

# The role of middle management in achieving continuous improvement

***Citation for published version (APA):***

Hermkens, F. J. A. (2020). *The role of middle management in achieving continuous improvement: a demanding playing field*. [Phd Thesis 1 (Research TU/e / Graduation TU/e), Industrial Engineering and Innovation Sciences]. Technische Universiteit Eindhoven.

***Document status and date:***

Published: 03/06/2020

***Document Version:***

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

***Please check the document version of this publication:***

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

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The role of  
middle management  
in achieving  
continuous improvement:  
a demanding playing field

Freek Hermkens



# **The role of middle management in achieving continuous improvement: a demanding playing field**

**Freek Hermkens**

A catalogue record is available from the Eindhoven University of Technology library  
ISBN 978-94-6380-715-9  
Hermkens F.J.A.

The role of middle management in achieving continuous improvement: a demanding playing field  
Eindhoven: Eindhoven University of Technology, 2020

Keywords: middle management | continuous improvement | Lean | financial service industry

Eindhoven University of Technology  
Department of Industrial Engineering & Innovation Sciences  
Innovation, Technology Entrepreneurship, and Marketing (ITEM) Group

Cover Design: Willem Prinssen  
Layout Design: Willem Prinssen and ProefschriftMaken  
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Printed by: ProefschriftMaken | [www.proefschriftmaken.nl](http://www.proefschriftmaken.nl)

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# **The role of middle management in achieving continuous improvement: a demanding playing field**

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Technische Universiteit Eindhoven, op gezag van de rector magnificus, Prof.dr.ir. F.P.T. Baaijens, voor een commissie aangewezen door het College voor Promoties, in het openbaar te verdedigen op donderdag 9 april 2020 om 13.30 uur

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Geboren op 16 mei 1974 te Heerlen

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*Het onderzoek of ontwerp dat in dit proefontwerp wordt beschreven is uitgevoerd in overeenstemming met de TU/e Gedragscode Wetenschapsbeoefening.*

**Do or do not. There is no try**

- Master Yoda -





## Acknowledgements

A dissertation is the result of years of research, learning, growing and gaining experience. In my case, this was all done alongside a full-time job as a consultant. So it was also a matter of planning, perseverance, falling down, getting up again and carrying on. In 2010 I started the master class Hora Est and in the years that followed, my PhD research became a quite permanent part of my life: a hobby that got out of hand. Now, the 'booklet' is ready, and I'm about to hear those famous words with which it all started.

My son Pepijn knows no better than that his dad is working on his PhD. Over the past years, my thesis, papers to read, my laptop and my notebook for ideas were never far away, even during our holidays at Lake Garda. Looking back, it has been an intense period in my life, that I would not have wanted to miss. Besides developing as a researcher, I had the opportunity to meet all kinds of new people through this research. Among others Steven, my fellow external PhD student, with whom I could share my story and experiences. As external PhD students we were often in the same boat. Many thanks for all the pleasant conversations we have had over the last few years. I also ended up at congresses in many different places in Germany, Sweden, Italy and The Netherlands to present and discuss my research with fellow researchers.

Many thanks go to Sjoerd, who had the patience to work with a busy external PhD student. Without your quick responses, in-depth feedback and suggestions, and your flexibility, this PhD research would not have been the same. Also many thanks to Sharon for the help and practical ideas, in particular for the second and third study. During the years working on my PhD, I was grateful to be able to spend days at the TU/e, to be able to close myself off from daily work matters and submerge myself in my research. I have always felt very welcome here, in particular being able to discuss with fellow PhD students, the help from the secretariat and the pleasant lunches.

Special thanks also go out to Frederieke and Mary-Ann for the editorial efforts on my PhD thesis. Any remaining errors are solely my responsibility. Willem, thanks for designing the wonderful cover and images. At MLC, I want to say special thanks to Robin and Martijn who allowed me the space and gave me the confidence to fulfill my dream, and my colleagues, in particular Saskia, Rik, Arvid and Job, for thinking along with me all those years. Paul, thanks for the great cooperation and sparring about the bank, the role of the middle manager and the research. Tibert, not only a great neighbor, but also my paronymph: our conversations, your interest in my research and its progress and especially the sparring about the statistics part were indispensable in this process.

Furthermore, thanks to Bert, my example of a great 'middle manager'. I have learned so much from you! You were always available to listen, have a cup of coffee and even long after I finished my assignment with your team, you were always interested and motivated me to finish this PhD. I look back to our Friday afternoon conversations at the 'Fopp' with great pleasure. To me, you confirm the importance of great middle managers. And more importantly, you are the proof that they exist.

In addition to all the effort spent on my thesis, I found the time for the necessary relaxation. Thanks to my hockey team at Fletiomare who made sure that I could clear my head during the training sessions and the matches. The tournament in Munich, the ‘smartlappen’ evenings, our team drinks and the necessary sense and nonsense in the app also provided the desired distraction. The conversations with John about my research were about as important as the analysis of the latest results of Ajax and PSV. Thanks for having been with me all the way, and for standing next to me as my paranymph today. Also thanks to Rutger for all the movie nights. Good food and drinks, nice company and great (and not so great) movies are the perfect ingredients for wonderful evenings, sharing our love for James Bond, Star Wars, and Marvel movies. Relaxation also took place at MLC, during the office meetings, knowledge conferences, and of course during the MLC ski holidays. And of course in our great courtyard, living together with wonderful neighbors, helping each other out when needed, taking care of each other’s kids and finding time for spontaneous drinks and dinners. Special thanks go to Alice, Henk & Marianne, Sander & Willemijn and Tibert & Femy for your friendship and all the moments of relaxation that were so much appreciated during the completion of this dissertation.

A very special thank you goes out to my parents, for their never ending confidence and support, which allowed me to grow and develop and to start matters with ‘gepaste onverschilligheid’ (appropriate indifference), as my father always taught me. Without your trust and support I would have never gotten this far. Of course I would also like to thank the rest of the family (Koen & Mariëlle, Jan & Ellie, Sylvia & Chris, and the kids) for being with me along the way, and for all the nice weekend getaways, birthdays, and other beautiful moments we shared. I hope there will be many more of those moments in the years to come.

I can hardly begin to describe the support at home by Miriam and Pepijn, during those endless hours in my study, the research always being present somewhere in our lives. You have been so important to me, especially in the last few months when the pressure on finishing this thesis intensified, which did not always made me more sociable. I was constantly working and always had to go upstairs to do something. And even when I was not working, I was still busy with my research in my head. But I am also very happy with all the nice things that we have continued to do: the holidays in Italy at ‘our’ lake, the skiing in Gerlos, weekends away, eating out, the sushi evenings or just together on the couch.

Miriam, the woman in my life, who has always supported me in this ‘crazy’ plan, I love you all my life. I hope that we can make plans together for a long time ahead and make our dreams come true. Finishing this thesis surely was one of them! And Pepijn, my ‘topper’, I love being the trainer/coach of your hockey team, building Lego and watching the latest Star Wars movies with you. You are getting bigger and wiser every day, and I am so proud of you! I greatly enjoy our trinity, I could not have done this without you.

What is next? This research was a permanent part of my life over the last few years and I loved the combination of my job as a consultant and my 'hobby' as a researcher. I really hope to be able to continue combining these two in the years ahead.

Thanks again to everyone who made this trip possible and took part in it...



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# Introduction

## Chapter 1



## 1.1 Introduction

The current economic climate can be described as uncertain, competitive and rapidly changing (Al-Haddad and Kotnour 2015; Beer 2001; Burgelman et al. 2018; Du Plessis 2007; Lleo et al. 2017). As such, the environment of organizations is becoming increasingly complex, dynamic and global (Canel et al. 2000; Hammer 2004; Lee et al. 2012; Neilson et al. 2014; Steiber and Alänge 2016) and organizations are therefore constantly trying to adapt to these ever-changing conditions (e.g. Birkinshaw et al. 2008; Madhani 2017; Saha et al. 2017; Wagner et al. 2019).

These challenges also hold for the financial services industry (De Koning et al. 2008; Ensslin et al. 2015; Gupta et al. 2016; Palermo et al. 2017; Zaitseva et al. 2014). To say that the financial sector is changing is an understatement, as banks, insurance companies, fund managers and pension funds continue to experience exciting times (Baker and Dellaert 2018; Goedee et al. 2008; Riva and Pilotti 2018; Thangavelu and Findlay 2010). Banks, in particular, play a central role in the world economy (Niepmann and Schmidt-Eisenlohr 2017), since they hold the savings of the public and finance the development of business and trade. More specifically, Dutch banks finance a large number of Dutch companies and play an important role in the economy of not only the Netherlands, but also beyond. This became clear in the most recent economic and financial crisis, (Asteriou and Spanos 2019; Kudlyak and Sanchez 2017) which underpinned the importance of good bank performance (Bijlsma et al. 2015; Fethi and Pasiouras 2010; Roubini and Mihm 2010).

The Dutch banking sector is changing drastically in many ways. For example, financial regulation and supervision have tightened since the crisis, and steps have been taken towards more central supervision, resulting amongst others in increasing requirements with regard to external reporting, and capital requirements. In addition, banks are facing increased competition from technology companies outside the traditional financial sector (Bijlsma and van Veldhuizen 2016; Salah et al. 2019) which are offering various financial technologies (fintech) and other services (e.g. Boot 2016; Cocco et al. 2017; Giungato et al. 2017). This may make it more difficult to offer financial services profitably in the long run. Financial institutions therefore have to adjust their business models and strategies and improve their cost-income ratio (Antoun 2018). In this respect, the pursuit of efficiency (Assaf et al. 2019) continues to be most important for financial institutions in the Netherlands and beyond (Bikker and Spierdijk 2017; Duncan and Elliott 2004; Thangavelu and Findlay 2010; Tornjanski et al. 2017).

Continuous Improvement (CI) practices such as Lean have the potential to position financial institutions for long-term success (Bakri 2019; Vashishth et al. 2019). By implementing Lean, organizations have a business model that is efficient, effective and sustainable, thereby offering the potential of greater flexibility and profitability moving forward (Jenkins et al. 2011; Khan et al. 2019). In addition, the fact that CI implementations are of a low cost nature, although certainly not cost free, makes them attractive for organizations to implement (Bessant et al. 1994; Samuel et al. 2015). However, implementing Lean (or any

other CI method) is a challenging process. Efforts to implement CI methods such as Lean are characterized by high failure rates (Holmemo and Ingvaldsen 2016; Taleghani 2010). Achieving sustainable improvement often proves to be difficult (Bateman 2005). Studies in both industrial and service-oriented organizations demonstrate that any (initial) results arising from such projects are often not sustained (Bortolotti et al. 2015; Found and Harvey 2007). As a result, a lot of money and effort is put into improving organizations with only a short term gain or no gain at all. This suggests it may be beneficial to investigate CI implementations within the financial service industry and to examine what drives them.

## **1.2 Conceptual Background**

### **1.2.1 Organizational change**

It can be argued that the successful management of change is crucial to any organization in order to survive and succeed in a highly competitive and continuously evolving business environment (Burnes 2011; By 2005; Gjerde and Alvesson 2019; Kim and McIntosh 1996; Lüscher and Lewis 2008). Since the 1990s, high failure rates of organizational change attempts have been observed (Al-Haddad and Kotnour 2015; Ashkenas 2013; Beer and Nohria 2000; Burke 2011; Franken et al. 2009; Hammer and Champy 1993). In addition, it can be noticed that there are only few change processes that have been either a complete success or a complete failure; most change efforts are in between, though they may be perceived as unsuccessful rather than as successful (Beer and Nohria 2000; Kotter 1995; Serrat 2017; Varney 2017). Looking at these results, one can argue that organizational change is complex. Therefore, there is a strong need for studies that provide insight into the complexity of organizational change, and particularly the management and leadership of change (Higgs and Rowland 2005; Jacobs et al. 2013; Pettigrew et al. 2001).

Middle managers can play an important role in facilitating change in organizations (Dawson 2019), through their creative and innovative skills, informal network and knowledge about what motivates employees (Huy 2001, 2002; Moss Kanter 1982; Realin and Cataldo 2011; Tabrizi 2014). They have value-adding ideas for improvement and tend to have a big informal network (Groskovs and Ulhøi 2019; Rost et al. 2019) within the organization, which can help to strike a balance between continuity and change. At the same time, if middle managers think negatively about a particular change, they may actively, though not always visibly, block and resist the change (Balogun 2003; Fenton-O’Creevy 1998; Guth and MacMillan 1986 Neumann et al. 2019).

If CI related change initiatives such as total quality management, Lean, Six Sigma, reengineering, scorecards, downsizing, outsourcing, and “cultural renewal” are examined, it becomes evident that some companies profited from these methods, whereas others experienced massive fiascos (Kotter 1996; McLean et al. 2017). Implementing CI appears to be a challenging process and demands substantial organizational changes and commitment of the people involved (Bhuiyan et al. 2006; Drew et al. 2004). The success (or failure) of

CI, therefore, largely depends on the people responsible for implementing the method. This includes managers and employees at various organizational levels, including top management and middle management (Fine et al. 2008). Effective change links different types of improvement efforts, strengthens employee involvement, increases the focus on the customer and improves and manages work processes (Moran and Brightman 2000). Middle managers link the ideas from top management with those of the shop floor (Burgelman 1994; Huy and Guo 2017; Tarakci et al. 2018; Van der Weide and Wilderom 2006). They must be able to filter information properly and translate it to the right level (Elliott et al. 2019; Sethi 1999). Hence middle management must be used as a key in facilitating change (Burgelman 1983; Holmemo and Ingvaldsen 2016; Huy 2002).

Thus, to make change successful, buy-in needs to exist in the entire organization, from the highest level of management to the shop floor (Simmons et al. 2010; Boyle et al. 2011). The implementation process requires explicit support from management (Worley and Doolen 2006; Achanga et al. 2006; O'Rourke 2005; Fryer et al. 2013; Timans et al. 2012), suggesting that top management should not only show commitment, it should also be active in implementing and communicating the change in the entire organization (Rentes et al. 2010; Simmons et al. 2010; Näslund 2013). This dissertation builds on the idea that middle managers have a particularly important role in organizational change and will therefore focus on middle managers' impact on CI efforts.

### **1.2.2 Middle managers**

A broad range of studies show that middle managers are important for organizations when it comes to change management (Dawson 2019; Herzing and Jimmieson 2006; Huy 2002; Tabrizi 2014), formulating strategy (Balogun 2003; Floyd and Wooldridge 1994; Huy 2001; Tarakci et al. 2018) and driving performance (Currie and Procter 2005; Mair 2017). To investigate the role of the middle manager it is good to briefly look at what is meant by a middle manager. We will apply the definition of Huy (2001, p. 73): "Any manager two levels below the CEO and one level above line managers". Middle managers hold a unique position in an organization. They are close to the daily operations but far enough away to see the bigger picture (Huy 2001).

As Huy (2001, 2002) argues, middle managers play an important role in facilitating change in organizations. They have an important role in disseminating knowledge widely throughout the organization and work as mediators between day-to-day operations and strategy (Engle et al. 2017; Floyd and Wooldridge 2000; Gatenby et al 2015; Nonaka 1994). Increasing productivity is directly related to creative and mainly innovative skills of the middle manager (Moss Kanter 1982). Middle managers do not have to be extraordinary individuals, but have to share a number of characteristics: comfortable with change, clarity on direction, thoroughness, participative management style, persistence and discretion (Moss Kanter 1982; Tabrizi 2014; Tinline and Cooper 2016).

Yet, in recent decades, the role of the middle manager has changed (Gratton 2016; Haneberg 2010; Osterman 2008; Shi et al. 2009). Constant reengineering of organizations, increasing automation of work and the impact of IT have diminished the number of middle managers in many organizations dramatically (Birkenshaw 2018; Clarke 1998; Dopson and Stewart 1993; Hayes 2008; Herzing and Jimmieson 2006; North and Kumta 2018; Stoker 2006). Downsizing has also led to reduced job security and increased work pressure, because the remaining middle managers need to work harder and longer and have a larger span of control (McCann et al. 2008; Robyn and Dunkerley 1999). Nonetheless, middle managers remain the critical interface between top management and operations (Burgelman 1994; Floyd and Wooldridge 1997; Otto et al. 2015) and academic work continues to emphasize the valuable contributions they can make to organizations (Balogun and Johnson 2004; Rouleau and Balogun 2011).

Top management has an important role in empowering and supporting their middle managers in ways that enhance their confidence in fulfilling their new role and are trusted to have the ability to modify and craft new routines within the organization (e.g. Lampaki and Papadakis 2018; Nelson and Yeo 2012; Song et al. 2014; Tippman et al. 2013). For CI programs such as Lean, the commitment, involvement and leadership of the entire management of the organization are critical (Costa et al. 2019; Dahlgaard and Dahlgaard-Park 2006; Kreutzer 2019; Snee 2010). Top managers therefore need to actively support and lead by example when dealing with empowerment, as they are responsible for creating a change-oriented culture (e.g. by promoting exploration of new and better ways of doing things, or trying to uncover the hidden potential of staff members) and adopting new organization-wide ways of working. Hence, top management should stimulate a cultural change to continuously improve the business and support CI principles throughout the organization (Alefari et al. 2017; Mann 2009; Netland 2016; Snee 2010).

It should not be underestimated that the function of middle managers is a difficult one (Stoker and de Korte 2001). It is the key position between the shop floor and higher level management: on the one hand middle managers have to translate strategy and on the other hand need to pay attention to the day-to-day problems on the shop floor. There is a constant struggle between the policy of the company and running the actual business and producing/selling products (Uyterhoeven 1989). Middle managers have an important role in disseminating knowledge widely throughout the organization and work as mediators between day-to-day operations and strategy (Birken et al. 2018; Floyd and Wooldridge 2000; Nonaka 1994). Middle managers have to be constantly alert in a world in which cutting budgets and lifecycle management are a true art form: cost cutting, more efficiency and in the end delivering the same or even more (Stoker 2006).

Although some people believe that middle managers are just “passing through” on their way to top management positions, it is important to realize that most companies need middle managers who are there to stay for the long run (Anicich and Hirsh 2017). Middle managers are not just managing change, they are change leaders (Tabrizi 2014). Despite the

number of studies that have emphasized the potential role of middle managers as driver of change in general, less work has been done on the role of middle managers and the major challenges they face in organization-wide implementation and adoption of CI (including possible resistance by middle management itself). This dissertation seeks to investigate this topic.

### 1.2.3 Continuous improvement

Organizations today constantly need to uphold quality at low cost, reduce waste (Bhuiyan et al. 2006), maintain their competitive position and safeguard their survival (Lleo et al. 2017). Much of this can be achieved through the implementation of CI.

CI is defined here as a culture of sustained improvement of products, services or processes, aimed at eliminating/reducing waste in all organizational systems and processes, which requires employee involvement and teamwork involving all organizational participants (e.g. Bessant and Caffyn 1997; Bessant et al. 1994; Bhuiyan and Baghel 2005; Fryer et al. 2007; McLean et al. 2017). CI is increasingly considered to be an important component to more radical, step-change forms of innovation (Bessant et al. 2001).

Before we continue, it is good to look at what is meant by a CI culture. This is easier said than done: in the world of organizational development and operational excellence, concepts associated with a CI culture can have a wide variety of meanings and interpretations (Angelis et al. 2011). These concepts involve, for example: customer focus, employee commitment, employee engagement, value creation, waste reduction, conceptual learning, and (lean) leadership (Bicheno 2008; Mann 2009).

Moreover, creating a CI culture is about getting everyone to see and embrace CI. This can be done by creating your own success stories; creating awareness of the need to constantly pursue improvements; openly communicating about process inefficiencies and other CI issues; using visual management tools; and empowering people to experiment (e.g. Chandrasekaran and Toussaint 2019; Dale 1996; Emiliani 2003; Hines 2010). As such, a good CI culture implies it is natural to solve a problem directly and structurally. Such a culture makes processes increasingly reliable and anchors the focus on process efficiency and product quality in the organization (Liker 2004).

One of the most widely adopted CI approaches is Lean management (hereafter: Lean), aimed at creating customer value and eliminating waste in operational and other processes (Alefari et al. 2017; De la Vega-Rodríguez et al 2018; Emiliani 2003; Womack and Jones 2015). The term Lean may have been introduced relatively recently, but its origin is further back in time (Krafcik 1988). Much of the literature points to Taiichi Ohno as the originator in the 1930s, although some of the literature points to the start of Lean thinking as early as the 1900s by Henry Ford (e.g. Bhuiyan and Baghel 2005; Motwani 2003; Van Dun 2015). Lean began to spread in the first half of the nineties when it was introduced in various organizations (Womack and Jones 1994) and from that point on Lean has had a big impact on the contemporary business world and how organizations look at CI (Holweg 2007).



In recent years, CI has evolved from its original focus on the application of CI in manufacturing processes, to the entire organization of manufacturing firms as well as service firms (Bhuiyan et al. 2006; Carlborg et al. 2013; Hasle et al. 2012; Koval et al. 2019). Moreover, as productivity in the service sector is lagging behind the productivity in the manufacturing sector to quite some extent (May 2005), a growing number of Lean initiatives has been observed in the service industry (Ahlstrom 2005; Seddon and O'Donovan 2010; Swank 2003; Vashishth et al. 2019). Recent work shows that there is an increase in the use of Lean and other CI methods in the financial services industry (De Koning et al. 2008; Hirzel et al. 2017; Leite and Vieira 2015; Leyer and Moormann 2014).

Despite its increasing popularity, many organizations fail to produce significant results when implementing Lean and other CI methods (Hines et al. 2018; Jasti and Kodali 2015; McLean et al. 2017; Repenning and Sterman 2001). Efforts in making process improvements stick in the culture often break down because people revert to their old ways of working (Bateman and David 2002). Moreover, it appears that the implementation of Lean is not successful because (middle) managers do not fully understand what the organization will look like after the transformation followed by the implementation of Lean principles (Bortolotti and Romano 2012; Durakovic et al. 2018; Gurumurthy and Kodali 2011). Although increasingly more attention is paid to Lean and other CI methods within financial service organizations (Delgado et al. 2010; Gupta et al. 2016), little is known about what may drive or hinder their success in this sector (Leyer and Moormann 2014). In combination with the observation that middle managers play an important role in facilitating change in organizations (Huy 2002; Livijn 2019), this implies that more work needs to be done in this area.

### **1.3 Research Questions and Study Approach**

The main goal of this dissertation is to understand how middle management affects organization-wide implementation and adoption of CI and in particular Lean. By investigating the relationship, this doctoral dissertation aims to understand how and to what extent middle managers influence CI. Having more insight can help an organization to better determine what is expected of middle managers and how the context set by top management can influence middle management. This will give the organization more means to influence the success of the implementation and will increase the likelihood of successfully implementing CI in the organization. The key question addressed is therefore:

*How and to what extent do middle managers contribute to accomplishing CI in the financial service industry?*

This PhD thesis contains three different studies that serve to further explore the influence of middle managers on CI (implementation) within organizations.

### 1.3.1 Systematic Literature Review

The first study provides a systematic review of the literature on middle management and CI (Needleman 2002). An important starting point of this study is that management theory, following Van Aken (2004, p. 221), “is either scientifically proven, but then too reductionistic and hence too broad or too trivial to be of much practical relevance, or relevant to practice, but then lacking sufficient rigorous justification”. It is frustrating for both academic researchers and managers that many theories are not applied in practice. In this respect, design research claims to produce knowledge that is both actionable and open to validation (Romme 2003). The main idea is to inquire into systems that do not yet exist (Simon 1996). The question in design research is “will it work?” rather than merely “is it true?” (Romme 2003). Here, design science attempts to close the gap between managerial practice and academic research (Van Burg et al. 2008). In order to theoretically ground the relationship between middle management and CI success, we draw on a mechanism-based research synthesis of a large, rather fragmented literature base. In the field of design science, a design proposition, the CMO-format, can be applied to offer a general template that allows a researcher to understand ‘what works for whom in what circumstances’ (Denyer et al. 2008). Mechanisms (M) can be defined as something that explains why a certain outcome (O) pattern is produced in a particular context (C) (Van Burg and Romme 2014). Here, this approach serves to uncover and define a set of middle management roles and organizational activities (mechanisms) that have an impact on organizational change towards CI success (a sustained practice of CI, or lack thereof) in a particular context. In this respect, the mechanism-based research synthesis produces knowledge that is both actionable and open to validation (Romme 2003) and also serves to close the gap between managerial practice and academic research (Rynes et al. 2007; Van Aken 2004; Van Burg et al. 2008).

