalization (Adler and Borys, 1996) is less significant compared with a traditional hierarchical structure. Instead, the design and use of MC elements promote the use of enabling MC characteristics (cf., Cäker et al., 2021). Moreover, the dissertation reveals that MC combinations within an employee-empowering agile environment trigger control-related tensions (cf., Kruis et al., 2016; Lewis et al., 2019; Tessier and Otley, 2012; Simons, 1995), and in some circumstances, non-managers play a key role in managing these tensions (cf., Mundy, 2010; Van der Kolk et al., 2020). Furthermore, the findings elucidate how MC elements—individually and in combination—contribute differently to fulfilling the basic psychological needs that underpin work motivation (cf., Deci and Ryan, 2000). Recognizing these nuances is essential when addressing this important issue of control (cf., Chen et al., 2020; Conger and Kanungo, 1998; Merchant and Van der Stede, 2017). These are novel findings in the realm of accounting research and appear relevant to the development of a theory explaining how and why combinations of MC elements either facilitate or hinder the resolution of control issues (cf., Bedford, 2020; Malmi and Brown, 2008; Grabner and Moers, 2013; Merchant and Van der Stede, 2017; Van der Kolk et al., 2020).
This dissertation underscores that employee empowerment tends to reduce active management involvement or “management interventions” in day-to-day operations. Given the increasing trend of delegating responsibilities to employees and decentralizing decision-making authority within organizations (cf., Birkinshaw, 2018; Delfino and Van der Kolk, 2021; Lewis et al., 2019; Rigby and Ryan, 2018), the findings offer valuable guidance and fresh perspectives for MC research. It is important to note that this dissertation provides a snapshot of a single organization at a specific point in time, which limits its generalizability. There remains ample room for further research on the effects and consequences of MC elements within an employee-empowering organizational context. I hope this dissertation serves as a compass, guiding accounting scholars toward new research ideas and laying the groundwork for future studies while also offering practical insights for managers.

The introductory paper succinctly summarizes the dissertation essays. These summaries encompass the research motivation, theoretical foundations, case selection, methodology, and key contributions of each study. The intention is to inspire researchers and practitioners to delve deeper into individual studies after reading the introduction, which provides a more detailed perspective on the implications of employee-empowering agile methods on MC elements.

1.1 Essay 1

The first essay in this dissertation describes the design and use of MC elements to enhance responsiveness in an employee-empowering, agile-inspired environment. Agile methodology has gained significant interest across various industries (Birkinshaw, 2018; Denning, 2018; Schrey et al., 2020) and research fields (Cappelli and Tavis, 2018; Lill and Wald, 2021; Malik et al., 2021; Rigby et al., 2020; Tallon et al., 2019). Surprisingly, the accounting literature has remained relatively silent regarding agile methods. Despite agile methodologies specifically targeting improved responsiveness (Beck et al., 2001; Kruchten, 2013; Rigby et al., 2020) and organizational responsiveness is an important area of interest in management accounting research (e.g., Adler and Borys, 1996; Chenhall, 2003; Gibson and Birkinshaw, 2004; Henri 2006), the effects of agile methods on MC elements have not been studied in management accounting research thus far. The accounting field lacks an understanding of, for instance, the specific characteristics of MC elements related to agile-inspired methods and how MC elements are designed and used to promote responsiveness. By examining the effects of agile methods on the design and use of MC elements through MC research theories and concepts, this essay provides insights into the relation between MC elements and responsiveness from a novel organizational perspective. This, in turn, can contribute to the development of a more accurate theory on how MC elements can be designed and used to stimulate the emergence of new strategies (cf., Mundy, 2010; Müller-Stewens et al., 2020; Simons, 1991), support learning and innovation (cf., Coyte, 2019; Wijethilake et al., 2018), and lay the groundwork for further exploration of the interplay among MC elements (cf., Bedford, 2020; Friis et al.,
This essay draws upon the literature on management controls and responsiveness (e.g., Bisbe and Otley, 2004; Gschwantner and Hiebl, 2016; Simons, 1991), with particular focus on the theory of enabling and coercive formalization (Adler and Borys, 1996). The conceptual framework of enabling and coercive formalization has been previously applied and developed in existing accounting studies (e.g., Ahrens and Chapman, 2004; Cäker et al., 2021; Grabner et al., 2022; Lewis et al., 2019). It has also been used to examine the relationship between MC elements and responsiveness (cf., Coyte, 2019; Jørgensen and Messner, 2009; Wijethilake et al., 2018), offering a well-articulated framework for empirical research. This framework places particular emphasis on how employees directly address unexpected events and operational issues (Adler and Borys, 1996). This is in line with the principles of agile methodology (Beck et al., 2001; Lill and Ward, 2021; Rigby and Ryan, 2018). Consequently, it proves to be a suitable theoretical framework for addressing MC elements within an agile environment. In the analysis, the essay adopts Malmi and Brown’s (2008) package approach to MC elements to comprehensively encompass the control elements that guide and maintain desired activities.