This first study results in two frameworks. Each of these frameworks assumes that top management consistently seeks to implement a particular (archetypical) philosophy of CI/Lean: the first framework assumes an integral management approach and the second one starts from the assumption that a cost-cutting strategy is adopted. Each of these two frameworks in itself reflects some of the key tensions and challenges arising from any CI/Lean change effort, especially for middle managers. In practice, the two conditions may overlap, which creates an additional level of complexity. Overall, our review provides an understanding of the (non)conditions in which continuous improvement initiatives are likely to succeed or fail, and as such also provides a starting point for future research as well as practical work in this area.

### 1.3.2 Vignette Study

The second study examines the effect of different ways of implementation on the adaptation of CI within the organization. To investigate the potential causality between the manner of implementing CI and the extent to which CI is embedded in the organization, the Experimental Vignette Methodology (EVM) is used. The vignette study was carried out at

a large bank in the Netherlands. Atzmüller and Steiner (2010, p. 128) describe a vignette as “a short, carefully constructed description of a person, object or situation, representing a systematic combination of characteristics.” To examine complex situations, vignettes can be used while controlling for moderating variables; however they must be appropriately designed, otherwise the data is useless (Maguire et al. 2015; Wason et al. 2002). The vignette method is used in favor of more traditional surveys to avoid socially desirable answers from the participants. By using vignettes, in which a concrete and detailed hypothetical scenario is outlined, the participants can go through the decision making process in a more realistic and unbiased manner. This reduces the chance that participants give short-sighted and socially desirable answers (e.g. Barter and Renold 2000; Finch 1987; Wilks 2004). By compiling the text of the vignette in such a way that the participant is included in the story, the questions asked are less personal and therefore less threatening (Barter and Renold 2000). By allowing the participants to participate in their natural environment, an attempt will be made to approach the daily practice in a much better way (Aguinis and Lawal 2013).

The findings arising from this study suggest that CI is more likely to be integrated in the organizational culture, enhance the customer orientation among employees and improve the work atmosphere, when it is implemented as an integral management approach rather than as an efficiency-oriented program. A significant risk arising from CI is that people perceive it as another downsizing method focused on short-term financial targets. This study suggests that middle managers can only help reduce this risk, if top managers commit themselves to CI as an integrated management philosophy and communicate this in a consistent manner, time and again, throughout the entire organization.

### **1.3.3 An Exploratory Research**

The final study focuses on middle managers’ contribution to strategic change. A widely-cited model of Floyd and Wooldridge (1992, 1996, 1997), which links organizational performance directly to middle management is used. They define four strategic roles for middle managers: Championing, Synthesizing, Facilitating and Implementing. These four roles provide “a framework that combines upward and downward influence with behaviors that integrate and support strategies on one hand and diverge from official strategy on the other” (Floyd and Wooldridge 1996, p. 42). Based on this model, middle managers can be expected to perform a downward influencing role by implementing deliberate strategy through the translation of objectives from top management into effective operational plans, and an upward influence role by synthesizing information for top management, thus filtering important strategic feedback upwards (Tarakci et al. 2018; Van Rensburg et al. 2014). Middle managers can also be facilitating in a downward manner, in search for new strategic initiatives and adaptability by organizational experiments; and successful experiments can be championed upward to top management (Tarakci et al. 2018; Van Rensburg et al. 2014).

Although there is a broad body of knowledge about the roles and influence of middle management in implementing strategy, insight in which roles are activated in CI initiatives

is underdeveloped and highly dispersed. Therefore, in this final study we developed a scenario experiment to explore which middle management roles are activated when middle managers are confronted with a CI initiative. The main findings from this study demonstrate that middle management can be conceived as a change agent, involving both upward and downward activities. Our findings show that most middle managers think of themselves as implementers and that they engage in this role much more than the other three roles.

## **1.4 Relevance of the Research**

By answering the various research questions raised earlier, this doctoral dissertation makes the following academic and social contributions.

### **1.4.1 Academic Relevance**

First, this dissertation enhances the extant knowledge about middle management. There has been a lot of discussion about the role of middle management, between those that believe and those that do not believe in a valuable contribution from the middle layer of the organization (Dopson and Stewart 1990, 1993). We can see middle managers as an obstacle to change or as a strategic asset (Balogun 2003). Middle managers can be seen as a bureaucratic barrier (Hammer and Champy 1993) or as a part of the organization that can make an important contribution (Osterman 2008; Wooldridge et al. 2008). This dissertation contributes to the literature by developing a conceptual framework (Chapter 2) that may spur empirical research on how middle managers affect CI practices and outcomes.

Second, a high failure rate can be observed in organizations that are implementing Lean (Taleghani 2010). Previous research suggest that to make a Lean implementation successful, it is important to not just implement a tool box, but also a philosophy (Bhasin and Burcher 2006). In addition, it appears that middle managers play an important role in ensuring Lean implementations are successful (Found et al. 2009). Taking into account that the understanding of middle management is remarkably thin (Osterman 2008), it is important to better understand the relationship between middle management and the sustainability of Lean within organizations. The success (or failure) of Lean programs largely depends on the people responsible for implementing the method, mostly middle managers (Fine et al. 2008). Yet, empirical evidence on how middle management influences CI success is highly dispersed.

Third, the work conducted for this dissertation serves to structure and map a large amount of available literature in the field of middle management and CI/Lean. We draw on a systematic review and synthesis of the literature, using a mechanism-based perspective (e.g. Gross 2009; Hedström and Ylikoski 2010; Pajunen 2008; Van Burg and Romme 2014). At the same time, we contribute to the research gap regarding a direct link between middle management and CI/Lean. With a few exceptions (e.g. Holmemo and Ingvaldsen 2016; Lleo et al. 2017; Manville et al. 2012; Van Dun et al. 2017), this has been under-researched. This

is remarkable because middle managers can be considered to be key agents in facilitating CI initiatives and, more broadly, striking a balance between continuity and change.

Fourth, this dissertation focuses on service-oriented organizations in the financial services industry, where CI/Lean has been receiving more and more attention after the initial momentum around CI/Lean in the manufacturing industries. CI has thus evolved from its original (narrow) applications in manufacturing processes to the entire organization of manufacturing as well as service and public sector processes (Bhuiyan et al. 2006; Stentoft Arlbjørn and Vagn Freytag 2013). Moreover, because service sector productivity trails productivity in the manufacturing sector by a wide margin (May 2005), a growing number of Lean initiatives has been observed in the service industry (Ahlstrom 2005; De Souza and Carpinetti 2014; Seddon and O'Donovan 2010; Swank 2003). However, Arfman and Barbe (2014, p. 22) argue “that there is a lack of debate and understanding about the real value of using Lean principles in service organizations.” This suggests there is a need to investigate this.

Finally, we shed some light upon role of top management versus middle management. Middle managers play a significant role during change (Balogun 2003; Balogun and Johnson 2004, Floyd and Wooldridge 1992, 1997), and have a major contribution towards implementation of top management’s intended strategies (Balogun 2003; Currie and Procter 2005). Moreover, for the sustainability over time of a CI practice, top management has to reinforce a culture of CI and make it successful through management and workers’ involvement and active participation (Angelis et al. 2011; Boyle et al. 2011; McLean et al. 2017). In practice, there is often a discrepancy between what top managers say they want and what they actually want (e.g. Argyris 2004; McCann et al. 2015; Van Maanen and Barley 1984). This gap between the purpose and values of CI espoused by top management and those actually being pursued may then result in potentially conflicting organizational realities. This ambiguity is further investigated in this dissertation.

#### **1.4.2 Societal Relevance**

The proposed research makes the following societal contributions. First of all, it results in an increased understanding of the role of the middle manager in the implementation of CI initiatives. Thereby it helps top management, HR officers, (internal) consultants and middle managers by indicating which measures they can take to ensure a successful and sustained implementation (Found et al. 2009; Mann 2014). This in turn should lead to more sustainable results in terms of savings, customer satisfaction and reaching the goals of CI within the organization. As a result, the money and effort spent on CI implementations will yield better results. As such, this dissertation is relevant to different groups in the organization.

Second, the findings arising from this dissertation are relevant for top management prior to and during the implementation process: how can CI best be pursued and implemented, what is the role of top management towards its middle managers, which factors influence the role of middle managers and how does one deal with them; and so forth?

Furthermore, for middle managers, this dissertation is relevant by providing a deeper understanding of the impact of their own role in CI processes, as well as by providing insight in the possibilities, opportunities and threats arising from CI implementation provides for them. This dissertation shows that middle managers have a critical but also very complex role. They need to demonstrate leadership (“leading by example”), which is not easy because the middle management echelon itself is often also subject to change.

The relevance of this dissertation for HR officers is twofold. On the one hand, the results of this doctoral work will help HR officers to guide and help people develop in such a way that they can effectively implement CI. On the other hand, the results of the dissertation can help in determining the profile of people to be hired or promoted to middle management positions. Organizations can improve their selection process with respect to selecting middle managers, thereby ensuring that the appointed employees fit in the “new” organization, thus increasing the likelihood of success.

Internal and external consultants involved in the implementation process may find this dissertation relevant as it might help them understand which factors play a role in the successful adoption of CI practices by middle management. Moreover, the findings from this research can also help to determine areas of potential resistance and may act as a set of guidelines during the introduction, development and implementation of CI.

Second, if employees do not feel sufficiently involved, this can have a negative effect on the implementation of CI (McLean et al. 2017; Van Assen 2018). So it is very important that employees are sufficiently involved to prevent these negative effects (Mantere et al. 2012). As a result, a lot of time, money and effort is put into improving organizations with no or only a short term gain. Therefore, this research also has a social relevance as it may provide more relevant information and insight for organizations to ensure that the chance of success increases. What advantages and disadvantages do the employees see, why is it necessary to change and what are the concerns?

Organizational change is complex and highly context dependent, and therefore there is a strong need for studies that provide insight into the complexity of (managing and leading) organizational change. Lean requires significant efforts regarding organizational change. Many organizations engage in these changes to establish CI, but often without success. One key reason for the failure of CI change attempts has been said to be poor leadership, and particularly the role of middle managers in facilitating and sustaining change. For many years, there has been a discussion about the role of the middle management in implementing change. I also expect this discussion to continue in the coming years, about key questions such as: do we continue to need middle managers and what is their added value? By means of this dissertation, I seek to contribute to this discourse.

## **1.5 Overview of the Dissertation**

In this dissertation, three studies are presented. Chapter 2 involves a systematic review of the literature, which serves to develop a mechanism-based framework explaining the

success and failure of CI initiatives in which middle managers are key agents. Chapter 3 reports an experimental vignette study that serves to identify the differences in adopting a Lean approach as a management philosophy versus a cost-cutting program. In Chapter 4, the different roles that middle managers can play in CI (Lean) are analyzed and compared. Overall, this dissertation contributes to both theory and practice, by providing new academic insights as well as recommendations for both top and middle managers involved in CI/Lean programs. Chapter 5 summarizes the findings of these three studies, reflecting on the potential theoretical contributions with regard to middle managers' challenges. This chapter also identifies potential avenues for future research, while considering the limitations of the current empirical work, and then discusses the practical implications of the insights gathered.

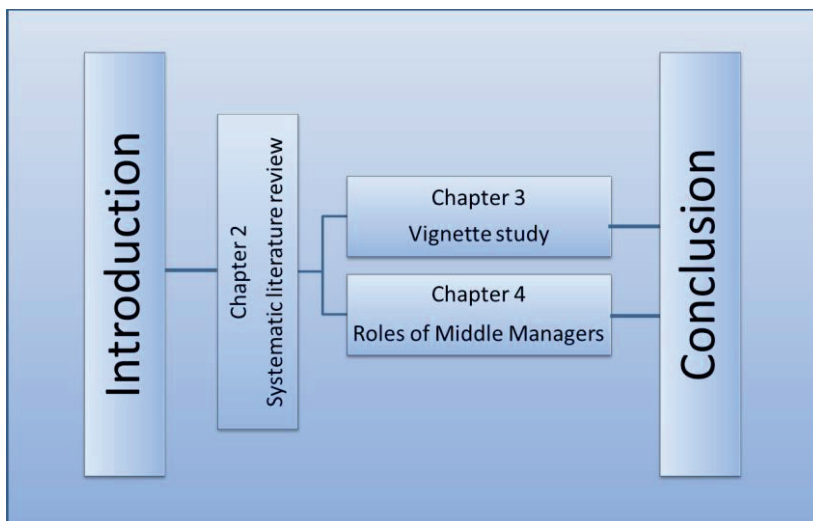


Figure 1.1 Overview of the dissertation

## 1.6 Related Publications

### Conference papers

Hermkens, F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2016). Examining the role of middle management in implementing change : a mechanism-based research synthesis.

*Paper presented at the 32<sup>nd</sup> EGOS Colloquium, Naples, Italy.*

Hermkens, F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2014). Hitting, fielding and pitching at the same time: The role of middle managers in change management. *Paper presented at the 9<sup>th</sup> Colloquium on Organizational Change & Development: The Future of Change Management, Essen, Germany.*

## Articles

Hermkens F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2019). A vignette study of middle managers' responses to continuous improvement initiatives by top management. *International Journal of Business and Social Science*, **10**, pp 100-115.

Hermkens, F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2017). The role of middle managers in becoming Lean: A systematic review and synthesis of the literature. *Journal of Economics, Management & Trade*, **20**, pp. 1-17.

### 1.7 Authors' contributions

This Ph.D. project involves three studies reported in Chapters 2 to 4, with an introduction and a conclusion in Chapter 1 respectively Chapter 5. The dissertation has been written by Freek Hermkens, under supervision of promotor Georges Romme and co-promotor Sharon Dolmans. Figure 1.2 presents an overview of the individual contributions to each chapter (or the paper it is based on).

	Freek Hermkens	Georges Romme	Sharon Dolmans
<b>Chapter 1</b>			
Writing main text	X		
Corrections and feedback	X	X	X
<b>Chapter 2</b>			
Design of the study	X	X	
Literature review	X		
Data collection	NA	NA	NA
Data analysis	NA	NA	NA
Interpretation of results	X	X	
Writing main text	X		
Corrections and feedback	X	X	X
<b>Chapter 3</b>			
Design of the study	X		X
Literature review	X		
Data collection	X		
Data analysis	X		X
Interpretation of results	X		X
Writing main text	X		
Corrections and feedback	X	X	X
<b>Chapter 4</b>			
Design of the study	X		X
Literature review	X		
Data collection	X		
Data analysis	X		X
Interpretation of results	X	X	X
Writing main text	X		
Corrections and feedback	X	X	X
<b>Chapter 5</b>			
Writing main text	X		
Corrections and feedback	X	X	X

Figure 1.2: Contribution of authors







# The Role of the Middle Manager in Becoming Lean: A Systematic Review and Synthesis

Many organizations adopt the Lean management approach (in short: Lean) to create an organizational culture of continuous improvement, but often fail to accomplish such a change. Previous studies have explained this high failure rate in terms of poor leadership and management, including the role of middle managers. However, the body of knowledge about the role and influence of middle management in continuous improvement and Lean practices is underdeveloped and highly dispersed. Some earlier work suggests that middle managers can both enable and hinder Lean and other initiatives, but a systematic overview of these processes is missing. This paper therefore draws on a systematic review of the literature on middle management and continuous improvement via Lean, to develop a conceptual framework for future empirical work in this area. Our findings serve to develop a mechanism-based framework that explains the success and failure of change efforts in which middle managers play key roles. This framework provides a starting point for future research projects as well as practical work in this area.

An earlier version of this chapter has been published as: Hermkens, F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2017). The role of middle managers in becoming lean: A systematic review and synthesis of the literature. *Journal of Economics, Management & Trade*, **20**, pp. 1-17.

## 2.1 Introduction

Organizational change is highly complex, also because its success and failure depends to a large extent on the specific organizational and industrial context (Higgs and Rowland 2005; Pettigrew et al. 2001). Changes within and around organizations are the order of the day, for example arising from the need to (often simultaneously) reduce cost, improve quality, reduce time-to-market lead times, and enhance flexibility (Homan 2006; Oakland and Tanner 2007; Stewart and Melnyk 2000). In many organizations, top managers seek to address these major challenges by initiating a change towards continuous improvement (CI) – an organizational culture in which all members contribute to performance improvement by continuously implementing minor or major changes in their work processes (Hernández and Mateo 2012; Holmemo and Ingvaldsen 2016). To establish a culture of CI, organizations typically adopt a specific approach to cope with all, or at least some of, these changes (Bhuiyan et al. 2006). One of the most widely adopted CI approaches is Lean management (hereafter: Lean)<sup>1</sup>, aimed at creating customer value and eliminating waste in operational and other processes (Emiliani 2003; Womack and Jones 2015). Lean appears to have had a major impact on the contemporary business world and how organizations engage in CI (Anand et al. 2009; Hines et al. 2004; Holweg 2007; van Dun and Wilderom 2012). In this respect, ‘The Machine that changed the World’ by Womack, Jones and Roos (1990) is one of the most influential (and widely cited) publications in the area of CI and operational management, and also served to make the Japanese concept of Lean accessible to the western world (Holweg 2007).

Yet, implementing Lean to achieve CI demands substantial organizational changes and a major commitment of all people involved (Alhaqbani et al. 2016; Drew et al. 2004; Netland 2016). While most Lean programs are initiated as CI efforts, they often end up as a quick fix, without any sustained efforts to create and maintain a true culture of CI (Bhasin 2011, 2012a; Bhuiyan et al. 2006; Snee 2010). The success of Lean thus largely depends on the managers responsible for initiating and implementing the method, including middle managers (Fine et al. 2008; Holmemo and Ingvaldsen 2016).

A key benchmark for our review is the earlier literature review conducted by Wooldridge et al. (2008), who outlined and assessed the available evidence with regard to the impact of middle management on how strategy in large organizations is formed. Almost a decade later, our review in this chapter focuses on the role of middle management in CI change initiatives. Middle managers can play an important role in enabling and sustaining such changes, by identifying and advancing ideas for making the organization better, thereby helping to strike a balance between continuity and change (Huy 2001, 2002; Moss Kanter 1982). Middle managers occupy a unique (network) position between operational and upper management and have deep knowledge about what motivates the employees in their unit or department (Huy 2001; Moss Kanter 1982), which allows them to improve the effectiveness of any change initiative (Currie and Procter 2005; Floyd and Wooldridge 1992,

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<sup>1</sup> Other methods include, for example: Six Sigma, Balanced Scorecard, TQM, and Lean Six Sigma (Bhuiyan and Baghel 2005; Hines *et al.* 2004).

1997; Moss Kanter 1982). Moss Kanter (1982) therefore argued that the success of any attempt to increase productivity is directly related to the creativity and innovation skills of the middle manager.

However, in the face of continual organizational change, middle managers' pivotal position between operations and strategy also makes the implementation of change difficult (Bryant and Stensaker 2011). The position of middle managers is therefore a difficult one: whereas they are responsible for translating strategic change initiatives to daily operations, on a daily basis they also have to attend to problems prevailing on the shop floor (Stoker and de Korte 2001; Uytterhoeven 1989). The constant pressure to cut costs as well as sustain or grow their unit's performance (e.g. productivity or customer satisfaction) may undermine middle management's efforts and commitment to implement CI initiatives such as Lean (Sim and Rogers 2009; Stoker 2006). Thus, a major challenge arises from the two different roles that top management typically expects middle managers to play: the role of change leader and the role of loyal executer. Drawing on an analogy with baseball, Uytterhoeven (1989) therefore observed that middle managers are typically expected to be able to hit, field and pitch at the same time.

The unique role and position of middle managers raises the question as to how they *influence the implementation and success/failure of Lean CI initiatives*. This study therefore aims to develop a framework for studying key aspects of the roles that middle managers enact in CI practices drawing on Lean. To theoretically ground the relationships between the roles and actions of middle management and the implementation of Lean, we draw on a systematic review and synthesis of the literature using a mechanism-based perspective (e.g. Gross 2009; Hedström and Ylikoski 2010; Pajunen, 2008; van Burg and Romme 2014). This mechanism-based approach to reviewing and synthesizing the literature produces knowledge that is actionable and open to validation, and also serves to close the gap between managerial practice and academic research (Denyer et al. 2008; Pascal et al. 2013; van Burg et al. 2008; Van Burg and Romme 2014).

The remainder of this paper is structured as follows. First, we outline the mechanism-based review and synthesis approach. Next, the findings regarding the role of middle management in Lean are presented in terms of contextual conditions, mechanisms and outcome patterns. Finally, we discuss these findings, also in terms of their contribution to the literature.

## **2.2 Mechanism-Based Review and Synthesis**

To theoretically ground the relationship between middle management and Lean success, we draw on a mechanism-based research synthesis of a large, rather fragmented literature base. A mechanism captures the deeper theoretical rationale underlying outcome patterns arising from actions in particular contexts. In the field of design science, the so-called CMO-format serves as a generic template that allows researchers to understand what works for whom, and in which circumstances (Denyer et al. 2008). A mechanism (M) can be defined as the theoretical rationale that explains why a certain outcome (O) pattern is produced in a

particular context (C) (van Burg and Romme 2014). Denyer et al. (2008) at the time proposed the so-called CIMO-format, consisting of contexts, interventions, generative mechanisms and outcomes. Van Burg and Romme (2014) adapted Denyer et al.'s framework by broadening the notion of (generative) mechanisms toward social mechanisms (Hedström and Ylikoski 2010; Merton 1968). Moreover, Van Burg and Romme's (2014) CMO framework serves to avoid any attempt to specify interventions or actions in any detail, but instead describe the boundaries of these actions in terms of contextual conditions, social mechanisms and outcome patterns; that is, these boundaries constitute an action space in which the key agents can choose specific actions.

The CMO approach here serves to uncover and define a set of middle management roles and organizational/social mechanisms that affect CI success or failure in a particular context. In this respect, mechanism-based research synthesis produces knowledge that is both actionable and open to validation (Romme 2003) and also serves to close the gap between managerial practice and academic research (Rynes et al. 2007; van Aken 2004; van Burg et al. 2008).

To develop the mechanism-based framework, we start by conducting a systematic review of the literature on middle management and continuous improvement (via Lean). This systematic review approach is expected to produce a literature overview with minimal bias as it aims to minimize the effects of (implicit) selection (Needleman 2002; Tranfield et al. 2003). The first step consists of an extensive search of articles with explicit and reproducible criteria in the selection (Thorpe et al. 2005). The review was conducted in the following search engines (in December 2011 - January 2012; October – November 2014 and August – October 2016): ABI/Inform, Emerald, Web of Science, Science Direct and Google Scholar. We followed the three stages of systematic literature review advocated by Tranfield et al. (2003): planning, conducting, and reporting the review. The review was limited to published peer-reviewed articles in journals (to control for overall study quality), supplemented with important monographs and other books regarding the main topics (middle management, Lean, and continuous improvement). The initial literature search was conducted using the terms 'middle management/manager', 'continuous improvement' and 'Lean'. The term 'Lean' was included as a separate term, because it refers to one of the most used continuous improvement methods (e.g. Holweg 2007) but often is presented as a method that stands on its own.

The search was initially conducted using the root search string 'middle manage\*' respectively 'continuous improvement' or 'Lean' in the title or subjects of the article. Because this search produced more than 2800 results, the search string was refined with 'Lean' in the abstract, document text and subject. This resulted in a score of 214 records for middle management and a score of 296 for Lean.

To further assess the results, we adopted the approach suggested by Thorpe et al. (2005) and divided the results in three categories: 'relevant', 'relevance not a priori clear (not clear)' and 'less relevant'. In this respect, the abstract of each publication was carefully reviewed

with regard to topic, objective, and central research question before placing it in one of the three categories.

Subsequently, all 'less relevant' articles were put aside. We then set out to further examine the articles marked as 'relevant' or 'not clear'. Out of the total of 142 (relevant and not clear) articles on middle management, 118 were located and downloaded (via university library system) and 24 articles were not directly available or accessible. For the latter articles, the citation score was checked in Google Scholar. The four articles that had a citation score  $\geq 30$  were located via other university libraries. Consequently, 122 articles in total were considered for the literature review on middle management. For continuous improvement and Lean, 221 articles were assessed as relevant or not clear. Several frequently cited books on Lean were also included in the review, because of their influence on the development of the field (Jørgensen and Emmitt 2008).

The articles assessed as 'relevant' or 'not clear' were examined in more detail, drawing on content analysis. The following information was considered: subject; key words; literature theme; main findings; research method; nature of the data; industry; and country/region. As such, several articles were evaluated as not relevant to the purpose of this review and were therefore excluded (e.g. book summaries, book reviews, interviews with researchers, and articles in the popular press). As a result, 99 articles on middle management and 104 articles on continuous improvement and Lean served as input for the remaining review.

The detailed review of these 203 publications was conducted by using the CMO framework outlined earlier. To categorize and synthesize the findings, we extracted the various contexts, outcomes and social mechanisms regarding CI and middle management. These contexts, outcome patterns and mechanisms were subsequently clustered, resulting in a systematic overview of contextual conditions, social mechanisms and outcome patterns regarding how middle managers affect CI success.

### **2.3 Findings**

In order to (better) understand how middle managers affect the implementation and success of CI/Lean initiatives, this section presents the main insights arising from the review.

Before turning to these findings, we start with defining several key constructs. First, the literature provides various definitions of middle management. Huy (2001, p. 73) defines a middle manager as "any manager two levels below the CEO and one level above line managers." Alternatively, middle managers have been more broadly defined as "holding positions between the first level supervisors and the level of executives, below those who have companywide responsibilities" (Herzing and Jimmieson 2006, p. 628). Harding, Lee and Ford (2014, p. 1230) define middle managers as "those who occupy a particular part of the organizational hierarchy, in which they face upward to senior management and downwards to junior staff". As a starting point for our review, we define middle management as all those in the organization who are employed directly under top management and above the operational management layer, and are regularly involved in operational activities while also

having regular access to top management (Floyd and Wooldridge 1994, 1996, 1997; Pugh et al. 1968; Wooldridge, Schmid and Floyd 2008).

Second, in the Introduction section we defined CI as a culture of sustained improvement in which all staff members contribute to performance improvement by continuously implementing changes in their work processes (Hernández and Mateo 2012; Jørgensen et al. 2003). Finally, Lean refers to a method for training all employees to identify wasted time and effort in their own job and to better work together with others in improving these activities, in order to make the enterprise deliver more value at less expense (Emiliani 2003; Womack and Jones 2015; van Dun and Wilderom 2012).

In the remainder of this section, we discuss the main findings with regard to contextual conditions, social mechanisms and main outcome patterns of middle management's role in CI and Lean initiatives.

### **2.3.1 Contextual Conditions**

A contextual condition is a key dimension of the framework used here (Van Burg and Romme 2014). CI practices such as Lean and Six Sigma have become widespread, but have also evolved over the years (Aloini et al. 2011; Fine et al. 2008; Hines et al. 2004; Hines et al. 2011; O'Rourke 2005; Rother 2010). Whereas the initial focus was on cutting cost, CI methods have more recently evolved towards an emphasis on changing the organizational culture (Basu and Ahmed 2012; Dale 1996; Heine et al. 2016; O'Rourke 2005). A key contextual condition for the role of middle management in CI/Lean therefore arises from what top management aims to accomplish via CI/Lean (Bhasin 2011; Bhasin and Burcher 2006). Lean programs intended to cut costs throughout the organization often end up as a quick fix, in the absence of any sustained efforts to create and maintain an organizational culture of CI (Bhasin 2011, 2012a; Bhuiyan et al. 2006; Snee 2010); moreover, established work routines appear to be rather difficult to change (Bateman 2005; Bateman and David 2002).

Organizations embracing Lean as an integral management philosophy, however, tend to perform better (Bhasin 2011). Therefore, successful implementation of Lean requires that top management views it as a long-term journey in installing a CI viewpoint as well as enabling cultural changes that support Lean principles throughout the entire organization (Bhasin and Burcher 2006). In the latter cultural changes, top managers need to demonstrate their commitment to building and sustaining a culture of CI (Boyle et al. 2011; Heine et al. 2016; Netland 2016) and empower and support middle managers in ways that enhance their confidence and efficacy in fulfilling their new role (Nelson and Yeo 2012; Song et al. 2014).

Our review also suggests that CI has evolved from its original (narrow) application in manufacturing operations to the entire organization (of industrial firms) as well as to organizations in professional services, the public sector, and elsewhere (Bhuiyan et al. 2006; Langstrand and Drotz 2016; Singh and Singh 2015; Stentoft Arlbjørn and Vagn Freytag 2013). Because productivity of the service sector trails productivity in the manufacturing sector



by a wide margin (May 2005), a growing number of Lean initiatives has been observed in the service industry (Ahlstrom 2005; de Souza and Carpinetti 2014; Seddon and O'Donovan 2010; Swank 2003). However, Arfman and Barbe (2014, p. 22) argue "there is a lack of debate and understanding about the real value of using Lean principles in service organizations." This raises the question whether Lean can be applied outside the original context in which it was developed (Bateman et al. 2014; Hasle et al. 2012; Singh and Singh 2015).

Notably, the constant reengineering and downsizing of many organizations appears to have dramatically decreased the (relative as well as absolute) numbers of middle managers in these organizations (Galagan 2010; Hayes 2008; Keys and Bell 1982; Shook and Roth 2011; Sitlington and Marshall 2011). The remaining population of middle managers, though, may have gained a much more significant role in facilitating learning and balancing organizational change and stability (Béliveau 2013; Costanzo and Tzoumpa 2008; Gonzalez and Martins 2016; Robyn and Dunkerley 1999). In this respect, downsizing may provide (the remaining) middle managers with more responsibilities and autonomy (McCann et al. 2008; Caughron and Mumford 2011). Without responsibility and autonomy, middle managers are likely to become increasingly frustrated and ineffective (Ouakouak, Ouedraogo and Mbengue 2014). In this respect, Huy (2002) argues that middle managers play an important role in facilitating change in organizations. They may have valuable ideas for making the organization better, tend to have a large informal network within the organization, and can help the organization in striking a balance between continuity and change. As such, there is a risk in downsizing the organization and its middle management cadre too much, as this may reduce organizational flexibility and innovation (Huy 2002). Overall, middle managers appear to play multiple pivotal roles in organizational change and transformation.

This also makes the role of middle managers a very difficult one, between operational and upper management and between operations and strategy. A major challenge for middle managers involves dealing with the two different roles that, in line with Likert's (1961) 'linking pin' principle, their superiors typically expect them to play: the role of change leader and the role of loyal implementer. Some middle managers appear to perceive the combination of these roles as unfair and unrealistic (Bryant and Stensaker 2011; Gunnarsdóttir 2016; Radaelli and Sitton-kent 2016). Evidently, these dual roles and contributions expected from middle management become particularly problematic when (part of) the middle management cadre itself is downsized.

Overall, middle managers are facing rather challenging contextual conditions when their organization sets out to become more Lean, especially in terms of what top management expects from them; these expectations include the broader aim of the CI/Lean program (as an integral management approach versus a strategy to cut costs), and the multiple roles and contributions expected from middle managers.

### 2.3.2 Social Mechanisms

Mechanisms can help to explain why action patterns in certain contexts produce a certain outcome pattern. For one, the CI approach needs to be contextualized and matched with the organizational setting (Pettersen 2009; Fryer et al. 2013). Second, people throughout the organization need to be willing to adopt CI practices, from the highest managerial level to the operational floor (Boyle et al. 2011; Simmons et al. 2010). In this respect, behavioral and cultural factors may give rise to resistance among employees and managers, and there is a limited understanding of these factors (Harrington and Williams 2004; Lacksonen et al. 2010; Sawhney and Chason 2005; Sim and Rogers 2009). Finally, the implementation process requires explicit support from management (Achanga et al. 2006; Fryer et al. 2013; O'Rourke 2005; Timans et al. 2012; Worley and Doolen 2006) and should be front-line driven, involving small steps and improvements on a daily basis, to keep the process focused (Näslund 2008; Robinson and Schroeder 2009; Sim and Rogers 2009).

Some studies of the Lean approach demonstrate that it requires a change in mindset and behavior among middle managers and other organizational leaders (Mann 2009), in the sense that they feel empowered to structurally apply lean principles. These cultural and behavioral changes at the managerial level are often difficult to accomplish, because there is a strong tendency among (both top and middle) managers to focus on tools and techniques (Mann 2009; O'Rourke 2005). In this respect, O'Rourke (2005) notes three important preconditions: the leadership's responsibility to influence business strategy with CI, its direct involvement in the design of the deployment process, and its active engagement in the implementation. This suggests that top management not only has to show commitment, but should also be active in implementing and communicating the change in the entire organization (Alhaqbani et al. 2016; Birken et al. 2015; Näslund 2013; Rentes et al. 2010; Simmons et al. 2010). This involvement apparently has to go beyond 'cheerleading' or sending around an e-mail. Rather, a sense of urgency about continually improving the organization and doing things differently needs to be created (Martinez-Jurado et al. 2013; Pepper and Spedding 2010; Snee 2010).

Moreover, the commitment and involvement of top management also appears to be critical for the sustainability of a CI practice over time (Birken et al. 2015; Cudney et al. 2010; McLean and Antony 2014; Ramakrishnan and Testani 2010; Rentes et al. 2010; Snee 2010). Although CI programs are often advocated and introduced to accomplish 'sustained' improvements, they often end up as a quick fix without a deliberate effort to create and maintain the conditions for a culture of CI (Bhuiyan et al. 2006; Snee 2010).

Research by Holden and Roberts (2004) suggests that many middle managers are in fact being depowered, and that change labeled as 'empowerment' often actually means less influence of middle management. Middle managers have thus been observed to actively block (so-called) empowerment initiatives, thereby attempting to preserve their power and status (Denham et al. 1997). Similarly, another study found that middle managers are less likely to block change when they are trusted to have the ability to modify and craft new

organizational routines (Tippman et al. 2013), that is, enable their staff to take responsibility for their own actions and results. As such, middle managers often (are expected to) move away from the role of supervisor to the role of coach. As a result, many middle managers feel insecure, which is reinforced by what they perceive to be a parallel hierarchy (Denham et al. 1997; Fenton-O’Creedy 2001; Holden and Roberts 2004; Psychogios et al. 2009). A parallel hierarchy implies that the formal channels of communication and accountability are changed to allow for (more) decisions to be made at lower levels of the organization that middle managers no longer control.

Another key mechanism affecting Lean initiatives is job insecurity. For one, employees can become afraid of losing their job and view Lean as just another downsizing method (Cudney and Elrod 2011). In addition, middle managers themselves may also become insecure about their jobs, which sometimes motivates them to take a more strategic role, for example as champions of the Lean initiative (Ahearne et al. 2014; Currie and Procter 2005). Overall, if there is limited commitment to CI (if any at all) from middle managers and employees and thus little knowledge transfer among them, then implementing Lean is unlikely to lead to any significant improvements in organizational behavior and performance (Bhasin 2012b; Cudney and Elrod 2011; Dahlgaard and Dahlgaard-Park 2006; Heine et al. 2016).

Floyd and Wooldridge (1992, 1994, 1997) and Wooldridge et al. (2008) found that the ‘roles’ of middle managers are important phenomena in any large organization. In this respect, Floyd and Wooldridge (1992) defined four strategic roles of middle managers:

- **Championing strategic alternatives:** the middle manager engages in persistent and persuasive communication of proposals that either provide the firm with new capabilities or allow the firm to use existing capabilities differently.
- **Facilitating adaptability:** the middle manager encourages cross-functional problem solving, experimentation and idea generation, and creates arrangements that increase organizational flexibility.
- **Synthesizing information:** the middle manager derives strategic meaning from events, connects ideas to strategic issues, and sells issues to top management and others in the organization.
- **Implementing deliberate strategy:** the middle manager aligns the unit’s actions with the firm’s strategic intent.

These four roles provide “a framework that combines upward and downward influence with behaviors that integrate and support strategies on one hand and diverge from official strategy on the other” (Floyd and Wooldridge 1996, p. 42). Thus, depending on the organizational context, type of strategic change, issues faced by top management, and leadership style of top managers, middle managers can play one or more of these roles (Floyd and Wooldridge 1992, 1994, 1997; Floyd and Lane 2000).

Overall, our review of the literature serves to identify seven social mechanisms: championing the intended change by creating a sense of urgency about it; informal networking to facilitate

adaptability of employees; actively blocking change (while publicly endorsing it); synthesizing and transferring knowledge and learning (outcomes); obtaining more responsibility and autonomy to act; being exposed to (what is perceived as) a parallel hierarchy; and becoming insecure/anxious about one's job.

### 2.3.3 Outcome Patterns

In line with our review thus far, a large number of studies argue and illustrate that successful CI/Lean initiatives require a systematic band-controlled change strategy, rather than a quick fix (Angelis et al. 2011; Bhasin 2011; Dahlgard and Dahlgard-Park 2006; Dibia et al. 2014; Fryer and Ogden 2014; Lacksonen et al. 2010). However, there is no agreement in the literature about what constitutes the (lack of) success of a CI/Lean program. In this section, we discuss three outcome patterns identified in the literature. We focus here on the results of CI/Lean efforts, rather than (intermediary) outcomes that were earlier categorized as social mechanisms. Notably, while each of these three outcome patterns were already mentioned in reviewing the contextual conditions and social mechanisms, we define them more explicitly here.

First, the 'ideal' outcome is accomplished when CI/Lean is embraced and practiced throughout the organization, with substantial changes in behavior and shared norms (Heine et al. 2016; Nelson and Yeo 2012; Netland 2016; Song et al. 2014); these behavioral changes involve, for example, a shift toward more experimentation, assessment, coaching and self-development. That is, CI/Lean becomes an integral part of the organizational culture (Bhasin 2011; Bhasin and Burcher 2006).

The second outcome pattern is the 'quick fix' mentioned earlier: this quick fix implies the organization ends up with 'just' another tool, with a rather short (e.g. reporting) time horizon and without any substantial changes in behavior and culture toward continuous improvement (Dibia et al. 2014; Fryer and Ogden 2014; Mann 2009; O'Rourke 2005; Womack and Jones 1994). That is, employees, supervisors and middle managers will participate in and complete the formal training required, and add CI ratios to the existing assessment and reporting schemes – but a true culture of CI does not arise.

Third, several studies have observed that organizations may become too Lean, for example, by eliminating most of the available human potential and developing an organization-wide aversion of Lean (Chen et al. 2010), especially when top management adopts it to downsize the organization rather than as an enabler for strategic and operational developments (Pepper and Spedding 2010; Bhasin 2012b). Similarly, Robinson and Schroeder (2009) observed that many Lean initiatives do not reach their full potential.

In sum, our review serves to identify three general outcome patterns. These outcome patterns involve the extent to which CI/Lean (a) is embraced as an integral part of the organizational culture; (b) is implemented as a tool, with a short time horizon, and therefore not giving rise to a CI culture; and (c) eliminates most or all of the available human potential, which in turn makes the organization less flexible and innovative. Table 2.1 provides an

overview of the main outcome patterns, social mechanisms and contextual conditions identified in our review.

**Table 2.1 Frequently observed contextual conditions, social mechanisms and outcome patterns**

Contextual Conditions	Social Mechanisms	Outcome Patterns
<p><i>Aim of change initiative</i> (as conceived by top management):</p> <ul style="list-style-type: none"> <li>- Implement CI/Lean as an integral management philosophy</li> <li>- Implement CI/Lean as a cost cutting program</li> </ul>	<p>Championing the intended change by creating a sense of urgency</p> <p>Informal networking to facilitate adaptability of employees</p> <p>Actively blocking change (while publicly expressing support)</p>	<p>CI/Lean is embraced and practised throughout the organization (and thus a CI culture arises over time)</p> <p>CI/Lean is implemented as a tool with a rather short time horizon (and thus a CI culture does not arise)</p>
<p><i>Organizational environment:</i></p> <ul style="list-style-type: none"> <li>- The number of middle managers has been substantially decreasing</li> <li>- At the same time, (remaining) middle managers have a much more significant role in facilitating and balancing organizational change</li> <li>- Middle managers are increasingly expected to perform multiple roles</li> </ul>	<p>Synthesizing and transferring knowledge &amp; learning (outcomes)</p> <p>Obtaining more responsibility &amp; autonomy to act</p> <p>Being exposed to (what is perceived as) a parallel hierarchy</p> <p>Becoming insecure/anxious about one's job</p>	<p>The available human potential is largely eliminated, making the organization less flexible and innovative</p>

## 2.4 Research Synthesis

Thus far, our literature review has produced an overview of contextual conditions, social mechanisms and outcome patterns regarding the literature of CI-Lean and middle management. In this section, we synthesize these findings in a CMO format (Denyer et al. 2008; Van Burg and Romme 2014). This synthesis especially draws on the causal relationships for which there is a strong body of evidence, that is, at least two empirical studies in which the causal relation was observed. Notably, the selected studies were summarized in a separate Excel file, which allowed for extracting the key patterns identified later in this chapter.

One key finding arising from our review is that the context in which middle managers engage with CI/Lean initiatives is rather turbulent and demanding. For one, the number of middle managers has been decreasing (Clark 1998; Dopson and Stewart 1993), while those remaining appear to have a much more significant role in facilitating learning and balancing organizational change (Costanzo and Tzoumpa 2008; Caughron and Mumford 2011). Moreover, the work of middle management has not only become more significant, it has also become more demanding, given that it involves engaging in multiple roles at the same time and/or continually switching between different roles (Bryant and Stensaker, 2011). In

the remainder of this section, we synthesize our research findings in two complementary CMO frameworks.

Before we can present these two frameworks, we need to make an analytical distinction. In this respect, the literature on top management learning and behavior has uncovered major gaps and inconsistencies between what many top managers say they want and what they actually want (Argyris 2004; Argyris et al. 1985; Van Maanen and Barley 1984). These inconsistencies between management's 'espoused theory' and 'theory-in-action' (Argyris et al. 1985) reinforce the complexity of organizational changes towards CI/Lean. We will explore this additional layer of complexity later in this section, and at this stage simply assume that top management deliberately sets out to implement CI/Lean as either an integral management philosophy or a cost-cutting program, and consistently follows up on this intention. This assumption serves to develop two CMO frameworks.<sup>2</sup>

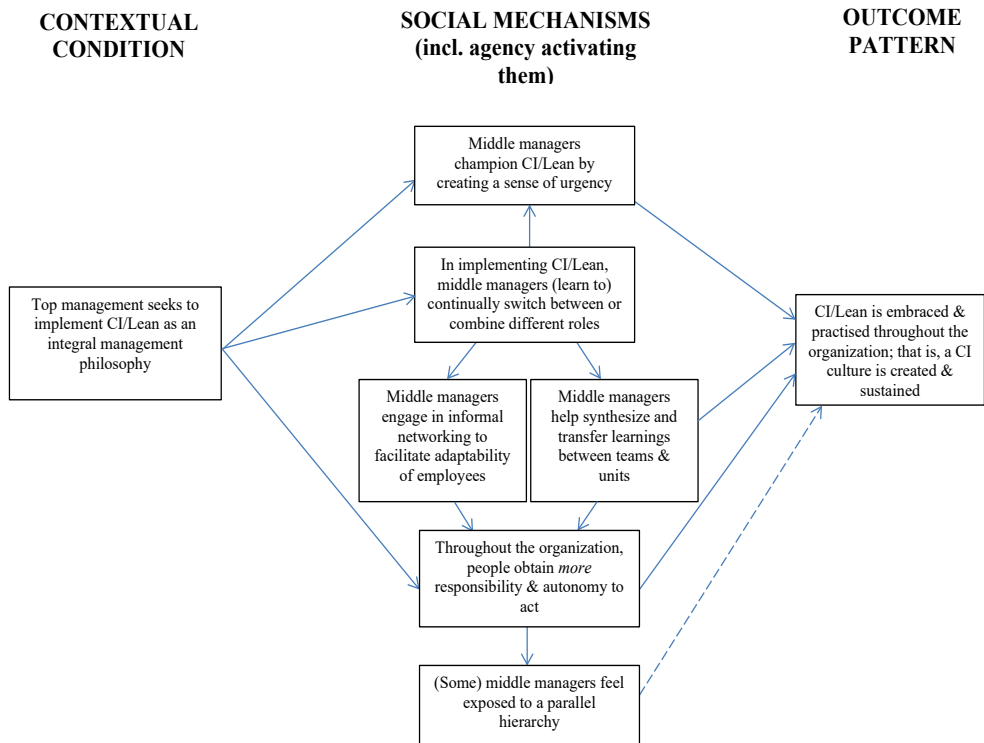
The first CMO framework, outlined in Figure 2.1, addresses the contextual condition (for middle management) in which top management seeks to implement CI/Lean as an integral management philosophy (Bhasin 2011; Bhasin and Burcher 2006). In this particular condition, various mechanisms are directly or indirectly triggered. If top management consistently seeks to implement CI/Lean as an integral management approach, this directly affects the sense of urgency about the need to do things differently (Boyle et al. 2011; Pepper and Spedding 2010; Simmons et al. 2010; Snee 2010), and also raises expectations among employees and middle managers with regard to obtaining more responsibility and autonomy to act (Caughron and Mumford 2011; McCann et al. 2008). Moreover, an integral approach advocated by top management enables middle managers to (learn to) engage in a broader set of roles (between which they continually switch), including: championing CI/Lean by creating a sense of urgency, informal networking among staff members to facilitate their adaptability, and actively synthesizing and transferring knowledge and learnings between teams and units (Floyd and Wooldridge 1997; Wooldridge et al. 2008). In turn, by facilitating the adaptability of their staff as well as synthesizing and transferring knowledge between teams and units, the responsibility and autonomy of employees is increased throughout the organization (Bhasin 2012b; Fryer et al. 2013; Martinez-Jurado et al. 2013).

As Figure 2.1 also suggests, three social mechanisms co-create the (from a managerial perspective) preferred outcome, that is, CI/Lean is embraced and practised throughout the organization (Bhasin 2011; Mann 2009). The potential noise in this CMO framework involves the effect that an increased level of responsibility and autonomy to act (of 'subordinate' staff) can have on middle managers: they may feel increasingly exposed to a parallel hierarchy (e.g. Holden and Roberts 2004; Psychogios et al. 2009). In Figure 2.1, we hypothesize that the latter perception has a negative effect on the key outcome pattern (this

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<sup>2</sup> The CMO frameworks outlined in Figures 1 and 2 are structured in terms of contextual conditions, social mechanisms, and outcome patterns. Notably, we depict the social mechanisms with an explicit description of the agents (i.e. middle managers) activating these mechanisms and/or the people affected by these mechanisms (cf. Van Burg and Romme 2014).

effect is represented by a dotted arrow). The significance of this ‘parallel hierarchy’ effect on the CI/Lean culture depends on how large this group of middle managers is (relative to the entire population of middle managers in the incumbent organization) and how strong this perception of a parallel hierarchy is.