This essay adopts an in-depth case study approach by triangulating data from interviews with “design architects” (i.e., senior management) and various corporate documents. Given the relative scarcity of research on the agile phenomenon within management accounting and the expected influence of contextual conditions on the design and use of MC elements, the case method emerges as an appropriate choice, as suggested by Yin (2008). Furthermore, the existing research primarily focuses on how MC elements are designed and used to enhance responsiveness, making the case method a suitable fit for the research question (Yin, 2008). Although senior management interviews and company documents are suitable sources for gathering insights, the incorporation of evidence from multiple sources enhances the validity of the insights acquired (Saunders et al., 2009). The data analysis aligns with the principles outlined by Adler and Borys (1996), with each MC element examined individually using four characteristics (repair, flexibility, internal transparency, and global transparency). By iteratively analyzing data and theory (cf., Alsharari and Al-Shboul, 2019), the study assesses whether the design and use of MC elements facilitate employee responses to real work situations or rely on coercion to elicit effort and compliance.

This essay makes two main contributions to the accounting literature. First, it meticulously documents the effects of agile methodology on the configuration of MC elements, providing theoretical insights into these effects. The study not only describes the design and use of MC elements but also characterizes them using the theory of enabling and coercive formalization (Adler and Borys, 1996). Second, it offers fresh perspectives to accounting literature by exploring how MC design and use can trigger employees to use enabling MC characteristics. This addresses the argument that enabling control necessitates an inherent interest in participation (Adler and Borys, 1996) and extends pre-
vious findings by including non-managerial employees (Cäker et al., 2021). Additionally, the findings reveal the limited role of coercive MC logic, as defined by Adler and Borys (1996), in employee-empowering agile organizations.

This essay describes how MC elements are designed and used to promote responsiveness in an employee-empowering, agile-inspired organization. As the first accounting study to provide a theoretically structured exploration of the impact of agile methodology's impact on MC elements, it raises new and more nuanced questions from an accounting theory perspective. For instance, the accounting literature addressing combinations of MC elements identifies their effects on each other’s efficiency (e.g., Bedford and Malmi, 2015; Grabner et al., 2022), such as complementarity and substitution effects (e.g., Bedford, 2020; Friis et al., 2015), as well as intentional and unintentional tensions (e.g., Mundy, 2010; Van der Kolk et al., 2020). This prompts inquiries about how MC elements work together and how potential tensions are managed in an employee-empowering environment. Additionally, the first essay takes the perspective of top management (i.e., the intended design and use of MC elements) without considering the employees’ perspective, which raises questions about how agile-inspired MC elements impact employee experiences, such as motivation, which remains a timeless concern in management accounting research (cf., Conger and Kanungo 1998; Chen et al., 2020; Groen et al., 2017; Thomas and Velthouse 1990). This essay serves as a descriptive study that introduces new questions relevant to accounting research and examines the effects of an employee-empowering management approach on MC elements in more detail, thereby setting the stage and motivation for the second and third essays in this dissertation.

1.2 Essay 2

This essay delves into how non-managerial employees navigate tensions resulting from combinations of MC elements. This question arose during the analysis of the first essay and motivated our research group to explore it from two specific theoretical perspectives.

First, previous accounting research suggests that combinations of MC elements can impact each other's effectiveness (e.g., Friis et al., 2015; Bedford et al., 2019) and that tensions can emerge when new MC elements are introduced (Simons, 1995; Tessier and Otley, 2012; Kruis et al., 2016; Lewis et al., 2019). Consequently, studying an institution operating in a traditionally regulated financial sector that adopts agile-inspired MC elements that differ significantly from past practices provides fertile ground for examining potential tensions. Moreover, the first essay hints at the presence of tensions, such as the coexistence of “agile” and “old” MC elements, for regulatory reasons.

Second, existing research suggests that tensions require continuous attention owing to their dynamic nature, and previous research has primarily focused on how managers can deal with these tensions (e.g., Henri, 2006; Mundy, 2010; Van der Kolk et al., 2020; Simons, 1995). Since the case organization adopted a management approach that promotes “self-management” and organizations
increasingly “empower” their employees (Bedford et al., 2022; Lewis et al., 2019; OECD, 2020), the question of how non-managers confront and deal with potential MC tensions seems relevant.