**Figure 2.1 Implementing CI/Lean as an integral management approach**

Solid arrows refer to positive effects and dashed arrow refer to negative effects

The second CMO framework starts from the contextual condition in which top managers initiate and implement CI as a cost cutting program (Basu and Ahmed 2012; O’Rourke 2005). Figure 2.2 provides an overview of this framework. This contextual condition obviously triggers the mechanism of anxiety and insecurity, or more specifically, it makes many people in the organization, including (some) middle managers, afraid of losing their jobs (Cudney and Elrod 2011; Pepper and Spedding 2010). Unlike the integral approach previously discussed, a focus on cost-cutting at the top level is also likely to motivate middle managers to avoid any other contribution than the minimum required by top management (e.g. get staff members enrolled in the Lean training sessions); in other words, middle managers do not (learn to) continually switch between different roles and contributions to the CI/

Lean process (cf. Floyd and Wooldridge 1997; Wooldridge et al. 2008). We also assume that increasing levels of insecurity and anxiety about one's job further reinforce the middle manager's inability to combine and switch between different roles.

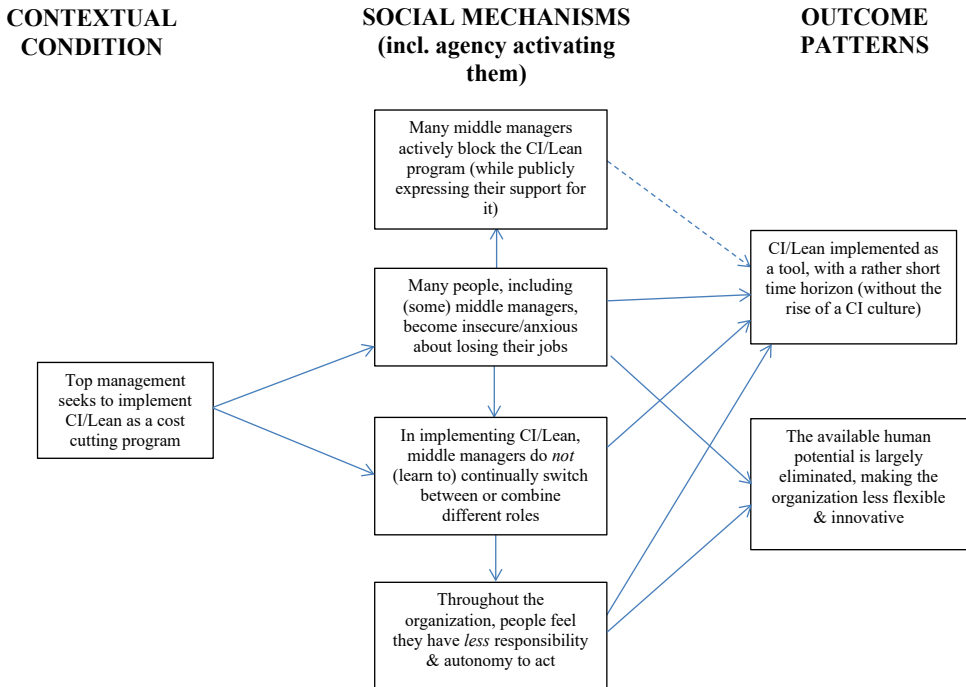
The latter mechanism, in turn, negatively affects the sense of responsibility and autonomy that people throughout the organization have (Caughron and Mumford 2011; McCann et al. 2008). Moreover, if middle managers feel their own jobs are at risk, they are likely to actively block the CI/Lean program, although they may publicly endorse it (Denham et al. 1997; Huy 2011).

In the CMO framework in Figure 2.2, we assume that three social mechanisms positively affect two primary outcome patterns: implementation of CI/Lean as a tool with a short time horizon, without the rise of a CI culture (Bhasin 2012b; Gurumurthy and Kodali 2011; Mann 2009; O'Rourke 2005) and elimination of most, or all, of the available human potential (Huy, 2002; Chen et al. 2010). In Figure 2.2, we also hypothesize that any attempts by middle managers to block the intended changes will negatively affect the implementation of CI/Lean as a tool (cf. Denham et al. 1997; Tippman et al. 2013), that is, these attempts undermine CI/Lean as a quick fix. Compared to the CMO framework in Figure 2.1, the outcomes in Figure 2.2 are twofold. Theoretically, the two outcome patterns can co-exist, but one outcome pattern can also prevail over the other—contingent on the strength and interplay of the cause-effect relationships hypothesized in this Figure.

Our synthesis of the literature is outlined in the frameworks in Figures 2.1 and 2.2. Each framework assumes that top management consistently seeks to implement a particular (archetypical) philosophy of CI/Lean, as either an integral management approach or a cost-cutting strategy. Each of the two frameworks in itself reflects some of the key tensions and challenges arising from any CI/Lean change effort, especially for those in middle management positions.

But CI/Lean changes are more challenging and complex than the causal relationships represented in Figures 2.1 and 2.2. In fact, the CMO patterns in these two figures tend to co-exist in practice, because of major gaps and inconsistencies between what many top managers say they want and what they actually want (e.g. Argyris 2004; Van Maanen and Barley 1984). This gap between the purpose and values of CI/Lean espoused by top management and those actually being pursued may create a rather hybrid organizational reality: that is, CI/Lean is often initially framed as an integral approach, to be implemented for the long-run, but then quickly ends up being (perceived by many as) a cost-cutting program initiated to accomplish short-term results. Organizational reality thus tends to be more messy than what each figure separately would imply.





**Figure 2.2 Implementing CI/Lean as a cost-cutting program**

Solid arrows refer to positive effects and dashed arrow refer to negative effects

## 2.5 Discussion and Conclusion

Efforts to implement CI and Lean are characterized by high failure rates (Taleghami 2010; Holmemo and Ingvaldsen 2016). The body of knowledge in this area is remarkably thin, and we therefore reviewed the literature to develop a framework for studying key aspects of the role of middle managers in CI/Lean practices. Our findings underline the strong need for studies that provide insight into the complexity of organizational change initiatives such as CI and Lean, and particularly how to manage and lead these changes.

The two CMO frameworks developed in this paper help to unravel the enormous complexity of CI/Lean change efforts. In this respect, CI programs are often initiated by managers referring to ‘sustained improvements’, ‘cultural changes’ and similar terms, but often end up as a quick fix of problems without a deliberate effort to create and maintain the conditions needed (Bhuiyan et al. 2006; Snee 2010). Studies in both industrial and service-oriented organizations demonstrate that any (initial) results arising from such projects are often not sustained over time (Found and Harvey 2006), amongst others because these organizations strongly focus on tools and thus insufficiently secure changes in the actual behavior of employees and managers (Womack and Jones 1994).

Overall, the role and influence of middle management within CI appears to be under-researched (Holmemo and Ingvaldsen 2016; Manville et al. 2012), which is remarkable because middle managers appear to be key agents in facilitating CI/Lean initiatives and, more broadly, striking a balance between organizational change and continuity. In many corporate settings, top managers often expect their middle managers to engage in the ‘triangle’ of leading change, implementing change and changing their own behavior, which gives rise to many tensions and possibly makes them actively block and resist change. To support middle managers in handling this triangle of roles and challenges, top managers would need to lead by example, which is a major challenge in itself, given the volatility at top management positions as well as shareholder pressure (e.g. towards cost-cutting) in many organizations.

Our review and synthesis of the literature on CI/Lean and middle management draws on a mechanism-based approach and results in two CMO frameworks. Each CMO framework assumes that top management consistently seeks to implement a particular (archetypical) philosophy of CI/Lean, as either an integral management approach or a cost-cutting strategy. We have also argued that organizational reality often is more complex and ambiguous, due to inconsistencies between what top managers say they want and what they actually want. This implies that the CMO patterns outlined in Figures 2.1 and 2.2 often co-exist and overlap. As such, future work in this area will need to test the bundle of hypotheses arising from each figure, but also explore and assess the interaction between the two bundles of causal patterns in settings in which the two contextual conditions of Figure 2.1 and 2.2 appear to co-exist.

This has important implications for future research. In-depth case studies can capture some of the dynamic complexity implied by Figure 2.1 and 2.2. But, any attempt to further investigate and disentangle these causal relationships may be best served with an experimental vignette approach (Atzmüller and Stiener 2010). Especially in complex situations, vignettes can be used to control for various conditions and variables, while offering each participant in the study (e.g. middle manager) a case vignette that to a large extent reflects authentic organizational settings s/he has been confronted with (Wason et al. 2002). Obviously, responding to hypothetical scenarios maybe less confusing and threatening for many participants than the reality of their own organization. As such, experimental vignette studies may be instrumental in validating and further developing the causal relations and patterns hypothesized in the two CMO frameworks presented in this paper.

The CMO frameworks developed in this article are not limited to a particular type of organization or industry, also in view of the broad set of studies (cutting across various industries and types of organizations) we reviewed. Future work can test the validity of these frameworks and possibly also serve to develop context-specific frameworks for a particular type of organization or industry.

Also, future research can explore the role and influence of national culture (Hofstede 1980; Hofstede 1988). on efforts to implement CI/Lean. The national cultural dimension has not

been addressed in this study. Thus, future work should explore the role of national culture in each of the two CMO frameworks as well as how cultural dimensions affect the co-existence and interaction between the two frameworks. A related avenue to pursue in future work is to apply Mintzberg's notions of deliberate versus emergent strategy (Mintzberg 1987a; Mintzberg 1987b) to CI/Lean changes. In this respect, an interesting research question is whether certain (e.g. uncertainty avoiding) cultures better enable top and middle managers to deliberately introduce and implement CI in their organizations, whereas other (e.g. uncertainty tolerant) national cultures possibly provide more fertile conditions for emergent strategies toward CI.

One key limitation of this review is the assumption that the adoption of Lean can be beneficial to any organization. This may be a problematic assumption, one that has been contested (Delbridge et al. 2000; McCann et al. 2015). Future work therefore needs to explore whether the assumed benefits of Lean are substantial or merely rhetorical. Another limitation of most literature we reviewed is the (often implicit) assumption that CI/Lean initiatives involve programmatic changes. Successful changes require top and middle managers to constantly challenge and adjust the program to make sure the change delivers the desired results (Oakland and Tanner 2007). In this respect, an additional reason for unsuccessful transformation toward CI/Lean may be that there is no, or limited, management of the change process during the transition (Nordin et al. 2012). A final limitation of the literature review and synthesis in this paper is that we did not explicitly address the theoretical and philosophical foundations of the Context-Mechanism-Outcome approach used (Denyer et al. 2008; Van Burg and Romme 2014).

To conclude, CI/Lean is a particular effort toward organizational change that many organizations engage in, but often without success. The failure of these change attempts has been attributed to poor leadership, and particularly the role of middle managers in facilitating and sustaining change. Our review indeed demonstrates that leadership by top managers is important in creating a sense of urgency regarding the need for an organizational culture of continuous improvement, but middle managers also play a pivotal role. The latter role is not an easy one, because middle managers have to change their own mindset and behavior and lead by example, in order to create and sustain changes in the entire organization (Dahlggaard and Dahlggaard-Park 2006; Snee 2010). The success of CI/Lean thus largely depends on the managers responsible for initiating and implementing the method, including middle managers (Holmemo and Ingvaldsen 2016; Fine et al 2008). As culture and values are to a large extent driven by top management, the role and behavior of these managers constitutes the most critical condition for effectively implementing CI (Mann 2009; Snee 2010).

The review study conducted in this chapter served to develop a mechanism-based framework that helps to understand the complexity of the role that middle managers play in facilitating and promoting CI/Lean. This theoretical framework is synthesized from the existing body of evidence, but also raises many questions to be addressed in subsequent work.







A Vignette Study of Middle  
Managers' Responses to  
Continuous Improvement  
Initiatives by Top  
Management

To better understand why continuous improvement (CI) initiatives often fail and do not result in sustained changes, this paper investigates how management's conceptualization of a continuous improvement program affects its implementation via middle managers. The study serves to identify the differences in outcomes of CI initiatives arising from implementing CI as an integral management versus an efficiency-improvement approach. This research draws on a vignette study (i.e. scenario experiment) with 107 middle managers working at one of the largest financial institutions in the Netherlands. The findings arising from this study suggest that CI is more likely to be adopted into the organizational culture, enhance the customer orientation among employees and improve the work atmosphere, when it is implemented as an integral management approach rather than as an efficiency-oriented program.

An earlier version of this chapter has been published as: Hermkens, F.J.A., Dolmans, S.A.M. and Romme, A.G.L. (2019). A Vignette Study of Middle Managers' Responses to Continuous Improvement Initiatives by Top Management. *International Journal of Business and Social Science*, **10**, pp. 100-115.

### 3.1 Introduction

Changes within and around organizations are the order of the day (By 2005), for example, those arising from the need to (often simultaneously) reduce cost, improve quality, decrease time-to-market lead times, and enhance flexibility (Lasrado 2018; Oakland and Tanner 2007; Shafiq et al. 2019 ). In addition, financial service providers increasingly have to deal with a growing amount of legislation and regulations. This creates additional pressure on the existing resources and an increasing need to deploy them efficiently (Banerjee and Mio 2017; Hancock and Dewatripont 2018). In many organizations, top management seeks to address these major challenges by initiating changes toward Continuous Improvement (CI) – an organizational *culture* in which all members contribute to performance improvement by continuously implementing minor or major changes in their work processes (Hellsten and Klefsjo 2000; Holmemo and Ingvaldsen 2016).

However, achieving a sustained organizational practice of CI proves to be rather difficult (Glover et al. 2015; McLean et al. 2017; Pearce and Pons 2017). In this respect, creating a CI culture that is sustained over many years requires the commitment, involvement and leadership of the entire management of the organization (Dahlgard and Dahlgard-Park 2006; Snee 2010). While top management is responsible for initiating and stimulating a cultural change to support the CI principles throughout the organization (Al-Najem et al. 2012; Mann 2009), middle management has a highly critical role in implementing CI throughout the organization, by acting “as a cornerstone between top management and bottom line workers” (Al-Najem et al. 2012, p. 119). Middle managers’ position and knowledge about what motivates the employees in their unit or department allows them to increase the likelihood of realizing change (Buick et al. 2018; Engle et al. 2017; Floyd and Wooldridge 1992; Huy 2011), in particular by facilitating sustained changes (Fine et al. 2008) that is making middle managers key agents in renewal efforts such as implementing a CI strategy (Collis 2016; Floyd and Lane 2000; Jayaram et al. 2008; Rahman et al. 2010).

Although CI programs are typically initiated by referring to ‘sustained improvement’ and similar terms, they often end up as a quick fix for problems without a deliberate effort to create and maintain the conditions needed (Bhuiyan et al. 2006; Snee 2010). Top management may initially pursue CI as a long-term integral management approach, but may frame targets so as to establish short-term cost-cutting results (cf. McCann et al. 2015). Indeed, in practice, there is often a discrepancy between what top managers say they want and what they actually want (e.g. Argyris 2004; McCann et al. 2015; Van Maanen and Barley 1984). This gap between the purpose and values of CI espoused by top management and those actually being pursued may then result in an almost conflicting organizational reality. In this context, middle managers are facing rather challenging conditions when their top management sets out to develop a culture of CI. These conditions include the ambiguity around the broader aim of the CI program and what top management expects from them. To better understand why CI initiatives often fail to result in a sustained cultural change,



this paper seeks to understand *how top management's conceptualization of a CI initiative affects the way middle managers perceive and act upon the initiative.*

To examine the effect of different ways of conceptualizing a CI initiative within the organization, this study draws on a random experiment with 107 middle managers of a large bank in the Netherlands. As part of this study, the managers evaluated a vignette: a description of the implementation of a CI project within the bank, with some deliberate manipulations. Half of the managers received a vignette describing a CI initiative to be implemented as an integral management approach and the other half received a vignette of a CI initiative to be implemented as an efficiency program. The experiment reveals that when CI is implemented as an efficiency program it is less likely to be adopted into the organizational culture, whereas implementation of CI as an integral management approach is more likely to result in a customer-focused culture with a better work atmosphere. The remainder of this chapter is structured as follows. First, this paper describes the theoretical background of this study. The subsequent section covers the experimental research design, followed by the results. Finally, the main findings are discussed and conclusions are drawn.

### **3.2 Theoretical Background**

A large number of studies on CI have focused on the sustainability of its implementation (Bhuiyan et al. 2006), including critical success factors (Achanga et al. 2006; Sim and Rogers 2009), pitfalls (Chen et al. 2010; Gurumurthy and Kodali 2011), culture (Angelis et al. 2011; Bhasin and Burcher 2006) and lean leadership (Mann 2009; O'Rourke 2005). Top management appears to have an important role in the successful implementation of CI (Jørgensen et al. 2003; Kaye and Anderson 1999). In this respect, top management is responsible for creating a change-oriented culture and adopting new organization-wide ways of working. Hence, top management should stimulate a cultural change to support the implementation of CI principles throughout the organization (Mann 2009; Snee 2010). Yet, when top management (perhaps unintendedly) generates ambiguity around the broader aim of the CI program, for example by setting short-term efficiency targets, the implementation of the CI program may fail to reach its intended (sustainable) cultural change. In particular, middle managers may interpret the initiative as a cost-cutting exercise, undermining the necessary cultural change.

The remainder of this section serves to develop three hypotheses about how framing by top management may influence the way in which middle management acts upon CI initiatives. These hypotheses address three key dimensions that reflect how middle managers perceive and act upon CI initiatives, namely organizational culture, customer focus and work atmosphere. This paper focuses particularly on these dimensions, because these are vital and critical aspects for implementation of CI programs (e.g. Achanga et al. 2006; Angelis et al. 2011; Cudney and Elrod, 2011).

### 3.2.1 Organizational Culture

Managers in many organizations are increasingly aware of the fact that the introduction of CI is not a quick fix. In this respect, CI practices such as Lean have recently become more mature and professional in nature (Aloini et al. 2011; Hines et al. 2018; Rother 2010). While CI's initial focus was on improving efficiency, CI methods have evolved towards an emphasis on changing the organizational culture (Basu and Ahmed 2012; Heine et al. 2016). CI programs such as Lean are about reducing waste and non-value adding activities in the entire organization but also about changing the corporate culture (Bhasin and Burcher 2006; Chen et al. 2010). The cultural change is typically one of the biggest challenges in implementing CI (Bessant et al. 1994; Lacksonen et al. 2010). We consider the organization culture to be CI oriented when (a) all managers act as role models in continuous improvement by demonstrating commitment as well as by creating a sense of urgency about doing things differently, and (b) everyone in the organization is intrinsically committed to reducing waste and improving quality in the entire organization. As Dahlgaard and Dahlgaard–Park (2006) stated, creating such a culture is not a quick fix. To create a CI culture, commitment of workers is essential (Angelis et al. 2011; Kaye and Anderson 1999).

It is therefore important that CI is conceptualized as an integral management approach (Bhasin and Burcher 2006), thereby ensuring top management's structural commitment towards CI as an integral part of the way the organization is organized and managed. This top management commitment can be regarded as conditional for creating a cultural commitment towards CI among workers (Angelis et al. 2011; Bessant et al. 2001). In addition, top management is responsible for creating a change-oriented culture and adopting new organization-wide ways of working. Hence, top management should stimulate a change in mindset and behaviour to support middle management in getting CI principles adopted throughout the organization (e.g. Mann 2009; Snee 2010).

However, cultural and behavioural changes at the managerial level are often difficult to accomplish, because there is a strong tendency among (both top and middle) managers to focus on tools and techniques and there is too little focus on knowledge transfer (Hines and Butterworth 2019; O'Rourke 2005; Zarbo 2012). Most organizations do, however, not (sufficiently) consider the people component in change (Hines and Butterworth 2019). As such, their focus is mainly on process (efficiency) improvements (Ramakrishnan et al. 2009). This makes it hard to sustain the improvements, once they are implemented (McLean et al. 2017; Rentes et al. 2009).

In this respect, Bhasin and Burcher (2006) observed that successful implementation involves viewing CI practices as a long-term journey and making cultural changes to support these practices throughout the entire organization. These cultural changes involve, for example, a shift toward more experimentation, creating a learning environment and more customer focus. As such, top management needs to promote a culture of CI by demonstrating management commitment as well as by creating a sense of urgency about doing things differently (Al-Najem et al. 2012; Boyle et al. 2011; Snee 2010), which serves to create

the conditions for middle management to engage in quality and process improvements in an early stage and embed the latter in the organization's operations (Balding 2005; Davis and Fisher 2002). An empirical study by Mann (2005) suggests that the success rate of CI implementation efforts is for about 80 percent determined by cultural factors, and the remaining 20 percent involves the tools and processes of CI themselves.

Overall, one of the biggest challenges in implementing CI is the required cultural change. This cultural change is more likely to come about when top management adopts a long-term integral approach, rather than a short-term focus (e.g. on implementing a tool). Moreover, commitment of workers appears to be essential for creating a CI culture, and middle management evidently plays a pivotal role in creating and sustaining this commitment. This leads to the following hypothesis:

*H1: When CI is implemented as an integral management approach rather than an efficiency improvement program, it is more likely that middle managers perceive CI to become better integrated in the organizational culture.*

### **3.2.2 Customer Focus**

Focus on the customer is essential to any business (Bodine 2011; Madhani 2017; McGinn 2011). This customer focus can be obtained by CI practices such as Lean, which have a strong focus on customers and eliminating waste (Andrés-López et al. 2015; Hines et al. 2011; Womack and Jones 2005). CI programs can help to analyse and identify customer needs (Hirzel et al. 2017). Nowadays, customers are demanding products and services of high quality and with top service delivery and low prices, while at the same time demanding that organizations constantly surpass their customers' expectations (Azuan and Ahmad 2013; Bicheno 2008). As a result, many companies need to develop a sense of urgency about customer focus among their workers and managers (Gulati and Oldroyd 2005; Parasuraman et al. 1991; Vandermerwe 2004). Standardizing services and increasing reliability in service through optimized processes can improve efficiency and increase competitiveness (Carlborg et al. 2013; Van Dun and Wilderom 2016). By using Lean and other CI methods, organizations learn to focus on aspects such as creating customer value and improving customer satisfaction (Aarnio 2015; Bhamu and Singh Sangwan 2014; Womack and Jones 2005).

Besides the focus on customers, the pursuit of efficiency is an important point for all businesses (Van Dun and Wilderom 2016), including financial institutions (Duncan and Elliott 2004). At the same time, there are also studies that show an increase in efficiency in services often implies a decreasing customer satisfaction and, in turn, lower levels of financial performance (Anderson et al. 1997; Duncan and Elliott 2004). This is in line with the widespread usage of Lean-oriented CI programs that strongly emphasize internal flow efficiency, which in turn may negatively affect customer satisfaction (Carlborg et al. 2013). Also, previous research shows that if there is a conflict between cost efficiency and customer

satisfaction, top managers tend to prefer cutting cost (Parasuraman 2002). The pressure to cut costs as well as sustain or grow a unit's performance (e.g. productivity or customer satisfaction) may undermine middle managers' efforts and commitment to implement CI (Sim and Rogers 2009; Stoker 2006).

However, the service industry can benefit from the implementation of CI programs such as Lean by increasing organizational competitiveness and customer satisfaction and reducing process variability and waste (Andrés-López et al. 2015). As such, many organizations have been exploring ways to improve their business, for example by providing better services against lower cost levels and improving customer satisfaction (Bhuiyan et al. 2006; Snee 2010). The role of middle management in Lean and other CI practices arises from what top management aims to accomplish (Bhasin 2011; Bhasin and Burcher 2006). Lean programs intended to cut costs often end up as a quick fix with a lack of customer focus (Bhasin 2011, 2012; Bhuiyan et al. 2006). By contrast, organizations embracing Lean as an integral approach toward CI tend to perform better (Bhasin 2011). In sum, this gives the following hypothesis:

*H2: When CI is implemented as an integral management approach rather than an efficiency-improvement program, middle managers expect people in the organization to become more focused on customers.*

### **3.2.3 Work Atmosphere**

Implementing CI may provide opportunities to workers in the organization to participate in improvement programs and enhance their job scope (Angelis et al. 2011). When a CI program is implemented, it is essential to take care of (balancing) the wellbeing of employees as well as the performance of the entire organization (Basu et al. 2015). Middle management has to feel supported and a long-term horizon needs to be adopted (Heine et al. 2016; Netland 2016). In this respect, when implementing CI, middle managers need to be empowered to act (Nelson and Yeo 2012; Song et al. 2014).

When top managers seek to implement CI as an integral management approach, middle managers may feel more secure, enabling them to better coach and support their staff (McQuade 2008) and facilitate knowledge transfer about CI (Caughron and Mumford 2011; Vänje and Brännmark 2017). As such, middle managers can increase the skills and knowledge of the entire workforce and stimulate workers to develop themselves (Lam et al. 2015; Poksinska et al. 2013; Van Assen 2018). In other words, middle managers can adopt a learning mindset and stimulate employee participation (Buick et al. 2018; Delizonna 2017; Vänje and Brännmark 2017).

However, when CI is implemented as an efficiency improvement program, several studies have observed that organizations may go too far in their optimization efforts, for example by eliminating all the available human potential, resulting in an organization-wide aversion of CI methods (Chen et al. 2010; Sim et al. 2015). While systematic waste elimination may

improve performance, it also increases the work load and the intensity of work (Angelis et al. 2011; Basu et al. 2015). This can, in turn, result in managers feeling extremely stressed as well as in lower levels of productivity (Cascio 1993; Harrington and Williams 2004).

In this respect, middle managers have been observed to actively block empowerment, in attempts to preserve the power and status they felt was being reduced or lost (Denham et al. 1997). Empowerment of employees may cause anxiety among middle managers when they can no longer control decisions made at lower levels and when formal communication channels are being rearranged. As such, the increased level of responsibility and autonomy to act among the 'subordinate' staff may make middle managers feel increasingly exposed to, and threatened by, a so-called 'parallel hierarchy' (Holden and Roberts 2004; Psychogios et al. 2009).

Moreover, top managers evidently appear to have an important role in empowering and supporting their middle managers in ways that enhance confidence and efficacy in fulfilling their new role (Song et al. 2014; Tippman et al. 2013). When top management implements CI as an integral approach, it can be expected that middle managers are more likely to focus on developing their skills and knowledge (to transform themselves) as well as those of their subordinates, as opposed to implementing CI as an efficiency program, where the focus may be too much on downsizing, resulting in lower employee morale. These arguments lead to the third hypothesis:

*H3: When CI is implemented as an integral management approach rather than an efficiency-improvement program, middle managers expect that the work atmosphere becomes better.*

### **3.3 Method**

To investigate the potential causality between top management's rationale of CI and how middle managers perceive and act upon the initiative, the Experimental Vignette Methodology (EVM) is used with participants from one of the largest banks in the Netherlands. The EVM is adopted because a vignette offers a hypothetical situation that resembles a real-life organizational setting, and thus avoids some of the disadvantages arising from other research methods such as surveys and case studies. In a traditional survey, the links between different aspects that influence opinion formation are not clear, so the research results become less valid (Alexander and Becker 1978; Schoenberg and Ravidal 2000).

In EVM, a specific and as detailed as possible hypothetical scenario is sketched, which participants can go through (largely) unbiased. This will reduce the chance of socially desirable answers (Alexander and Becker 1978). The main added value of an EVM-based study is its explanatory power. In this respect, the participant does not give his/her opinion on isolated aspects but on an integrated description of the situation (Atzmüller and Stiener 2010; Jenkins et al. 2010).

More specifically, a vignette is “a short, carefully constructed description of a person, object or situation, representing a systematic combination of characteristics” (Atzmüller and Stiener 2010, p. 128). By using vignettes, in which a concrete and detailed hypothetical scenario is outlined, the participants can go through a decision making process in a realistic and unbiased manner. When the text of the vignette is compiled in such a way that the participant is included in the story, the questions to be asked are less personal and therefore less threatening (Barter and Renold 2000). This reduces the chance that participants give short-sighted and socially desirable answers (e.g. Barter and Renold 2000; Wilks 2004). Moreover, by exposing the participants to an environment that feels natural to them, EVM serves to resemble daily practice as closely as possible (Aguinis and Lawal 2013).

Based on one of the authors’ extensive professional experience at banks, a hypothetical scenario of a bank was prepared, called “The Piggy Bank.” As part of the experiment, all participants received the base case scenario in which they work as a manager at “The Piggy Bank”, involving a vignette that contains a short description of the change program “GOLD”, aimed at implementing CI in this bank. The description of the exact aim of the “GOLD” program was slightly altered to create two situations: vignette 1 focused more on implementing CI as a management approach and vignette 2 on the implementation of CI as an efficiency program (see Figure 3.1).

### 3.3.1 Sample

To obtain participants for the experiment, one of the authors contacted program managers (involved in CI changes) and management team members of the various business lines within the bank to construct a list of the names and business e-mail addresses of all middle managers. This resulted in a total number of 474 potential participants. Each of these middle managers received an e-mail including a password-protected link to the online environment. The unique login information ensured confidentiality of both the vignette and the middle managers response. All participants were randomly assigned to one of the vignettes. The participating middle managers were asked to provide the following personal information: gender, age, business line, reporting line, level of education, years of experience at the bank, years of experience at current department, and years of experience with continuous improvement. Table 3.1 provides descriptive information on the sample of middle managers participating in this study.

**Table 3.1 Sample**

<i>Sample</i>	<i>Mean/ Frequency</i>
<b>N</b>	107
<b>Male</b>	72 (67.3%)
<b>Female</b>	35 (32.7%)
<b>Mean age (in years)</b>	47.27
<b>Experience (in years)</b>	
0-2	3 (2.8 %)
3-5	2 (1.8 %)
6-10	7 (6.5 %)
>10	95 (88.8 %)
<b>Experience in department (in years)</b>	
0-2	47 (43.9 %)
3-5	31 (28.9 %)
6-10	20 (18.7 %)
> 10	9 (8.4 %)
Mean experience with CI (in years)	3.4
<b>Highest degree</b>	
Postgraduate	6 (5.6 %)
Master	37 (34.6 %)
Bachelor	58 (54.2 %)
MBO	2 (1.9 %)
High school	4 (3.7 %)

The sample of participants included 72 male (67.3%) and 35 female (32.7%) managers, ranging in age from 33 to 64 (M = 47.3). On average, the participants had 3.4 years of experience in working with CI. In terms of work experience, 95 (88.8%) participants had more than ten years of experience. In terms of the highest level of education obtained, 6 managers hold a postgraduate degree (5.6%), 37 hold a master degree (34.6%) and 58 have a bachelor degree (54.2%).

### **3.3.2 Scenarios**

The information in the overall scenario was the same for each participant (see appendix 1). The vignettes were altered at different points regarding use of words and the sequence of the enumeration of goals to be achieved with the “GOLD” program. The two CI implementation strategies are extensively explained in the Introduction section, as the two archetypical top management strategies toward CI. The integral management approach is the strategy that is consistent with CI, but top management often ends up using CI as a quick fix for financial/efficiency problems, without a deliberate effort to create and maintain the conditions needed. Methodologically, a vignette experiment requires the development of

two straightforward conditions that can be clearly distinguished from each other. As a result, we decided to create a black/white contrast between the two top management approaches to CI.

**Vignette A**

Within the context of continuous improvement, there is special attention for the implementation of a mentality change throughout the organization. The top management of Piggy Bank considers the implementation of the GOLD program as an investment in the vitality and performance of the organization. Therefore, it aims to initiate a substantial culture shift. The top management expects that the cultural change will increase customer satisfaction, involve employees and increase the profitability of the organization in the long term.

**Vignette B**

Within the context of continuous improvement, there is special attention to efficiency improvement throughout the organization. During the implementation of the GOLD program, several resources and tools have been handed to the organization in order to achieve this. The top management of The Piggy Bank considers the implementation of the GOLD program as an investment that contributes to the optimization of departments and chains. Therefore, it aims to realize process improvements that will result in cost reductions. The top management expects that the efficiency improvement will increase customer satisfaction, involve employees and increase the profitability of the organization in the long term.

**Figure 3.1 Used Vignettes**

A comparison of the characteristics of middle managers over the two vignettes serves to check the random assignment of the middle managers to these vignettes. Table 3.2 shows the means, standard deviations and t-tests for the two groups. No statistically significant differences exist between the two groups that were assigned a different vignette, indicating that randomization has its desired effect.

Furthermore, to ensure that the scenario and vignette would reflect a realistic situation, the research team pre-tested the experiment. This test included eight employees of the bank participating in the vignette study and four employees of other large banks where a similar CI program was introduced. Based on their feedback, both the scenarios and vignettes were further refined and some questions were altered to better ensure the anonymity of the participants. In addition, the term ‘middle manager’ was replaced with ‘manager’ since all participants are middle managers.



**Table 3.2 Check of randomization**

<b>Treatments</b>	<b>Integral</b>	<b>Cost Cutting</b>
N	60	47
Gender	1.65 (0.48)	1.70 (0.46)
t-value		0.57
Age	48.25 (6.66)	46 (6.46)
t-value		0.08
Education	4.37 (0.78)	4.36 (0.79)
t-value		0.97
Years at organization	3.87 (0.50)	3.74 (0.71)
t-value		0.32
Years at department	2.03 (1.04)	1.77 (0.89)
t-value		0.16
Years of improvement experience	3.47 (1.65)	3.36 (1.85)
t-value		0.76
Type of department	2.47 (1.20)	2.66 (1.36)
t-value		0.44
Function level	4.15 (1.07)	4.09 (1.12)
t-value		0,76

### 3.3.3 Measures

The experiment includes seven questions (see Table 3.3) that aim to capture the outcome variables included in the set of hypotheses formulated in section 2. First drafts of these questions were discussed with several managers in the financial service industry, and adapted based on their feedback.

When participants replied to the questions on the basis of the received vignette, they had to make a choice based on a 5-point Likert scale (totally disagree – disagree – agree nor disagree – agree or totally agree).

**Table 3.3 Outcome measures**

<b>Outcome Measures</b>	<b>Questions</b>
<i>Permanent change culture</i>	I consider GOLD to be a program that results in a permanent change in our organizational culture.
<i>Integration CI culture</i>	I expect that GOLD results in the implementation and integration of continuous improvement within our culture.
<i>Adaptation to new culture</i>	Because of GOLD, I will steer the department toward achieving continuous improvement and the adaption to a new organizational culture.
<i>Fulfilling customer needs</i>	Because of GOLD, I focus on fulfilling customer needs.
<i>Steering on customer satisfaction</i>	Because of GOLD, I will steer the department toward customer satisfaction.
<i>Work atmosphere</i>	The work atmosphere will improve due to the implementation of GOLD.

### 3.4 Results

Table 3.4 reports the results of the vignette experiment. Consistent with several hypotheses, when CI is implemented as an integral management approach rather than an efficiency program, middle managers perceive CI to become more part of the organizational culture (H1) and they expect their company to become more focused on its customers (H2). Also, middle managers expect a significantly better work atmosphere (H3). The results of the statistical analysis of each hypothesis in Table 3.4 show that these effects are statistically significant (see P-values) and have a high F-value.

**Table 3.4 Experimental results**

	Treatments	Integral	Cost Cutting
	N	60	47
<b>Permanent change culture</b>	<b>Implementation type</b>	3.73	3.26
	SD	0.88	1.17
	P-value*	0.018	
	F-value	5.755	
<b>Integration CI culture</b>	<b>Implementation type</b>	3.68	3.13
	SD	0.83	1.05
	P-value*	0.004	
	F-value	8.932	
<b>Adaptation to new culture</b>	<b>Implementation type</b>	3.97	3.45
	SD	0.82	0.99
	P-value*	0.004	
	F-value	8.707	
<b>Fulfilling customer needs</b>	<b>Implementation type</b>	3.42	2.89
	SD	0.90	1.10
	P-value*	0.010	
	F-value	6.981	
<b>Steering on customer satisfaction</b>	<b>Implementation type</b>	3.72	3.30
	SD	0.90	1.08
	P-value*	0.035	
	F-value	4.589	
<b>Work atmosphere</b>	<b>Implementation type</b>	3.50	3.02
	SD	0.72	0.84
	P-value*	0.003	
	F-value	9.536	

\*(P<0.05)

### 3.5 Discussion and Conclusion

This study explores whether the way top management conceptualizes the rationale of the CI program affects how middle managers respond in getting CI adopted and implemented. In this respect, CI can be considered as a culture of sustained improvement in which all its members contribute to performance improvement by continuously implementing small changes in their work processes (Jørgensen et al. 2003).

The findings show that implementing CI as an integral management approach may result in better integration in the organizational culture, a more customer-oriented focus and a better work atmosphere, compared to implementing CI as a cost-cutting tool. This implies that a more integral approach can help to prevent that the organization ends up with 'just' another tool, with a rather short time horizon and without any substantial changes in culture and behavior (e.g. coaching and experimentation) toward CI (Dibia et al. 2014; Fryer and Ogden 2014; Mann 2009). These findings are discussed in more detail in the remainder of this section.

The main findings from this study provide evidence that, when CI is implemented as an integral management approach, middle managers may believe CI is more likely to be integrated into the organizational culture. This is an important finding because it suggests that embedding CI in the organizational culture contributes to the sustainability of CI in the organization (Mann 2005; O'Rourke 2005). This particular result of the vignette experiment is in line with previous research findings (Bhasin 2012; Bhasin and Burcher 2006). From a practical perspective, it means that top management's conception of CI as an integral management approach may have a positive effect on middle management's expectation that CI will be incorporated into the organizational culture in a sustained manner. And precisely the element of sustainability is often a major problem (Bessant et al. 1994; Found and Harvey 2006; Pearce and Pons 2017).

To survive in today's highly competitive market, a focus on customers is of great importance (Brettel et al. 2014; McFarlane 2013). Knowing what is happening and what customers' expectations are, ensures that one can adapt and connect to the ever-changing customer needs (Tomczak et al. 2018; Wiesner et al. 2015). The findings align with the idea that, if top management implements CI as an integral management approach, middle managers expect that their staff members become more customer-focused. This is important because one of the risks of many CI programs is that they mainly focus on internal efficiency instead of customer satisfaction (Fryer et al. 2007; Huang and Rust 2014).

In order to serve customers well, a good working atmosphere in the organization appears to be very important (Stock et al. 2017; Varghese et al. 2017). Previous studies have observed a negative association between CI and work atmosphere, due to the risk of job loss, more monotonous work and increasing peer pressure (McCann et al. 2008; Sim et al. 2015). The results of our study lead to more nuanced insights. In particular, middle managers may have less negative associations regarding the work atmosphere when CI is implemented as an integral management approach rather than a cost-cutting tool. Top management's

focus during the implementation of CI should thus be on securing ample opportunities for employee participation, development and growth (Angelis et al. 2011).

As such, it is better to create an optimal level of service productivity (Huang and Rust 2014), which often involves a trade-off between customer focus on the one hand and efficiency on the other. If this is done in a proper way, optimizing the operations will not only improve efficiency but also the service level to external customers (Radnor and Johnston 2013). Eventually, optimizing the operations will not only improve customer service but also improve the financial performance of the organization (Duncan and Elliott 2002; Swank 2003).

To further disentangle the complexity of CI change efforts, in-depth research needs to be done to establish how the interaction between top management and middle managers affects the implementation of CI. Here, the framework of Floyd and Wooldridge (1992; 1996), which combines upward and downward influence with behaviors that integrate and support strategies on one hand and diverge from the official strategy on the other, can be very helpful.

### **3.5.1 Limitations**

This study has a number of limitations. First, the randomized experiment in this study results in a stylized setting in which respondents are asked to make a choice based on limited information. One of the risks this entails is that respondents tend to judge situations or persons more rationally than they would normally do. Since the participants' judgements were simulated in hypothetical situations, one might question whether the results of such an exercise do accurately reflect authentic behavior. However, by using a traditional survey method, middle managers (as respondents to the survey) might give socially desirable answers regarding the implementation of CI (Steiner et al. 2016) and each respondent would refer to a possible different CI practice (even within the same organization), which does not allow the researcher to systematically compare different CI conditions and scenarios. In this respect, the vignette designed in this study provides a specific stylized situation for the participants that comes as close as possible to authentic situations they (may have) experienced in the past.

Second, although we took several measures to make the experiment as realistic as possible, we are aware that the description is not fully representative of a situation experienced by a middle manager in practice. This implies that our experiment is limited in its external validity (Roe and Just 2009; Schram 2005). Hence, we hope that future studies will serve to replicate or falsify our findings, in order to increase the validity of the emerging body of knowledge in this area.

Third, this study was performed within a single organization, which implies that the results may not be generalizable. Therefore, future work in this area needs to engage in replication and validation efforts regarding the results of this study in other financial service organizations as well as organizations in other industries.

Finally, vignettes are a valuable method for exploring the perceptions, beliefs and meanings of people about specific situations. However, participants in vignette studies may assess situations more rationally than they would do in reality. This makes it difficult to clearly establish the relationship between, for instance, belief and actions (Collett and Childs 2011). Further investigations of this relationship can be an interesting extension of research into middle management.

### **3.5.2 Conclusion**

The main findings of this study suggest that top management's conceptualization of the rationale of a CI program could influence the role of middle management in getting CI implemented. Middle managers thus appear to have an important role in the organization-wide implementation and adoption of CI. The results demonstrate some effect of how top management conceptualizes CI on the ways in which middle managers perceive CI being adopted in the organizational culture, and expect an increased customer focus and improved work atmosphere. The effect on middle managers' fear for their own positions is not supported.

A significant risk arising from CI initiatives is that most people in the organization perceive CI as another downsizing method focused on short-term financial targets, rather than the necessary deeper cultural change. The findings arising from this study give reason to assume that middle managers can help reduce this risk, but only if top managers commit themselves to CI as an integrated management approach and communicate this in a consistent manner, time and again, throughout the entire organization. However, in order to establish more definite conclusions about causal relationships in this area, more research should be done.







# An Exploratory Study of Middle Manager's Roles in Continuous Improvement



Floyd and Wooldridge have developed a model regarding the middle managers' contribution to strategic change. In this model, four strategic roles for middle managers are considered: Championing, Synthesizing, Facilitating and Implementing. Although there is a broad body of knowledge about the roles and influence of middle management in implementing strategy, insight in which roles are activated in CI initiatives is underdeveloped and highly dispersed. Therefore, in this study we seek to understand *which middle management roles (i.e. championing, synthesizing, facilitating, implementing) contribute to accomplishing CI?* To explore which of the four roles are activated when middle managers are confronted with a CI initiative, we developed a scenario experiment. Our findings indicate that some middle management roles appear to be of key importance in the context of CI initiatives, such as the implementing and synthesizing roles, while the facilitating and championing roles appear to be less relevant.

## 4.1 Introduction

Accomplishing continuous improvement (CI) in an organization is a challenging process and demands substantial organizational changes as well as commitment of the people involved (Drew et al. 2004). While most of these changes are initiated as sustainable improvement plans, they often end up as a quick fix without deliberate efforts to create and maintain the conditions needed (Bhasin 2011, 2012a; Bhuiyan et al. 2006; Snee 2010). Accomplishing CI thus requires a sustainable change in mindset and behavior among the organization's top and middle management (Mann 2009).

Creating a sustainable CI culture requires creating new ways of working (i.e. continuously improving operational processes) and it requires that CI is integrated as a core activity in the daily routines of the organization (Anicich and Hirsh 2017; Bateman 2005; Bateman and David 2002; Fine et al. 2008; Holmemo and Ingvaldsen 2016). Middle managers can be considered to be key agents in facilitating this kind of change and striking a functional balance between continuity and change (Embertson 2006; Guo et al. 2017; Huy 2002; Moss Kanter 1982). Their unique position between operational and top management and their knowledge about what motivates the employees in their unit or department (Huy 2001; Moss Kanter 1982) allows middle managers to enhance the chances of realizing sustainable change (Currie and Procter 2005; Engle et al. 2017; Floyd and Wooldridge 1992, 1997; Moss Kanter 1982). As accomplishing CI requires a controlled change strategy (Bhasin 2011, 2012a), middle managers can play an important role during this change as they can help to bridge the gap between top management and employees at the operational level (Ahearne et al. 2014; Gatenby et al. 2015; Kim et al. 2014; Likert 1961; Raes et al. 2011; Shi et al. 2009; Stoker and De Korte 2001). Their unique position and pivotal role makes middle managers important for strategical renewals (Floyd and Lane 2000; Osterman 2008; Raes et al. 2011; Wooldridge et al. 2008) such as CI (Collis 2016; Jayaram et al. 2008; Rahman et al. 2010). Middle managers translate top management strategy into operational activities and at the same time need to pay attention to problems on the shop floor on a daily basis (Anicich and Hirsh 2017; Currie and Procter 2005; Floyd and Lane 2000; Sims 2003).

With regard to middle managers' contribution to strategic change, a widely-cited model is that of Floyd and Wooldridge (1992, 1996, 1997), who link organizational performance directly to middle management. Floyd and Wooldridge (1992, 1996, 1997) define four strategic roles for middle managers: Championing, Synthesizing, Facilitating and Implementing. These four roles provide "a framework that combines upward and downward influence with behaviors that integrate and support strategies on one hand and diverge from official strategy on the other" (Floyd and Wooldridge 1996, p. 42).

Middle managers perform a downward support role by implementing deliberate strategy through the translation of objectives from top management into effective operational plans, and an upward influence role by synthesizing information for top management, thus filtering important strategic feedback upwards (Tarakci et al. 2018; Van Rensburg et al. 2014). Middle managers can also facilitate in a downward manner, in the search for new strategic

initiatives and adaptability by organizational experiments; and successful experiments can be championed upward to top management (Tarakci et al. 2018; Van Rensburg et al. 2014). In sum, middle managers' integrative role is important for organizational performance while the divergent role is more important for organizations that want to innovate (Floyd and Wooldridge, 1997). Although there is a broad body of knowledge about the roles and influence of middle management in implementing strategy, insight in which roles are activated in CI initiatives is underdeveloped and highly dispersed. Therefore, in this study we seek to understand *which middle management roles (i.e. championing, synthesizing, facilitating, implementing) contribute to accomplishing CI?*

To this end, we developed a scenario experiment to explore which of these roles are activated when middle managers are confronted with a CI initiative. Our findings indicate that some middle management roles appear to be of key importance in the context of CI initiatives, such as the implementing and synthesizing roles, while the facilitating and championing roles appear to be less relevant. The remainder of this chapter is structured as follows. First, we further explore CI initiatives and middle manager roles in the following section. We then describe our experimental method and procedure. After that, we report the results in which middle manager roles are likely to contribute to accomplishing CI. Finally, we discuss our findings and the implications for both theory and practice, followed by several conclusions.

## **4.2 Theoretical Perspective**

This study aims to enhance our understanding of Floyd and Wooldridge's middle manager roles in the context of CI initiatives. In this section, we further develop the theoretical background of this study.

### **4.2.1 Floyd and Wooldridge's Middle Management Roles**

Middle managers are crucial in connecting top management's vision to the shop floor (Ahearne et al. 2014; Heyden et al. 2017; Holmemo and Ingvaldsen 2016; Kras et al. 2017). Their involvement in the formation of strategy is thus associated with the improvement of organizational performance (Mair 2017; Ouakouak et al. 2014; Wolf and Floyd 2017). In this respect, there are two ways in which middle management involvement could enhance organizational performance: higher quality strategic decisions and more efficient implementation (Wooldridge and Floyd 1990).