This essay draws on a growing body of literature concerning the effects of MC combinations that address the interaction between controls and their impact on control effectiveness (e.g., Bedford et al., 2019; Demartini and Otley, 2020; Grabner and Moers, 2013; Friis et al., 2015; Malmi and Brown, 2008). For instance, the interaction between MC elements can be complementary or substitutive in terms of the effectiveness of controls (Bedford, 2020; Grabner and Moers, 2013), and control combinations can cause tensions (Kruis et al., 2016; Lewis et al., 2019; Simons, 1995; Tessier and Otley, 2012). In particular, this essay adopts the concept of tension, as recognized by Simons (1995) and further developed in accounting research (cf., Jørgensen and Messner, 2009; Lewis et al., 2019; Lövstål and Jontoft, 2017; Smith and Lewis, 2011; Van der Kolk et al., 2020). These studies highlight how tensions can arise for different reasons, both internal and external (cf., Bedford et al., 2019; Lewis et al., 2019), how tensions are complex and dynamic (cf., Van der Kolk et al., 2020), and how tensions require constant balancing to ensure control effectiveness (cf., Henri, 2006; Lewis et al., 2019; Mundy, 2010). Although accounting research has been relatively silent on the agile approach, business journals and some academic journals offer insights into the effects of agile work practices (cf., Birkinshaw, 2018; Denning, 2018; Malik et al., 2021; Rigby et al., 2020; Vidgen and Wang, 2009) and indications of potential tensions (cf., Lill and Wald, 2021; Stettina and Hörz, 2015). Existing accounting research provides insights into how and why managers deal with control-related tensions; however, there is limited understanding of how non-managers can mediate such tensions.

Our research employs a qualitative case study method based on observations, company documentation, and 25 fully transcribed video interviews. A case method is employed because our research is interested in the “how” questions, and a qualitative method is particularly well-suited to finding answers to such questions (cf., Flick, 2009). In addition, previous studies encourage a more in-depth look at the relationship between controls and tensions (e.g., Mundy, 2010; Hall, 2016), which also instigates the use of case method. The research material comprises approximately 130 pages of internal documentation and data from semi-structured interviews, which were triangulated together with observations to provide rich insights into the reality of the case organization (cf., Ahrens and Dent, 1998). The case data on the use of MC elements, rising tensions, and how non-managers deal with emerging tensions were coded and analyzed by the team of researchers during and after the data collection to identify emerging themes and patterns in interpretation and theorizing while also mitigating potential biases. All four authors worked collaboratively on data analysis (e.g., deriving insights from observations) and drawing conclusions about when tensions arise and how non-managers deal with these tensions.
This essay contributes two primary findings to the accounting literature. First, it identifies three control-related tensions stemming from the implementation of agile methodology. The first tension (A) arises from the misalignment of external regulatory requirements with internal agile ideologies, impacting management structures, work processes, communication models, and responsibilities. Although this finding supports previous research on agile working methods (cf., Lill and Wald, 2021; Stettina and Hörz, 2015), it complements previous accounting research by adding to the discussion on external tension triggers (cf., Mundy, 2010; Van der Kolk et al., 2020). The second (B) and third (C) tensions result from different speeds of change in MC elements; therefore, they are under the active choice of top management. Tension B occurs because accounting systems are not able to adapt quickly enough to newly introduced agile planning requirements, whereas tension C emerges from changes in team task descriptions and employee balanced scorecards (BSCs). These findings shed light on how tensions can be a result of conscious choices made by top management (not) to immediately adjust MC elements (cf., Mundy, 2010), whereas tension A is beyond the direct influence of management.

Second, the findings complement previous research on the active role of management in managing tensions while providing new insights into how, in some circumstances, non-managerial employees play a central role in dealing with control-related tensions (cf., Kruis et al., 2016; Mundy, 2010; Simons, 1995; Van der Kolk et al., 2020). The essay shows that non-managerial employees have plenty of room to navigate the tensions they confront autonomously, which shows, for instance, that core operating principles, such as cultural controls, serve as a guiding compass for employees in such situations. This essay enhances our theoretical understanding of why certain combinations of MC elements may create tensions and how employees may attempt to mediate these tensions. Importantly, it is one of the first studies in the accounting literature to examine the effects of agile working methods on MC elements.