Floyd and Wooldridge (1992, 1996, 1997) and Wooldridge et al. (2008) found four 'roles' through which middle managers can influence organizational performance. These roles (Floyd and Wooldridge 1992) are described as follows:

- **Championing strategic alternatives:** the middle manager engages in persistent and persuasive communication of proposals that either provide the firm with new capabilities or allow the firm to use existing capabilities differently.

- **Facilitating adaptability:** the middle manager encourages cross-functional problem solving, experimentation and idea generation, and creates arrangements that increase organizational flexibility.
- **Synthesizing information:** the middle manager derives strategic meaning from events, connects ideas to strategic issues, and sells issues to top management and others in the organization.
- **Implementing deliberate strategy:** the middle manager aligns the unit's actions with the firm's strategic intent.

These four roles (figure 4.1) provide “a framework that combines upward and downward influence with behaviors that integrate and support strategies on one hand and diverge from official strategy on the other” (Floyd and Wooldridge 1996, p. 42). Downward influence impacts the level in which the organization is aligned with the new strategy, whilst upward influence affects the opinion of top management on organizational circumstances and alternative strategic options. Divergent ideas are not in line with the organization's given strategy, whereas integrative ideas support the organization's strategic alignment (Floyd and Wooldridge 1996). Thus, depending on the organizational context, type of strategic change, issues faced by top management, and leadership style of top managers, as well as their personal disposition, middle managers can play one or more of these roles (Floyd and Wooldridge 1992, 1994, 1997; Floyd and Lane 2000).

		<b>Behavioral dimension</b>	
		<i>Upward</i>	<i>Downward</i>
<b>Cognitive dimension</b>	<i>Divergent</i>	Championing	Facilitating adaptability
	<i>Integrative</i>	Synthesizing information	Implementing deliberate strategy

Figure 4.1 Middle management's four strategic roles (Floyd and Wooldridge 1992, 1996; Jaoua 2016; Neto and Lavarda 2017)

Middle managers should be engaged with strategy implementation due to their structural positions in managing resources, providing information to decision makers and communicating strategic intent of top management throughout the organization (Salih and Doll 2013). Their integrative strategic behaviors entail implementing the deliberate organizational strategy by translating it to lower levels and synthesizing new information to top management regarding implementation (Floyd and Wooldridge 1992; Van Rensburg et al. 2014). Table 4.1 provides illustrations of the behaviors typical to each role.

**Table 4.1 Examples of middle management’s strategic influence activities in each strategic role (Floyd and Wooldridge 1997, p. 467)**

Upward	
Synthesizing information	Gather information on the feasibility of new programs Communicate the activities of competitors, suppliers, etc. Assess changes in the external environment
Championing	Justify and define new programs Evaluate the merits of new proposals Search for new opportunities Propose programs or projects to higher level managers
Downward	
Facilitating adaptability	Relax regulations to get new projects started ‘Buy time’ for experimental programs Locate and provide resources for trial projects Provide a safe haven for experimental programs Encourage informal discussion and information sharing
Implementing deliberate strategy	Monitor activities to support top management objectives Translate goals into action plans Translate goals into individual objectives Sell top management initiatives to subordinates

To conclude, middle managers play a significant role during change (Balogun 2003; Balogun and Johnson 2004, Floyd and Wooldridge 1992, 1997), and make a major contribution towards achieving of top management’s strategic ambitions (Balogun 2003; Currie and Procter 2005; Van Rensburg et al. 2014) by implementing top-level decisions and coordinating activities at the operational level (Floyd and Lane 2000).

#### **4.2.2 Continuous Improvement**

Continuous Improvement (CI) is one of the most frequently sought-after organizational change initiatives. CI can be defined as a culture of sustained improvement in which all members of the organization contribute to performance improvement by continuously realizing small changes in their work processes (Jørgensen et al. 2003). Not surprisingly, many organizations strive for CI in hope of improving performance, staying competitive and lowering costs (Bhuiyan et al. 2006; Nyhuis et al. 2010; Snee 2010). Many organizations

in financial services and other industries effect a strategy of CI to adapt to their changing environment (Bessant et al. 2001; Bhuiyan et al. 2006; Collis 2016).

Hernández and Mateo (2012) describe continuous improvement as an ongoing effort to continuously improve products, services or processes, which can be incremental over time or take the form of larger breakthrough improvements. Due to its popularity, CI practices such as Lean have developed and become more professional in recent years (Aloini et al. 2011; Hines et al. 2011; O'Rourke 2005; Rother 2010). While the initial focus was on cutting cost, CI methods have evolved towards an emphasis on changing the organizational culture (Basu and Ahmed 2012; O'Rourke 2005). In this respect, Dale (1996) describes CI as the means to enhance process performance on a continual basis. The primary focus of CI practices such as Lean is to eliminate activities that do not add customer value and simultaneously address value-adding activities (Cudney and Elrod 2011).

Yet, achieving sustainable improvement often proves to be difficult (Bateman 2005). CI initiatives have to be included in the organizational culture; otherwise they will fail (Bicheno 2008). As such, CI implementations such as Lean are less likely to be successful if one or more of the following conditions exist in the organization: the absence of a CI culture, short-term commitment (if any) among middle managers and employees, lack of knowledge transfer regarding CI, or too much focus on tools and techniques. In these conditions, the execution of CI practices is not likely to lead to any significant improvements in organizational behavior and performance (Atkinson 2010; Bhasin 2011, 2012a, 2012b; Cudney and Elrod 2011; Dahlgaard and Dahlgaard-Park 2006; Holweg 2007; Saurin et al. 2011). As such, the momentum of CI efforts often comes to a halt, after which the organization falls back into its established routines (Bateman and David 2002; Hines et al. 2018).

As a result, it appears that organizational culture is important to achieve a sustainable CI practice over time. Top management has to reinforce a culture of CI and make it successful through management and workers' involvement and active participation (Angelis et al. 2011; Boyle et al. 2011; McLean et al. 2017). If employees do not feel sufficiently involved, this can have a negative effect on the execution of CI (McLean et al. 2017; Van Assen 2016). Research shows that middle managers play an important role in enabling and sustaining change in organizations (Huy 2002). They can enable organizational change, because they may have value-adding ideas for making the organization better and tend to have a big informal network as well as detailed knowledge about what motivates each employee (Huy 2001, 2002; Moss Kanter 1982). Moss Kanter (1982) therefore argues that the success of any attempt to improve performance is directly related to the creative and innovative skills of the middle manager. By focusing on the role of the middle manager, an organization can make the implementation process successful (Found et al. 2009) and gain more sustainable results in terms of savings, customer satisfaction and reaching CI within the organization. Previous studies acknowledge the role of the middle managers in facilitating change into a lean organization and making it adhere.

But as Osterman (2008, p.2) stated: “Yet our understanding of middle management is remarkably thin, compared with research conducted on higher management”. Hence, more insight is needed to understand which middle management roles are likely to contribute to accomplishing CI.

### **4.3 Method and Procedure**

To investigate which middle manager roles may contribute (in particular) to achieving CI, we draw on an exploratory quasi-natural experimental design (Miles et al. 2014; Saunders et al. 2009), involving 107 middle managers working within a large bank. As part of the experiment, the managers were first asked to complete an existing self-test questionnaire (Floyd and Wooldridge 1996) to characterize their natural individual middle manager role profile. Subsequently, managers were asked to evaluate a realistic, yet fictitious scenario of a CI initiative by indicating how they perceived this initiative and what action they would take. This experimental setup allows us to explore which middle managers roles are most likely to contribute to achieving CI.

#### **4.3.1 Data Collection**

This experiment was carried out at a large bank in the Netherlands. The data was collected at the same time as the data collected for the study in Chapter 3. Based on the lead author’s extensive professional experience with banks, a hypothetical scenario of a bank, called “The Piggy Bank”, was prepared. As part of the experiment, all participants received the scenario in which they work as a manager at “The Piggy Bank”. The scenario describes top management’s request to the managers (participants) to implement the CI initiative “GOLD”.

#### **4.3.2 Sample Selection**

To obtain participants for the experiment, one of the authors contacted program managers (involved in CI changes) and management team members from the various business lines within the bank to construct a list of the names and business e-mail addresses of all middle managers. This resulted in a total number of 474 potential participants; this is the same group of participants as in Chapter 3. Each of these middle managers received an e-mail including a password-protected link to the online environment. The unique login information ensured confidentiality of their responses. The participants were asked to provide the following personal information: gender, age, business line, reporting line, level of education, years of experience at the bank, years of experience at current department, and years of experience with CI.

#### **4.3.3 Questionnaire Development**

To collect the experimental data, the authors made use of two lists of statements. The “Self-test of Middle Management Strategic Involvement Integrative Behavior” (Floyd and Wooldridge 1996) was used to capture middle manager roles. This is a validated list of

statements (see appendix 1) to determine the different roles of the middle manager. The middle manager can indicate on the basis of a 5-point Likert scale (never, rarely, sometimes, regularly or often) to what extent he or she has a preference for the activities mentioned. Second, based on the professional experience of one of the authors in working with various middle managers at a bank, we developed a questionnaire to capture the middle managers' perception of the CI initiative as well as their intended response or action (see appendix 2) with respect to e.g. culture, customer satisfaction, efficiency, role, job security, work atmosphere and top management support (De Waal 2018; Delizonna 2017; Netland 2016; Nguyen 2018; Sreedharan and Sunder 2018). To ensure that the experiment and the questionnaire reflect a realistic situation, the research team pre-tested the experiment. This test included eight employees of the bank participating in this study and four employees of other large banks where a similar CI program was introduced. Based on their feedback, the experiment was further refined.

#### **4.3.4 Characteristics of the Sample**

Table 4.2 provides descriptive information on the sample of middle managers participating in this study. The sample of participants included 72 male (67,3%) and 35 female (32,7%) managers, ranging in age from 33 to 64 ( $M = 47.3$ ). On average, the participants had 3,4 years of experience in working with CI. In terms of work experience, 95 (88,8%) participants had more than ten years of experience. In terms of the highest level of education obtained, 6 managers hold a postgraduate degree (5,6%), 37 hold a master degree (34,6%) and 58 have a bachelor degree (54,2%).



Table 4.2: Descriptive statistics of the sample

<i>Sample</i>	<i>Mean/Frequency</i>
<b>N</b>	107
<b>Male</b>	72 (67.3%)
<b>Female</b>	35 (32.7%)
<b>Mean age (in years)</b>	47.27
<b>Experience (in years)</b>	
0-2	3 (2.8%)
3-5	2 (1.8%)
6-10	7 (6.5%)
>10	95 (88.8%)
<b>Experience department (in years)</b>	
0-2	47 (43.9%)
3-5	31 (28.9%)
6-10	20 (18.7)
> 10	9 (8.4%)
<b>Mean experience with CI (in years)</b>	3.4
<b>Highest degree</b>	
Postgraduate	6 (5.6%)
University	37 (34.6%)
HBO	58 (54.2%)
MBO	2 (1.9%)
High school	4 (3.7%)

### 4.3.5 Experiment

The participating middle managers received a scenario in which they are a manager at ‘The Piggy Bank’. The scenario describes how The Piggy Bank is going through turbulent times. This bank’s top management wants to improve the cost-income ratio every year, but is facing stricter requirements of regulators; moreover, they want any changes not to come at the expense of customer satisfaction. At the same time, the (banking) world is not free from radical changes. In order to be able to cope with all these changes, top management aims to roll out the “GOLD” CI program in this bank, with the help of the manager (participant). As Chapter 3 indicates, the way of accomplishing CI (either as an integral management approach or as an efficiency program) has an influence on how middle managers perceive such an initiative, the experimental set-up differentiates between these two ways of accomplishing CI to control for their effects.

Before reading and evaluating the scenario, the participants were asked to fill out the self-test developed by Floyd and Wooldridge (1996) (see appendix 1). The purpose of this self-test is to get a general picture of the middle manager role. After the participants had read

the scenario, they were asked to answer the newly developed questionnaire on the basis of the scenario description (see appendix 2).

#### **4.3.6 Questionnaire**

The questionnaire includes 22 statements (see table 4.3) that aim to capture both how middle managers perceive CI initiatives and what actions they would take to put this into practice. We focus particularly on these dimensions because they are vital and critical aspects of the practice of CI programs (e.g. De Waal 2018; Delizonna 2017; Netland 2016; Nguyen 2018; Sreedharan and Sunder 2018). First drafts of these statements were discussed with several managers in the financial service industry to make sure the statements were realistic and representative of how middle managers evaluate such initiatives, and adapted accordingly. This resulted in statements more focused on the perception of the middle managers (e.g. “I consider Gold as an implementation of the CI philosophy”) and statements more focused on the actual practice (e.g. “I will steer the department on achieving CI”). This distinction is made because in practice there is often a discrepancy between the actual practice and perception of middle managers (e.g. Argyris 2004; Van Baarle et al. 2019). In this respect, there is a difference between what middle managers say they are going to do and what they will actually do (e.g. Argyris 2004). The statements reflect important dimensions of CI initiatives such as culture, customer satisfaction, efficiency, own role, job security, work atmosphere, tool and top management support. In addition, they correspond to the experiences from the professional practice of one of the researchers. Participants were asked to respond to the statements on a 5-point Likert scale (totally disagree – disagree – agree nor disagree – agree or totally agree).

**Table 4.3 Statements used in experiment grouped on basis of CI aspects**

<b>Perception</b>	<b>CI aspects</b>	<b>Statements</b>
1	Culture	I consider GOLD as an implementation of the continuous improvement philosophy.
2	Culture	I consider GOLD as a programme that results in a permanent shift of our organisational culture.
5	Culture	GOLD results in the implementation of continuous improvement within our culture.
3	Efficiency	I consider GOLD as an effort to increase the efficiency of the organisation.
6	Efficiency	GOLD results in a drastic cost decrease.
7	Work atmosphere	The working atmosphere will improve due to the implementation of GOLD
4	Job security	I consider GOLD as a threat to my function.
10	Own role	I perceive my role as crucial within the GOLD programme.
<b>Practice</b>		
13	Culture	I will integrate GOLD and adapt it to the current way of working within my department(s)
22	Culture	Because of GOLD, I will steer the department on achieving continuous improvement and the adaption to a new organisational culture.
20	Efficiency	Because of GOLD, I will steer the department on efficiency.
17	Efficiency	I will determine specific KPI's to timely realise the efficiency objectives of GOLD.
18	Efficiency	In the context of GOLD, I actively monitor individual and team KPI's in order to identify improvement possibilities.
19	Own role	By implementing GOLD, I will solely focus on activities that are beneficial for me.
9	Own role	I will fulfil a pioneering role in making GOLD a success.
11	Customer satisfaction	Because of GOLD, I focus on fulfilling customer needs.
14	Customer satisfaction	In the context of GOLD, I will adapt the organisation in order to meet customer needs in the best possible way.
15	Customer satisfaction	Because of GOLD, I focus on fulfilling customer needs at the lowest possible costs and shortest lead time.
21	Customer satisfaction	Because of GOLD, I will steer the department on customer satisfaction.
12	Customer satisfaction	I will investigate how GOLD can contribute to customer satisfaction.
16	Tool	I select the proper tools to achieve and monitor the GOLD objectives.
8	Top management support	I will support top management during the implementation of the change (GOLD).

#### **4.4 Results**

Table 4.4 reports the results of the experiment (see also Appendix 2). We found significant P-values regarding the four Floyd and Wooldridge roles on 17 out of the 22 statements. These are statements concerning dimensions of CI such as culture, customer satisfaction, efficiency, own role, job security, work atmosphere, tool and top management support. The results show that the implementing and synthesizing roles in particular play a role in activating middle managers to achieve CI.

**Table 4.4 Results of regression analyses**

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Championing	.046	.036	-.019	.062	-.029	-.070	-.022	-.016	-.020	-.030	-.003	.054	-.038	0.19	.057	.015	0.23	.037	.074**	.071	.007	-.017
Facilitating	.015	-.021	-.013	-.065**	.036	-.007	-.013	-.041	.021	.038**	.006	-.016	.027	.005	-.002	-.009	-.012	-.062	-.063**	.007	-.016	.031
Synthesizing	-.034	.024	.031	-.065**	.046	.067*	.068**	.070**	.082***	.041	.029	.034	-.072*	.008	.001	.008	.008	-.027	-.024	-.098**	.003	-.074*
Implementing	.052*	.071*	.096***	.012	.071*	.053	.057*	.058**	.034	.006	.030	.024	.161***	.018	.010	.074***	.124***	.143***	.021	-.036	.033	.085**
Gender	.173	.270	-.001	-.397	.308	-.120	.156	.138	.076	.259	.076	.373	.432	.051	.103	.050	.112	-.059	-.229	.146	-.221	-.159
Age	.025	.007	-.003	.025	-.011	-.010	-.009	.003	.000	.007	-.005	.006	-.003	.013	.022	-.003	-.020	.000	-.007	.006	.029	.002
Type of department	-.067	-.061	.047	-.076	.075	-.031	-.121	.007	.054	.055	-.180	-.024	-.079	.054	-.101	.056	.035	.044	-.157	-.014	-.052	.012
Function level	.162	-.192	-.064	-.033	.049	-.196	-.076	-.096	-.142	-.049	.039	-.168	.000	-.013	-.064	-.055	.179	.077	.020	.078	.095	.246
Education	-.413	-.149	-.048	-.086	-.003	-.062	-.193	-.164	-.230	-.131	-.233	-.021	.003	-.180	-.276	-.214	-.008	.058	.039	.004	-.040	-.069
Years at organization	.102	.125	.054	.117	-.029	-.120	.057	-.077	-.055	-.015	-.049	.087	.154	.054	.048	.084	.113	.057	-.011	-.028	-.110	-.008
Years at department	-.027	-.060	-.038	-.077	-.061	-.007	-.012	.037	.029	.006	.048	-.012	-.093	.012	-.038	.007	-.017	.010	-.143	.020	.044	.008
Years of improvement experience	.144	.426	-.049	-.284	.561	-.067	.504	.144	.159	-.135	.561	-.179	.085	.072	-.121	.051	.234	.063	.173	-.015	.350	.492
Philosophy	.245	.021	.293	-.186	.222	-.013	.341	.210	.063	.035	.042	-.007	.033	.245	.151	.152	-.156	-.362	-.272	-.029	.121	.039
Pressure																						
Constant	1.469	1.663	2.151	3.389	3.713	3.998	3.067	4.103	3.810	3.008	2.466	2.508	1.863	2.647	2.510	3.342	1.009	1.418	4.174	3.037	1.263	1.760
N	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107
F-value	2.033	1.975	1.476	2.691	1.823	.988	3.261	2.956	2.937	1.020	1.698	1.501	2.961	.859	.900	1.566	2.407	2.725	2.381	.803	1.072	1.534
R Square	.238	.224	.185	.293	.219	.132	.334	.315	.311	.146	.207	.188	.290	.117	.122	.194	.270	.295	.268	.110	.142	.191

\*P ≤ 0.10      \*\* P ≤ 0.05      \* P ≤ 0.01

Table 4.5 shows that the implementing role, in particular, plays a role in activating middle managers to achieve CI. More specifically, the implementing role has a significant P-value, a high F-value and a positive B-value in 11 statements. This suggests that the implementing role has a positive impact on the different statements regarding CI.

The synthesizing role has a significant P-value and a high F-value in 8 statements. However, Table 4.5 also implies that 4 statements regarding the synthesizing role have a positive B-value and 4 statements have a negative B-value. With regard to the synthesizing role, 2 negative B-values (regarding statements 4 and 20) can be interpreted as a positive impact. So, based on these results the synthesizing role appears to have a positive influence on achieving CI.

Moreover, our results show that the facilitating role (i.e. 3 statements) and championing role (1 statement) are less likely to be activated in CI initiatives. For the facilitating role, we found a significant P-value and a high F-value in 3 statements. Regarding these 3 statements, Table 4.5 implies that we have 1 statement with a positive B-value and 2 statements have a negative B-value. But the negative B-values (regarding statement 4 and 19) can be interpreted as a positive impact. So, based on these results the facilitating role appears to make a minor contribution to achieving CI.

The championing role has a significant P-value and a high F-value for one statement (statement 19), with a positive B-value that can be interpreted as implying a negative impact. We also found that 4 statements have a significant score on both integrative roles. However, 2 out of the 4 statements had a combined positive and negative effect (B- value) from the 2 roles involved (in table 4.5: statements 13 and 22), making it difficult to draw a clear conclusion. Also, one statement has significant results on both divergent roles, but again a combined positive and negative effect was found on the 2 roles involved (statement 19); thus, here we can also not draw a clear conclusion.

Remarkably, none of the four roles show any significant evidence for the five statements regarding customer satisfaction.

**Table 4.5 Statements used in experiment, grouped on the basis of role significance**

Perception	CI aspects	Statements	Role Significant	Effect
1	Culture	I consider GOLD as an implementation of the continuous improvement philosophy.	Implementing	Positive
2	Culture	I consider GOLD as a programme that results in a permanent shift of our organisational culture.	Implementing	Positive
5	Culture	GOLD results in the implementation of continuous improvement within our culture.	Implementing	Positive
3	Efficiency	I consider GOLD as an effort to increase the efficiency of the organisation.	Implementing	Positive
6	Efficiency	GOLD results in a drastic cost decrease.	Synthesizing	Positive
7	Work atmosphere	The working atmosphere will improve due to the implementation of GOLD	Implementing/ Synthesizing	Positive/ Positive
4	Job security	I consider GOLD as a threat to my function.	Facilitating/ Synthesizing	Negative/ Negative
10	Own role	I perceive my role as crucial within the GOLD programme.	Facilitating	Positive
<b>Practice</b>				
17	Efficiency	I will determine specific KPI's to timely realise the efficiency objectives of GOLD.	Implementing	Positive
18	Efficiency	In the context of GOLD, I actively monitor individual and team KPI's in order to identify improvement possibilities.	Implementing	Positive
16	Tool	I select the proper tools to achieve and monitor the GOLD objectives.	Implementing	Positive
9	Own role	I will fulfil a pioneering role in making GOLD a success.	Synthesizing	Positive
20	Efficiency	Because of GOLD, I will steer the department on efficiency.	Synthesizing	Negative
13	Culture	I will integrate GOLD and adapt it to the current way of working within my department(s)	Implementing/ Synthesizing	Positive/ Negative
22	Culture	Because of GOLD, I will steer the department on achieving continuous improvement and the adaption to a new organisational culture.	Implementing/ Synthesizing	Positive/ Negative
8	Top management support	I will support top management during the implementation of the change (GOLD).	Implementing/ Synthesizing	Positive/ Positive
19	Own role	By implementing GOLD, I will solely focus on activities that are beneficial for me.	Facilitating/ Championing	Negative/ Positive
11	Customer satisfaction	Because of GOLD, I focus on fulfilling customer needs.	None	None
14	Customer satisfaction	In the context of GOLD, I will adapt the organisation in order to meet customer needs in the best possible way.	None	None
15	Customer satisfaction	Because of GOLD, I focus on fulfilling customer needs at the lowest possible costs and shortest lead time.	None	None
21	Customer satisfaction	Because of GOLD, I will steer the department on customer satisfaction.	None	None
12	Customer satisfaction	I will investigate how GOLD can contribute to customer satisfaction.	None	None

## 4.5 Discussion and Conclusions

The role and added value of middle managers have been subject to debate for a long time (Dopson and Stewart 1990, 1993; Harding et al. 2014; Tabrizi 2014). Some consider middle management to be a bureaucratic barrier (Guth and MacMillan 1986; Hammer and Champy 1993) or obstacle to change (Blom 2018; Cândido and Santos 2019), even suggesting that middle management might cease to exist altogether (Clarke 1998, p. 191): “Middle management is an endangered species that has been delayed and subject to many change programs.” Others, however, argue in strong favor of the role and impact of middle management, by regarding it as a strategic asset (Balogun 2003; Van der Voet et al. 2016) that can have an important contribution (Kuyvenhoven and Buss 2011; Osterman 2008; Wooldridge et al. 2008), in particular in the context of responding to organizational change (Nonaka 1994). Despite the fact that scholars have argued that middle managers play an important role in facilitating change in organizations (Buick et al. 2018; Engle et al. 2017; Huy 2011), our understanding of middle management remains remarkably thin (Osterman 2008). Organizations in financial services and other industries are constantly trying to adapt to this ever-changing environment (Birkinshaw et al. 2008; Madhani 2017; Saha et al. 2017), among others by implementing a CI strategy (Bessant et al. 2001; Bhuiyan et al. 2006; Collis 2016). Therefore, in this study, we set out to explore which middle management roles (as established in the framework by Floyd and Wooldridge) may contribute to or hinder accomplishing organizational change in the form of CI.