The discussion of the implications of MC combinations and tensions in this essay links the thesis to the effectiveness of control, which is important for developing theory on MC combinations (cf., Bedford, 2020; Friis et al., 2015; Grabner and Moers, 2013; Malmi and Brown 2008; Van der Kolk et al., 2020). Addressing how non-managers mediate tensions offers a fresh perspective on an unanswered question and connects control-related tensions to the employee-empowering environment. Given that accounting research has not previously explored MC combinations and tensions in an employee-empowering agile context, omitting this section would leave out a vital discussion. Consequently, addressing tensions and employee responses in this dissertation is relevant for investigating the impact of the employee-empowering agile-inspired method on management control elements. Furthermore, as organizations are increasingly “empowering” employees (Bedford et al., 2022; Delfino and Van der Kolk, 2021; Lewis et al., 2019; OECD, 2020; Rigby et al., 2020), questions about non-managerial responses to tensions may become increasingly important in both theory and practice.
1.3 Essay 3

The third essay examines the relationship between MC elements and autonomous motivation. Specifically, this study investigates the relative importance and interplay of MC elements in determining employees’ basic psychological needs. Accounting literature has long been interested in the relationship between MC elements and motivation (cf., Conger and Kanungo, 1998; Drake et al., 2007; Thomas and Velthouse, 1990). In addition, contemporary accounting research (e.g., Chen et al., 2020; Matsuo et al., 2021; Delfino and Van der Kolk, 2021) addresses this control problem by utilizing self-determination theory (SDT) (Deci and Ryan, 2000; Gagné and Deci, 2005). SDT posits that satisfying basic psychological needs for autonomy, competence, and relatedness is the underlying motivational mechanism underlying behavior and that these needs are interrelated (Baard et al., 2004; Deci and Ryan, 2000; Gagné and Deci, 2005; Rigby and Ryan, 2018).

However, most accounting studies concentrate on the impact of controls on the quality of motivation at the “aggregate” level without examining the effects of controls on specific psychological needs (cf., De Baerdemaecker and Bruggeman, 2015; Chen et al., 2020; Groen et al., 2017; Matsuo et al., 2021; Wong-Non-Wing et al., 2010), with only a few exceptions (cf., Van der Hauwaert et al., 2022; Van der Kolk et al., 2019). Moreover, most existing studies rely on quantitative methods, such as surveys (e.g., Chen et al., 2020; Van der Hauwaert et al., 2022; Matsuo et al., 2021; Van der Kolk et al., 2019), potentially overlooking the nuanced processes of MC elements that contribute to need satisfaction. Consequently, accounting research lacks a profound understanding of how different MC elements interact to satisfy the three psychological needs and the underlying processes (the “how”) between control elements and basic psychological needs.

This paper draws upon the literature on MC combinations (e.g., Bedford and Malmi, 2015; Grabner and Moers, 2013; Friis et al., 2015; Malmi and Brown, 2008; Merchant and Van der Stede, 2017; Simons, 1995) and SDT (Deci et al., 2017; Gagné et al., 2005; Howard et al., 2020; Rigby and Ryan, 2018), both of which offer evidence-based tools for examining the relationship between controls and psychological needs. In particular, this essay utilizes Bedford’s (2020) analytical concepts to explore and communicate the relative importance of MC elements (i.e., whether they are more “core” or “peripheral”) and the interplay of MC elements (e.g., independent and interdependent). Additionally, the theoretical framework benefits from the growing literature on the MC–motivation relationship (e.g., Chen et al., 2020; Delfino and Van der Kolk, 2021; Van der Hauwaert et al., 2022; Sutton and Brown, 2016).

This essay adopts an in-depth case study methodology. The primary research material comprises 25 recorded and fully transcribed video interviews that offer insights into employee perceptions. Supplementary data include approximately 100 pages of company documentation. Since most MC–motivation studies based on SDT employ quantitative methods (e.g., surveys), this essay’s research method differs from the mainstream. Given that a qualitative approach is valuable for developing a rich and nuanced understanding of a phe-
nomenon within a natural organizational setting (Yin, 2008), an in-depth case approach was deemed the most appropriate method for unraveling the processes underlying the effects of MC elements. Furthermore, the accounting literature encourages the use of qualitative approaches in addition to quantitative methods to study MC interactions and their effects (cf., Bedford, 2020; Hall, 2016). Similarly, the SDT literature suggests the use of qualitative methods to gain a more detailed understanding of experiences, practices, and motivations (cf., Ryan and Deci, 2020).