Our findings indicate that some middle management roles appear to be of importance in the context of implementing CI initiatives, such as the implementing and synthesizing roles, while the facilitating and championing roles appear to be less relevant. In line with Floyd and Wooldridge (1997), our results suggest support for the integrative roles (i.e. implementing and synthesizing) that middle managers may engage in when top management seeks to adopt CI. However, for the synthesizing role we found a negative effect of this role on achieving CI (see statement 13 and 22). But, for the majority of the statements, there is a positive effect of the integrative roles. So, for our sample, one can state that middle managers who prefer an integrative role within the organization are more likely to perceive CI initiatives as a sustainable cultural change and are more likely to take action in this respect. According to Bessant and Francis (1999), the implementing role can be seen as a critical component in CI development, thereby helping to ensure that CI activities are in line with the organizational strategy developed by top management (Oakland 2011). Thus, for the integrative roles of implementing and synthesizing, our findings suggest that middle managers tend to help bridge the gap between top management and employees at the operational level, thereby translating top management strategy into operational activities (Ahearne et al. 2014; Anicich and Hirsh 2017; Gatenby et al. 2015; Kim et al. 2014; Shi et al. 2009; Stoker and De Korte 2001).

This study found less support for the two divergent roles of facilitating and championing as contributing to accomplishing CI. In the facilitating role, middle managers facilitate



employees to exchange knowledge and information, to come up with new ideas, to experiment and realize CI (Floyd and Lane 2000). One explanation for the lack of support for this role can be found in earlier research conducted by Delbridge and Barton (2002). They indicate that organizations tend to use external knowledge and skills for facilitating CI instead of placing this role with the current middle management. In addition, almost no support was found for the championing role with respect to accomplishing CI. In this role, middle managers may influence the change process by bringing innovative concepts to the attention of top management (Floyd and Wooldridge 1996). This would for example imply that middle managers would develop alternatives to the current strategy and present them to top management (Floyd and Wooldridge 1992). The insignificance of the championing role in the data analysis can possibly be explained by the fact that top management does often not support or appreciate divergent behavior (Floyd and Lane 2000).

#### **4.5.1 Interpretation of key Findings**

Understanding the role of middle managers is critical because, as stated by Tabrizi (2014): the key to change is middle management. In addition, Holmemo and Ingvaldsen (2016) define the middle manager as the missing link in Lean implementation. Our experiment aims to explain which middle management roles contribute to accomplishing CI. To achieve that, we have made the concept of CI practical by focusing on a number of important CI aspects such as culture, customer satisfaction, efficiency, own role, job security, work atmosphere and top management support (De Waal 2018; Delizonna 2017; Netland 2016; Nguyen 2018; Sreedharan et al. 2018).

Regarding the embedding of CI in the culture of the organization, our study indicates that the implementing role of middle managers is probably a key driver for them to develop a deliberate intention toward embedding CI in the organization. For all statements related to the cultural aspect, there is a significant and positive correlation between the statement and the implementing role. Thus, our results underline the idea that middle managers are executors of the deliberate strategy created by top management (Floyd and Wooldridge 1992; Nonaka 1994). This is important because creating a CI culture that needs to be sustained over many years requires the commitment, involvement and leadership of the entire management of the organization (Dahlgaard and Dahlgaard-Park 2006; Snee 2010). Furthermore, our results also show that the implementation role has a high degree of significance when it comes to efficiency statements. Out of the five statements related to efficiency aspect three have a significant relationship concerning the implementing role. The other two statements show significance related to the synthesizing role. This can be supported by the view that the pursuit of efficiency is an important point because optimized processes can increase reliability and increase competitiveness (Carlborg et al. 2013; Van Dun and Wilderom 2016). By gathering information (synthesizing role) about competitors' activities and evaluating major changes in the business environment, middle managers can

play an important role in accomplishing the necessary changes to stay competitive, and contribute to accomplishing CI within the organization.

From a more integrative perspective, the implementing and synthesizing roles indicate a significant positive relationship between the (expected) work atmosphere and top management support. Our results suggest that middle managers pay attention to these CI aspects from the perspective of both roles. A possible explanation is that middle managers expect that executing CI may offer opportunities for learning and for new and extensive role interpretation (Angelis et al. 2011; McQuade 2008; Nelson and Yeo 2012). Moreover, middle managers can increase the skills and knowledge of the entire workforce and stimulate workers to develop themselves (Lam et al. 2015; Poksinska et al. 2013; Van Assen 2018). In other words, middle managers can adopt a learning mindset and stimulate employee participation within the organization (Buick et al. 2018; Delizonna 2017; Vänje and Brännmark 2017). This underlines the idea that middle management enables the exchange of knowledge and new ideas and plays a key role in strategic renewal (Chandler 1977). Overall this is in line with the fact that an integrative role in support of intentional strategy is predefined and openly expected (Floyd and Lane 2000).

As already mentioned, only a few of the statements indicated that there is a significant relationship with the facilitating and championing role. A possible explanation is the fact that divergent behavior is often not supported and appreciated by top management (Floyd and Lane 2000).

Lastly, our findings imply no significant relationship between the statements about customer satisfaction and any of the four roles identified by Floyd and Wooldridge (see Table 4.5). This finding fails to support the idea that the primary focus of CI practices such as Lean is to eliminate activities that do not add customer value and address value-adding activities (Cudney and Elrod 2011). If middle managers adopt a more synthesizing role here, the organization would be better able to monitor and evaluate the impact of changes in the environment, including activities of competitors and suppliers (Floyd and Wooldridge 1992). In line with this, the implementing role of middle managers regarding CI may help safeguard customer focus among employees (Floyd and Wooldridge 1992; Gulati and Oldroyd 2005). One possible explanation of this result of the experiment is that the description of the customer and customer needs was not clear enough in the GOLD case text and survey.

#### **4.5.2 Limitations**

The study in this chapter has a number of limitations. First, although the results are insightful, our study was performed within a single organization, which makes the results potentially less generalizable. Replications of this study in other financial service organizations are thus recommended.

Second, the findings may not be generalizable outside the Netherlands. We have no direct evidence for this limitation, because the national cultural dimension has not been explicitly

addressed in this study. Thus, future work should explore the possible impact of national culture.

Third, more conclusive results could have been generated if the sample size had been bigger. For future work in this area, obtaining a larger sample size would therefore be important.

Fourth, the simulated nature of the experiment may, when it comes to the emotional side of human perception (e.g. middle management roles), not provide the same setting as a real-life organizational context. As a result, our experiment is limited in its external validity (Roe and Just 2009; Schram 2005). On the other hand, the substantial number of years of management experience of the participants in our sample implies that the vignettes provide a context they know from their professional practice. In turn, this positively affects external validity (e.g. Barends et al. 2014; Buchanan 2008; Rouleau and Balogun 2011). Hence, we hope that future work will replicate and extend our findings in field studies of real-life CI initiatives.

Fifth, the effect size of the various statements is quite small. This does not mean that the outcomes are not valuable, but they need to be interpreted with caution and thereby invite further investigation.

Finally, this study did not consider in an objective manner the extent to which CI was *accomplished* in a specific organization, and what the impact of the different roles was on this accomplishment. Rather, the study focused on perceptions, intentions and expectations that the participants had with respect to the impact of the roles investigated. One could, therefore, state that the internal validity of the findings arising from this study are limited (cf. Roe and Just 2009; Schram 2005). As such, it would be valuable to examine real-life cases in which CI is implemented and determine the impact the various roles have in these cases. The proposed causal relationships arising from our study can inform such investigations.

### **4.5.3 Conclusion and Further Research**

In sum, middle management can be expected to have a role in accomplishing CI throughout the organization, by acting “as a cornerstone between top management and bottom line workers” (Al-Najem 2012, p. 119). In addition, if middle managers feel they are not sufficiently involved at an early stage of the CI effort, they are not likely to become the change agents they possibly can be (Holmemo and Ingvaldsen 2016; Lleo et al. 2017). Successful interventions have been observed to include and activate middle managers at an early stage of the process (Davis and Fisher 2002) and to involve top management in creating a culture that makes it easier for middle managers to be involved in quality improvement and embed it in the organization (Balding 2005). Our findings indicate that the implementing and synthesizing roles of middle management appear to be of importance in the context of CI initiatives, while the facilitating and championing roles appear to be less relevant.

The main findings from this study demonstrate that middle management can be perceived as a change agent, as was already indicated in different previous studies (Balogun 2003; Buick et al. 2018; Kuyvenhoven and Buss 2011; Westley 1990), involving both upward and downward

activities (Wooldridge et al. 2008). In line with research by Reid (1989), our findings show that most middle managers in our sample think of themselves as implementers and that they engage in this role much more than the other three roles (Floyd and Wooldridge 1992). Changes within organizations have become the norm rather than the exception (Schaffer 2017). This requires even more adaptive organizations that are willing and able to change. To accomplish this, organizations are increasingly using the concept of agility, in addition to Lean and other CI methods (Harraf et al. 2015; Rigby et al. 2016), which changes the role of middle managers (De Smet 2018). The impact that an agile way of working has on the role of middle management is an interesting area for further research, especially to find out which middle management roles (i.e. championing, synthesizing, facilitating or implementing) contribute mostly to accomplishing organizational agility.





## Conclusion

## Chapter 5



## 5.1 Introduction

Since the beginning of the 21st century, many companies have been exposed to growing competition and cost pressure (Cruz and Wang 2018; Dombrowski and Karl 2017; Mora 2014). Thus, the environment of these organizations is becoming increasingly complex, dynamic and global (Hammer 2004; Lee et al. 2012; Neilson et al. 2014; Steiber and Alänge 2016; Van Olffen et al. 2019). So, for many years, these companies have been looking for ways to improve their business: that is, providing better services against lower cost, improving customer satisfaction, and staying competitive (Bhuiyan et al. 2006; Nyhuis et al. 2010; Snee 2010). Many managers have implemented a strategy of Continuous Improvement (CI) to adapt to this ever-changing environment (Bessant et al. 2001; Bhuiyan et al. 2006; Collis 2016; Madhani 2017; Saha et al. 2017). Successful implementation of CI programs such as Lean involves viewing Lean as a long term journey, installing a continuous improvement viewpoint, and initiating cultural change to support Lean principles throughout the entire organization (Bhasin and Burcher 2006). As mentioned by Emiliani (2006) and Liker (2004), implementing CI requires a long-term commitment.

Organizational change is complex and highly context dependent. Therefore, there is a strong need for studies that provide insight into the complexity of organizational change, and particularly the management and leadership of change (Higgs and Rowland 2005; Pettigrew et al. 2001). CI programs are often initiated by referring to ‘sustained improvements’, ‘cultural change’ and similar terms, but often end up as a quick fix without a deliberate effort to create and maintain the conditions required for CI (Bhuiyan et al. 2006; Snee 2010). Studies in both industrial and service-oriented organizations demonstrate that (initial) results arising from such projects are often not sustained (Found and Harvey 2006).

Overall, the role and influence of middle management within CI appears to be under-researched (Manville et al. 2012). This is remarkable because middle managers can be considered key agents in facilitating CI initiatives and play a key role in striking a balance between continuity and change. However, middle managers encounter the triangle of leading change, implementing change and changing their own behavior, which gives rise to tension and possibly the tendency to actively block and resist change. To support middle managers in handling this triangle of roles and challenges, top management has to lead by example, which is a major challenge in itself in view of the volatility at top management positions and shareholder pressure (e.g. cost-cutting) in many corporations. Hence, the research question addressed in this dissertation is: How and to what extent do middle managers contribute to accomplishing CI in the financial service industry? To answer this question, I carried out three studies to explore the influence of middle managers on CI within an organization. Before going to the main conclusion, I provide a summary of the three studies. The chapter concludes with a broader exploration of the implications arising from this study as well as reflections, limitations and suggestions for future research.



## 5.2 Summary of Studies

The studies presented in this dissertation contribute to a deeper understanding of how middle management deals with the demanding playing field of continuous improvement. In this section, I discuss the key findings of the previous chapters.

### ***Study 1 The role of middle management in becoming lean: A systematic review and synthesis of the literature***

Implementing any CI method appears to demand big changes in the organization and mindset of the people involved (Drew et al. 2004). Efforts to implement CI methods such as Lean are characterized by high failure rates (Holmemo and Ingvaldsen 2016; Taleghani 2010). One key reason for the failure of CI methods has been said to be poor leadership (Lucey et al. 2005), and particularly the role of middle managers in facilitating sustainable change (Fine et al. 2008). Overall, the role and influence of middle management within CI appears to be under-researched (Holmemo and Ingvaldsen 2016; Manville et al. 2012), which is remarkable because middle managers can play an important role in facilitating change in organizations (Huy 2002) as they can help to bridge the gap between top management and employees at the operational level (Ahearne et al. 2014; Gatenby et al. 2015; Likert 1961). The middle manager's unique position and pivotal role ensures that s/he can translate top management strategy into operational activities and at the same time is able to pay attention to problems on the shop floor on a daily basis (Anicich and Hirsh 2017a; Currie and Procter 2005; Floyd and Lane 2000).

However, there is rather little knowledge about the role of the middle manager in the implementation of CI methods, and we therefore reviewed literature to develop a framework for studying key aspects of the role of middle managers in CI/Lean practices. Accordingly, study 1 explores the literature on how middle management influences the implementation and success/failure of CI/Lean initiatives due to their unique position.

We conducted a mechanism-based systematic review. In total 203 publications were selected and then reviewed in detail. This resulted in two CMO frameworks (see figure 2.1 and 2.2) which help to unravel the enormous complexity of CI/Lean change efforts. Each CMO framework assumes that top management consistently seeks to implement a particular (archetypical) philosophy of CI/Lean, as either an integral management approach or a cost-cutting strategy. Each of the two CMO frameworks in itself reflects some of the key tensions and challenges arising from any CI/Lean change effort, especially for those in middle management positions.

But CI/Lean changes are more challenging and complex than the causal relationships represented in the two CMO frameworks. In fact, the CMO patterns in these two figures tend to co-exist in practice, because of major gaps and inconsistencies between what many top managers say they want and what they actually want (e.g. Argyris 2004; McCann et al. 2015; Van Maanen and Barley 1984). This gap between the purpose and values of CI/Lean supported by top management and those actually being pursued may create a rather hybrid

organizational reality. Top management may initially frame CI/Lean as an integral approach, to be implemented for the long-run, but end up being (perceived by many) as a cost-cutting program initiated to accomplish short-term results (cf. McCann et al. 2015).

This implies that the CMO patterns outlined often co-exist and overlap. Future work in this area will not only need to test the bundle of hypotheses arising from each figure in study 1, but also explore and assess the interaction between the two bundles of causal patterns in settings where these two contextual conditions appear to co-exist.

### ***Study 2 A vignette study of middle managers' responses to continuous improvement initiatives by top management***

For the sustainability of a CI practice, the commitment, involvement and leadership of the entire management of the organization is critical (Dahlggaard and Dahlggaard-Park 2006; Snee 2010). As culture and values are to a large extent driven by top management, the role of top management in the implementation of CI is rather important. Top managers need to actively support and lead by example when empowering people in CI. In addition, they are responsible for creating a change-oriented culture and for adopting new organization-wide ways of working. This should result in a cultural change to support the CI principles throughout the organization (Mann 2009; Snee 2010). While top management is responsible for initiating and stimulating a cultural change to support the CI principles throughout the organization (Al-Najem et al. 2012; Mann 2009), they may initially pursue CI as a long-term integral management philosophy, but may frame targets so as to establish short-term cost-cutting results (cf. McCann et al. 2015). In this context, middle managers are facing rather challenging conditions when their top management sets out to develop a culture of CI. These conditions include the ambiguity around the broader aim of the CI program and what top management expects from them. Therefore study 2 seeks to understand how top management's conceptualization of a CI initiative affects the way middle managers perceive and act upon the initiative.

This research draws on a vignette study (i.e. scenario experiment) conducted among 107 middle managers working at one of the largest financial institutions in The Netherlands. The vignette used in this study provides information about a hypothetical setting, for participants to develop an understanding of the situation. Participants make explicit choices on the basis of their understanding of this vignette.

The main findings from this study demonstrate that, when CI is implemented as an integral management approach, middle managers believe CI leads to better integration in the organizational culture, and expect a more customer-oriented focus and better work atmosphere compared to implementing CI as a cost-cutting tool. These findings suggest that embedding CI in the organizational culture contributes to the sustainability of CI in the organization (Mann 2005; O'Rourke 2005). Our findings also suggest that, if top management implements CI as an integral management approach, middle managers expect the organization to become more customer-focused. Finally, middle managers appear to

perceive less negative associations regarding the work atmosphere when CI is implemented as an integral management approach rather than as a cost-cutting tool.

### ***Study 3 An exploratory study of middle managers' roles in continuous improvement***

Understanding the role of middle managers is critical because the “key to change is middle management” (Tabrizi 2014) and as such, the middle manager is the missing link in lean implementation (Holmemo and Ingvaldsen 2016). Middle managers can bridge the gap between top management and employees at the operational level (Likert 1961; Raes et al. 2011; Shi et al. 2009; Stoker and De Korte 2001), especially by translating strategy into operational targets and processes and paying attention to the day-to-day problems on the shop floor (Anicich and Hirsh 2017a; Currie and Procter 2005; Floyd and Lane 2000; Sims 2003). This pivotal role makes middle managers important for strategical renewals (Floyd and Lane 2000; Osterman 2008; Raes et al. 2011; Wooldridge et al. 2008) such as implementing a CI Strategy (Collis 2016; Jayaram et al. 2008; Rahman et al. 2010). Therefore, in the third study in this dissertation we seek to understand which middle management roles (i.e. championing, synthesizing, facilitating, implementing) contribute to accomplishing CI.

To investigate which middle manager roles may contribute (in particular) to achieving CI, we draw on an exploratory quasi-natural experimental design (Miles et al. 2014; Saunders et al. 2009), involving 107 middle managers working within a large bank. The managers were first asked to complete an existing self-test questionnaire (Floyd and Wooldridge 1996) to characterize their natural individual middle manager role profile. Subsequently, managers were asked to evaluate a realistic, yet fictitious scenario of a CI initiative by indicating how they perceived this initiative and what action they would take.

Our findings suggest that some middle management roles influence how CI initiatives are processed. In line with Floyd and Wooldridge (1997), our results show support for the two integrative roles (i.e. implementing and synthesizing) that middle managers may play when the organization aims to adopt CI. In particular, middle managers who fulfill an implementing role within the organization are more likely to perceive CI initiatives as a sustained cultural change and are more likely to take action in this respect.

Less support was found for the two divergent roles of facilitating and championing as factors contributing to accomplishing CI. In the facilitating role, middle managers support employees to exchange knowledge and information, to come up with new ideas, to experiment and realize CI (Floyd and Lane, 2000). One explanation for the lack of support for this role can be found in earlier research conducted by Delbridge and Barton (2002). These authors indicate that organizations tend to use external knowledge and skills for facilitating CI instead of having this role executed by current middle managers.

In addition, almost no support was found for the championing role with respect to accomplishing CI. In this role, middle managers may influence the change process by bringing innovative concepts to the attention of top management (Floyd and Wooldridge 1996). This would, for example, imply that middle managers would develop alternatives to

the current strategy and present them to top management (Floyd and Wooldridge 1992). The insignificance of the championing role in the data analysis could be explained by the fact that divergent behavior is often not supported and appreciated by top management (Floyd and Lane 2000).

### 5.3 Overall Conclusion

This section serves to explore the joint contribution of the studies in answering our main research question regarding the contribution of middle managers to accomplishing CI in the financial service industry.

The three studies conducted (see previous section) reveal that middle managers engage in a dynamic playing field (Heyden et al. 2018; McCann et al. 2008; Theodore et al. 2017), in which they have a pivotal role when it comes to organizational change (Holmemo and Ingvaldsen 2016; Huy 2002; Tabrizi 2014; Tarakci et al. 2018). More specifically, top management's conceptualization of the rationale of a CI program appears to significantly affect the role of middle management in getting CI implemented (see figure 5.1). From a practical perspective, this means that if top management conceives CI as an integral management approach, this has a positive effect on middle management's expectation that CI can be incorporated into the organizational culture in a sustained manner.

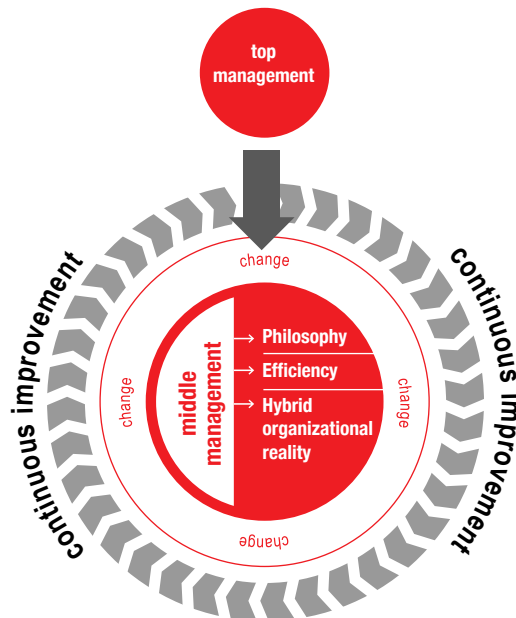


Figure 5.1: The dynamic playing field

However, the findings in this doctoral dissertation suggest that the middle management role is not an easy one, because middle managers have to change their own mindset and behavior (e.g. experimenting; evaluating; coaching; building trust) and lead by example, in order to create and sustain changes in the entire organization (Dahlgaard and Dahlgaard-Park 2006; Snee 2010). To make CI successful, organizations largely depend on the managers responsible for achieving CI, including middle managers (Fine et al. 2008; Holmemo and Ingvaldsen 2016). The three studies in this dissertation show that, if the implementation of CI is not properly embedded in the organization, there is a significant risk that people in the organization perceive CI as 'just another' downsizing method focused on short-term financial targets (see figure 5.1). Middle managers can only help reduce this risk if top managers commit themselves to CI as an integrated management approach (again see figure 5.1) and communicate this in a consistent manner, time and again, throughout the entire organization (Mann 2009; Snee 2010). This implies that a more integral approach helps to prevent the organization ending up with 'just' another tool, with a rather short time horizon and without any substantial changes in behavior and culture toward CI (Dibia et al. 2014; Fryer and Ogden 2014; Mann 2009).

From our literature review in Chapter 2, we concluded that it is also important that middle managers understand the purpose of the change (Livijn 2019; Strebel 1996; Tarakci et al. 2018). While top and middle managers often deliberately try to plan change to make it more manageable (e.g. Gilley et al. 2009; Huy 2001b; Rosenbaum et al. 2018), organizational realities tend to be more messy and noisy than can be effectively planned for. As already noticed in Chapter 3, if top management says one thing but does the other, middle management may fear and eventually resist the change; this in turn confirms the idea that middle managers are no longer needed or have insufficient skills to support the change (Griffith et al. 2019; Keyser et al. 2016). These gaps and inconsistencies between what many top managers say they want and what they actually want (Argyris 2004; Argyris et al. 1985; Van Maanen and Barley 1984) create a so-called hybrid organizational reality. Our vignette study in Chapter 3 shows that this hybrid organizational reality may cause an implementation gap between CI (rhetorically being) implemented 'for the long-run' and the reality of top managers seeking to merely accomplish short-term results (see figure 5.1). This gap can be reduced by proactively including middle managers in the change efforts, so they can actively contribute to reducing (if not avoiding) major gaps and inconsistencies (Snee 2010; Way et al. 2018).