This essay contributes to the accounting literature in two main ways. First, it demonstrates that different MC elements and their combinations play distinct roles in satisfying the basic psychological needs that determine the quality of work motivation. Specifically, the paper illustrates how structural controls (e.g., flatter hierarchies and self-managing structures) serve as “core” elements in promoting a sense of autonomy and how cybernetics is a “core” practice in fulfilling the need for relatedness. These findings represent a novel addition to accounting research on the MC-motivation relationship. Second, the study revealed that control elements work together in different combinations when promoting the satisfaction of psychological needs. The evidence shows that control elements co-exist when contributing to the satisfaction of a particular need but also have independent effects on the satisfaction of needs. This causal relationship can be described supplementary in accordance with Bedford’s (2020) analytical conceptualization. These findings not only deepen the existing MC-motivation research (cf., Chen et al., 2020; Groen et al., 2017; Matsuo et al., 2021; Van der Kolk et al., 2019) but also elucidate the underlying processes between control elements and psychological needs.

The discussion of the relationships between MC elements and motivation connects this dissertation to an important topic for management accounting research, i.e., motivation (cf., Chen et al., 2020; Van der Hauwaert et al., 2022; Lewis et al., 2019; Merchant and Van der Stede, 2017). While this essay complements the accounting literature, it also provides insights into how employees respond to employee-empowering MC elements inspired by agile methodology from a motivational perspective. Therefore, excluding this discussion would leave a gap in the understanding of the effects of an employee-empowering agile management approach on MC elements. Furthermore, there is another more practical reason for including the discussion on MC-motivation relationship in the dissertation. One of the three primary goals of agile implementation in the case organization was to enhance the employee experience in cases where hierarchies and bureaucracy dampened employee motivation. Thus, neglecting employees’ motivational experiences would overlook the central issue in the case organization and could introduce bias in understanding the effects of MC elements.


De Baerdemaeker, Jolien and Werner Bruggeman. 2015. “The impact of participation in strategic planning on managers’ creation of budgetary slack: The mediating
role of autonomous motivation and affective organizational commitment.”
Management Accounting Research 29: 1 – 12.
Human needs and Self-Determination of Behavior.” Psychological Inquiry 11(4):
227-268.
Work Organizations: The State of a Science.” Annual Review of Organizational
Psychology and Organizational Behavior 4:19 – 43.
Delfino, Gianluca and Berend Van der Kolk. 2021. “Remote working, management
control change and employee response during the COVID-19 crisis.” Account-
ing, Auditing & Accountability Journal 34 (6): 1376-1387.
Demartini, Maria Chiara and David Otley. 2020. “Beyond the system vs. package dual-
ism in Performance Management System design: A loose coupling approach.”
Accounting, Organizations and Society, 86 (101072)
Nov. 4.
Drake, Andrea, Jeffrey Wong and Stephen Salter. 2007. “Empowerment, Motivation,
and Performance: Examining the Impact of Feedback and Incentives on Non-
Flick, Uwe. 2009. “An introduction to qualitative research (4th ed.).” Sage Publica-
tions Ltd.
Friis, Ivar, Allan Hansen and Tamás Vámosi. 2015. “On the Effectiveness of Incentive
Pay: Exploring Complementarities and Substitution between Management Con-
trol System Elements in a Manufacturing Firm.” European Accounting Review
Gagné, Marylène and Edward Deci. 2005. “Self-determination theory and work moti-
Gschwantner, Stefanie and Martin Hieble. 2016. “Management control systems and
Gibson, Cristina and Julia Birkinshaw. 2004. “The Antecedents, Consequences, and
Mediating Role of Organizational Ambidexterity.” Academy of Management
Grabner, Isabella, Aleksandra Klein and Gerhard Speckbacher. 2022. “Managing the
trade-off between autonomy and task interdependence in creative teams: The
role of organizational-level cultural control.” Accounting, Organizations and So-
ciety, 101 (101347).
Grabner, Isabella and Frank, Moers. 2013. “Management Control as a System or a
Package? Conceptual and Empirical Issues.” Accounting, Organizations and So-
ciety 38 (6-7): 407-419.
Groen, Bianca, Marc Wouters and Celeste Wilderom. 2017. “Employee participation,
performance metrics, and job performance: A survey study based on self-
Hall, Matthew (2008). “The effect of comprehensive performance measurement sys-
tem on role clarity, psychological empowerment and managerial performance.”
Accounting, Organizations and Society 33(2-3): 141-163.
Henri, Jean-Francois. 2006. ’Management Control System and Strategy: A Resource-
Based Perspective.’ Accounting Organizations and Society 31(6):529-558.
Howard, Joshua, Marylene Gagné and Alexandre Morin. 2020. “Putting the pieces
together: reviewing the structural conceptualization of motivation within SDT.”