Cooperation between top management and middle management thus appears to be essential for accomplishing CI. Top management needs to create the framework within which middle managers - using their link between top management and shop floor - can ensure that improvements are actually implemented and guaranteed within the organization. The study in Chapter 4 suggests that middle managers, by executing the implementing and synthesizing roles, can help bridge the gap between top management and employees at the operational level; the two integrative roles, here, especially require that middle managers

are skilled in translating top management strategy into operational activities (Ahearne et al. 2014; Anicich and Hirsh 2017a; Gatenby et al. 2015; Kim et al. 2014; Shi et al. 2009; Stoker and De Korte 2001). At the board room level, top management has to communicate openly and honestly about CI, by stating what the objective of the change is and then actively supporting the change (Gigliotti et al. 2019; Miller et al. 2004; Way et al. 2018).

In recent years, changes within organizations have become the norm rather than the exception (Dawson 2019; Sanders 2016; Schaffer 2017; Wee and Taylor 2018; Van Olffen et al. 2019) and to cope with all the change, these organizations have to become even more adaptive. To accomplish this, organizations are increasingly using the concept of agility, in addition to Lean and other CI methods (De Mann et al. 2019; Harraf et al. 2015; Rigby et al. 2016; Williams et al. 2013), which changes the role of middle managers (De Smet 2018). The impact that an agile way of working has on the role of middle management is an interesting area for further research, especially to find out which middle management roles (i.e. championing, synthesizing, facilitating or implementing) contribute mostly to accomplishing organizational agility.

Because the middle manager finds himself in such a dynamic playing field, it helps to place her/his role in a somewhat broader perspective. In the remainder of this section, we therefore conduct a broader exploration of the implications rising from this study and look at middle management from different angles. Firstly, we provide an overview of three different ways of looking at middle management. Next, we look at middle managers' role enactment during organizational change initiatives such as CI. We conclude by exploring the future of the middle manager.

### **5.3.1 Toward a broader view: Three Views of Middle Management**

In this section we develop a broader perspective, also in view of the discourse on middle management. The role and added value of middle managers have been subject of debate for a long time (Cândido and Santos 2019; Dopson and Stewart 1990, 1993; Harding et al. 2014; Tabrizi 2014). The constant re-engineering of many organizations appears to have diminished the number of middle managers in many organizations dramatically (Bernstein et al. 2016; Clarke 1998; Dopson and Stewart 1993; Hayes 2008), but has not made them less important (Balogun and Johnson 2004; Floyd and Lane 2000; Livijn 2019).

Especially the work of Floyd and Wooldridge has had a significant impact on the thinking about middle managers and their roles in implementing strategy (Beck and Plowman 2009; Bryant and Stensaker 2011; Currie 1999; Currie and Procter 2005; Dutton et al. 1997; Hope 2010; Jones 2005; Mair 2005; Mantere 2008; McCann et al. 2008; Rouleau 2005). Also more recent studies often refer to the work of Floyd and Wooldridge when discussing implementing strategy in organizations (Ahearne et al. 2014); Chen et al. 2017; Currie and Procter 2017; Gauthier et al. 2016; Glaser et al. 2015; Guo et al. 2017; Heyden et al. 2017; Heyden et al. 2018; Jaoua 2016; Mirabeau et al. 2018; Neto and Lavarda 2017; Radaelli and Sitton-Kent 2016).

As pointed out in the three studies in Chapters 2 to 4, middle management can be seen as one of the most important human agents for creating conditions for achieving CI in an organization (Alefari et al. 2017; Holmemo and Ingvaldsen 2016; Lodgaard et al. 2016). Especially the practical experience of many middle managers can be an important asset in implementing CI within the organization (Harrington and Williams 2004). These reflections can be captured in three different views on middle management (see Figure 5.2), based on the perception of top management, the employees as well as the middle manager him/herself.

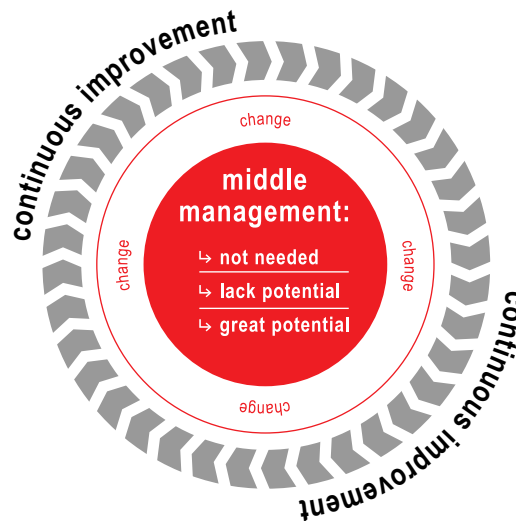


Figure 5.2: Three views of middle management

### *Middle managers are not needed*

One of the views on middle management is that they are no longer needed, due to changing ways of working in organizations, increased automation of various work processes and higher levels of employee independence and autonomy (Balogun 2003; Cameron et al. 1991; Gratton 2011; Hamel 2011). Organizations are increasingly looking for coaches and mentors, not middle managers (Gilley et al. 2009; Munteanu and Rațiu 2018; Stoker 2006). The delayering of organizations may result in the middle manager's role being threatened by extinction (Belasen and Belasen 2016; Clark 1998; Foster et al. 2019). Supporters of this view may argue that middle managers have become dinosaurs that do not add value (Sims 2003). They consider middle management as a bureaucratic barrier that needs to be overcome (Guth and MacMillan 1986; Hammer and Champy 1993). If this view on middle management prevails in an organization, it may result in middle managers becoming afraid of change and feeling insecure about their position (Conway and Monks 2011; Keyser et

al. 2016; Wagner et al. 2019). It may also lead to middle managers experiencing parallel hierarchies (see Chapter 2) as a result of more empowerment of operational employees by higher management. (Holden and Roberts 2004; Psychogios et al. 2009). In such situations, middle managers may feel as if their role is being dismantled by placing more responsibilities at the workplace level (Guth and MacMillan 1986).

Middle managers thus find themselves in a struggle to survive (Gjerde and Alvesson 2019; Spreitzer and Quinn 1996; Townsend and Dundon 2015), particularly when they perceive the empowering of their subordinates as beneficial to the organization but not beneficial to themselves (Denham et al. 1997). Middle managers have been observed to actively block empowerment in order to preserve the power and status they felt was being reduced or lost (e.g. Denham et al. 1997; Fenton-O’Creavy 2001).

#### *Middle managers lack sufficient potential*

Another view on the role of middle managers is that they have insufficient potential. In such cases, middle managers can become demotivated because they do not feel heard and because they face many organizational changes (Zenger and Folkman 2014). Supporters of this view may feel that middle managers cannot deal with the changing role that is asked of them. There is often insufficient attention for the development of middle managers, despite the fact that their role is constantly changing (Griffith et al. 2019; Stoker and De Korte 2001). Therefore, middle managers stick to their existing patterns (Hout 1999), thereby effectively blocking changes and innovations (see Chapter 2), while they should play an essential role in the changing organization (Koene 2017). Another reason may be that middle managers are promoted until they reach a level that they can no longer cope with what is expected of them (Griffith et al. 2019), the so-called “Peter principle” (Benson et al. 2018; Lazear 2004). This can be harmful to organizations, especially if professionals are first promoted to middle management positions and are subsequently promoted to a level that is just too high for them. In such situations, the organization loses a good professional, whilst at the same time getting a manager in return who performs a role for which s/he does not have the skills (Benson et al. 2018; Griffith et al. 2019).

#### *Middle managers have great potential*

A third view is that middle managers have great potential, because they occupy a unique position in the organization (Lawrence and Lorsch 1967; Mintzberg 1989; Tinline and Cooper 2016) and can ensure the connection between the shop floor and top management as well as translate the ideas from the top to the execution at the operational level (Nonaka 1994). The role of (remaining) middle management has apparently become more important in efforts to delayer organizations (McKinney et al. 2013). Middle management has thus been assumed to play an important role in linking layers and different groups in the organization, by safeguarding coordination and helping employees prioritize projects, and facilitating collaboration and ensuring that everyone is heard within an organization (Garvin 2013;



Livijn 2019; Whitehurst 2015). Middle management can have a big role in this, through their creative and innovative skills, informal network and knowledge about what motivates employees (Huy 2001a; Moss Kanter 1982).

As already mentioned before, middle managers are the necessary change agents who ensure the required execution of the changes (Glaser et al. 2016; Koene 2017; Kuyvenhoven and Buss 2011; Van der Voet et al. 2016). In this respect, CI implies continuously achieving small changes in the work processes (Jørgensen et al. 2003) and middle managers are highly critical in accomplishing CI throughout the organization (Al-Najem et al. 2012; Holmemo and Ingvaldsen 2016; Lleo et al. 2017). If one assumes that middle managers have great potential, they need to take a leading role (see Chapter 3). This is not an easy task, because they have to change their own mindset and behavior and lead by example.

### **5.3.2 Bermuda Triangle**

Our findings underline the need for studies that provide insight in the complexity of organizational change initiatives such as CI (Antony and Gupta 2019; Atkinson 2010; Bhasin 2012; McLean et al. 2017), and particularly how to implement and lead changes (Buick et al. 2018; Engle et al. 2017; Moran and Brightman 2000). Our literature review in Chapter 2 showed that middle managers can be considered to be key agents in facilitating this kind of change and help striking a balance between continuity and change. However, middle managers encounter the triangle of leading change, implementing change and changing their own behavior, which gives rise to major tensions and possibly the tendency to actively block change and create resistance. To highlight the complexity of organizational change from a middle management perspective we will look into this triangle of roles and challenges in this section. This so-called Bermuda triangle involves three key elements: leading change, implementing change, and behavioral change.

#### *Leading Change*

When it comes to leading change, middle managers may at the same time be leaders, who ensure things get done and changes are implemented in the organization, and followers, who implement the assignments of top management (Bryant and Stensaker 2011; Neumann et al. 2019; Tiggelaar 2019). Our study in Chapter 4 shows the crucial task for middle managers to translate new strategies to the operational level and to implement the desired change (Belasen and Lubber 2017). This may also seem paradoxical, as many changes also concern middle managers themselves: managing change requires middle managers to change their own behavior (Eddy and Amey 2018; Heyden et al. 2018; Stoker 2005). As a result, they are facing the constant struggle between strategy and business operations (Gjerde and Alvesson 2019; Uytterhoeven 1989).

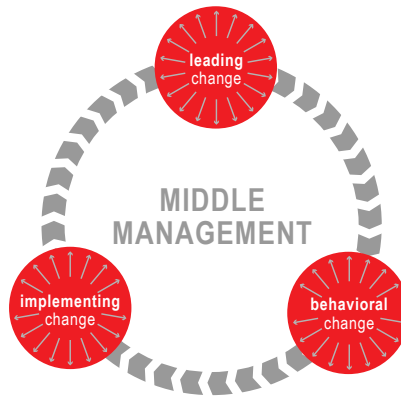
### *Implementing Change*

Middle managers are often caught between translating top management strategy to the workplace on the one hand, and representing the work place towards top management on the other hand (Nonaka 1994; Stoker and De Korte 2001). The interests of these two organizational layers are not always aligned (Guth and MacMillan 1986; Radaelli and Sitton-Kent 2016). From their position as a connecting link, middle managers can play an important role in the success of the implementation (e.g. Kuyvenhoven and Buss 2011; McCann et al. 2008). However, a more servant style of leadership may be required, one in which the middle manager shows that the result of the change is more important than his or her own position (Gandolfi and Stone 2018).

### *Behavioral Change*

The multiple roles and contributions expected from middle management are particularly problematic when (part of) the middle management echelon itself is subject to change (Anicich and Hirsh 2017b; Han et al. 2014). The fact that middle managers themselves may also be subject to change is a phenomenon that has been largely neglected within the organizational change literature (Oreg et al. 2011). If a middle manager wants to be able to contribute to the change, it also involves reviewing his own behavior and adjusting it. Having access to sufficient development and training opportunities is important here (Abugre and Adebola 2015; Jørgensen et al. 2007), as is the individual ability to change. These conditions often appear to be missing (Griffith et al. 2019; McKinney et al. 2013; Zenger and Folkman 2014). Middle managers play a role in showing exemplary behavior and leadership and the way in which the middle managers interpret the change is of great importance for the way in which they subsequently propagate the change in the organization (e.g. Galbraith 2018; Lam et al. 2015; Van Assen 2018).

All these reflections on the managers' role enactment during achieving CI can be included in the "Bermuda" triangle (see figure 5.3). In many corporate settings, top managers often expect their middle managers to engage in the 'triangle' of leading change, implementing change and changing their own behavior, which gives rise to many tensions and possibly results in middle managers actively blocking and resisting change (Blom 2018; Cândido and Santos 2019).



**Figure 5.3: The Bermuda triangle of middle management**

Overall, middle managers appear to play multiple pivotal roles in organizational change and transformation (Balogun 2003; Buick et al. 2018; Kuyvenhoven and Buss 2011; McKinney et al. 2013). To support middle managers in handling this triangle of roles and challenges, top managers would need to lead by example (Alhaqbani et al. 2016; Birken et al. 2015; Näslund 2013). This is a major challenge in itself, given the volatility at top management positions as well as shareholder pressure (e.g. toward cost-cutting) in many companies.

### **5.3.3 A Future Perspective on the Middle Manager**

An episode of Tegenlicht (2015), called “The end of the manager”, implies there is no ‘hope’ or role whatsoever for the (middle) manager, in line with the first two views outlined in section 5.3.1. However, we expect that middle managers will keep their roles: their positions may be renamed (De Man 2018), but the need for this type of coordination work will remain in more or less the same size. The problem in many organizations is not that management is inefficient or redundant, but that the role and purpose of a “manager” does not keep pace with what is needed (Pistrui and Dimov 2018). The remainder of this section therefore highlights two important developments, which will likely influence the role of the middle manager: new organizational forms and further digitalization.

#### *Redefining middle management in new organizational forms*

The debate about the middle manager is far from over and will very likely be continued in the coming years (e.g. Gjerde and Alvesson 2019; Heyden et al. 2017; Jacobs 2015; Nicula and Ghimiși 2019). One current discussion involves the impact of new forms of organizing like organizational agility, self-management and holacracy on the role of middle management (De Man et al. 2019; Lee and Edmondson 2017; Rigby et al. 2016; Romme 2015, 2017; Velinov et al. 2018). In several firms in the financial service sector, these new

forms of organizing are being adopted (Barton et al. 2018; Birkinshaw 2018a). These new organizational forms require a changing role and potentially different competences from the middle manager. This especially means that middle managers need to become more like coaches and mentors (De Man 2018; Gilley et al. 2009; Munteanu and Rațiu 2018). In this respect, middle managers have to start leading by raising questions rather than giving orders, and thus need to let go of their command-and-control management style (Denning 2016; Netland et al. 2019; Nicula and Ghimiși 2019; Rigby et al. 2016). A more servant style of leadership is necessary in which middle managers consider the goals of the team and individual more important than their own goals (Gandolfi and Stone 2018). As a result, middle managers will spend less time on the traditional manager's roles described by Floyd and Wooldridge (Livijn 2019).

On the other hand, various organizations already distance themselves from 'self-management' (Kumar and Mukherjee 2018; Visser 2019; Zandstra 2019) because self-managing teams seem to take away people's professional identities (Ten Bos 2018) and the organization's effectiveness appears to diminish unless it is actively managed (Hout 1999). The notion of self-management and the resulting claim that layers of middle managers need to be reduced is therefore highly disputed (Burton et al. 2017; Garvin 2013). In this respect, there appears to be no clarity about the central concepts of many new organizational forms (Anderson and Brown 2010; Bernstein et al. 2016; Lee and Edmondson 2017; Tarakci et al. 2016), which provides interesting opportunities for future research.

#### *Redefining middle management in a digital world*

Technology plays an increasingly important role within organizations (Heavin and Power 2018; Hirte and Sieger 2018; Lobo et al. 2019; North and Kumta 2018). Especially digital technology can be assumed to have a major impact on the role and number of middle managers in organizations (Applegate et al. 1988; Birkinshaw 2018b; Gratton 2011, 2016; Hirt and Willmott 2014). For example, Mims (2015) claims that data is the new middle manager. In addition, operational work by human workers is in many organizations being substituted or facilitated by robotic process automation (Kumar and Balaramachandran 2018; Madakam et al. 2019) and artificial intelligence (Duan et al. 2019; Jarrahi 2018; Kolbjørnsrud et al. 2017). This means that a more digital workforce (Colbert et al. 2016; Wesche and Sonderegger 2019) will impact the role and activities of management (North and Kumta 2018; Stone et al. 2015), for instance, in terms of different (e.g. virtual) ways of working together (Lilian 2014; Marlow et al. 2017).

These two developments require adaptive organizations that can and want to change. Organizations must become more agile but strike the right balance between agility and the ability to absorb changing circumstances (Sull 2009). Continuous organizational change appears to be essential for organizations to compete and survive in the changing environment (Carter et al. 2013). The role of the middle manager is clearly changing as previously described. Technology, automation, digitization, all factors that cause the world

and therefore the working environment of the middle manager to change faster and faster (Colbert et al. 2016; Kolbjørnsrud et al. 2017). This requires agile middle managers (De Smet 2018; North and Kumta 2018). It is thus important to further investigate these developments and their future impact on the role of middle management. The following section will explore this further.

## **5.4 Reflection, Limitations and Future Research**

As with any research, this doctoral research is subject to limitations, which in turn also provide opportunities for further research. Therefore, this section serves to reflect on the executed research, and discuss its limitations and potential areas for further research.

### **5.4.1 Reflection**

This study is bounded by several conditions. The literature review in Chapter 2 draws on a particular set of search terms we opted for. Our review method implies the use of many papers from journals such as JOM, IJOPM, IJQRM, which use the word Lean in different ways depending on the respective research fields. For instance, some researchers in the operations management field focus on lean tools for waste elimination, such as process flow mapping, 5-whys analysis, and JIT. However, other researchers in the same field focus on “lean” as a “learning capability” for conducting continuous improvement activities. The lean concept is also used as shop-floor management techniques and practices in the field of HRM. This doctoral study also draws on some papers from HRM journals, such as Human Relations and Human Resource Management Journal. In this field, the word “lean” is sometimes considered the same as “TQM”. Furthermore, the lean concept is also used in the innovation field where many researchers focus on “process innovation”. In our research, we did not make a specific distinction between these different research fields. Such a distinction could have been helpful to further disentangle and structure the literature found.

On the other hand, one could argue that the original search terms were too narrow, which potentially resulted in an incomplete or superficial perspective. For example, much has been written about the politics of lean, and particularly about “Japanese” management principles and the Toyota Production System, both representing more or less the same principles as lean. This is insufficiently taken into account in the current literature review, while this may significantly impact the issues that we seek to explore. Additionally, the word “lean” can be considered ambiguous, and has been used in different ways depending on different research fields. This observation provides opportunities for further research.

Also, one could argue that the fact that the two CMO frameworks developed in Chapter 2 are likely to overlap, due to top managers saying one thing and doing another. Perhaps it would thus have been useful to develop a single model that better captures the *hybrid* nature of the process of implementing CI. On the other hand, the current distinction between the two frameworks helped to disentangle (the outcomes arising from) two different CI implementation strategies in the studies in Chapter 3 and 4.

The research builds on the importance of top management policy and initiative related to CI implementation, because in most cases middle-managers' autonomy, responsibility, and motivation are influenced by or perhaps even dependent on top management policies. However, other potentially influencing factors could have been taken into account as well, such as: company size, environmental conditions (e.g. stable or rapidly changing environment), industrial settings (e.g. manufacturing or service), and industrial relations (e.g. collaborative or hostile).

Furthermore, the findings arising from Chapter 3 show that implementing CI as an integral management approach, rather than as an efficiency program, is likely to lead to better integration in the organizational culture, a more customer-oriented focus and a better work atmosphere compared to implementing CI as a cost-cutting tool. This result is very much in line with the hypotheses developed in Chapter 3. In this respect, the main outcomes of the study in Chapter 3 are rather self-evident, in terms of the conventional wisdom about CI as a cultural change. None the less, no previous study has demonstrated or indicated these causal relationships, which can thus be considered to be the main contribution arising from Chapter 3. A possible explanation for this self-evident outcome can be that the two CI implementation strategies are framed as archetypical approaches of top management toward CI.

We choose the vignette approach over a traditional survey because of the advantages mentioned in Chapter 3. For instance in a traditional survey, the links between different aspects that influence opinion formation are not clear, so the research results may become less valid (Alexander and Becker 1978; Schoenberg and Ravidal 2000). We decided to present the vignettes as a short textual description of the change program "GOLD", aimed at implementing CI in this bank, although there are also various other ways of presenting a scenario. For instance, vignettes could have alternatively been presented in the experiment by means of video, audio, sketches (visuals) or (simulation) games (e.g. Eifler 2007; Hughes and Huby 2004; Steiner et al. 2016). Other ways of presenting the vignette are likely to influence the outcome. For instance, a video can also take show interactions between people and tends to draw more attention from the participants (Hughes and Huby 2004; Weekley and Jones 1997). A downside of a high quality video use is the cost of developing it (Weekley and Jones 1997), which was a reason for not choosing this method. Another example is using visual representations, which generally help to avoid information overload (Hughes and Huby 2002) and can also ensure a more direct response from the participants (Hughes and Huby 2004). However, the latter was not desirable, given the purpose of our study. Overall, the use of other design elements, such as video and visuals, in the vignettes tend to make them more complicated in terms of execution, but may also increase the validity of the findings.

In Chapter 4, our findings imply no significant relationship between the statements about customer satisfaction and any of the four roles identified by Floyd and Wooldridge. These findings do thus not support the idea that the primary focus of CI practices such as Lean is to

eliminate activities that do not add customer value and addressing value-adding activities. This can perhaps be explained by the fact that we have used middle managers placed in a head office in our study, who may be positioned too far away from the (end) customer. As a result, these middle managers may have interpreted questions about customers differently from what was intended; a similar type of perception gap was observed in studies of headquarter-subsidary relationships by Abdullah and Liang (2013) and Birkinshaw et al. (2000).

All in all, the results of Chapters 3 and 4 may have been influenced by the original blueprint of the bank at which data was collected. The so-called founder's blueprint involves fundamental choices regarding how to deal with human resources and employer-employee relationships (e.g. Romme et al. 2012), choices that have a long-term impact on how the organization operates, also many decades after the organization was first established. This blueprint is unique and may lead to a certain type of middle manager (in this particular Dutch bank): namely, a manager who does not seek to 'shake the tree' and who is completely excluded from engaging in strategy development, which is exclusively claimed by top management. Those middle managers who do not fit this profile and challenge this implicit agreement are likely to be considered 'obstacles' by top management, and will therefore have to leave the organization sooner rather than later (Romme et al. 2012; Van Baarle et al. 2019).

#### **5.4.2 Limitations**

The first limitation of this dissertation involves the assumption that the adoption of CI practices such as Lean can be beneficial to any organization. This may be a problematic assumption, one that has been contested (e.g. Ashkenas 2012; Delbridge et al. 2000; McCann et al. 2015). Future work therefore needs to explore whether the assumed benefits of CI practices such as Lean are substantial or merely rhetorical. Literature on Lean and other CI methods downsides and weaknesses and its effectiveness could be further reviewed.

Another limitation of most of the literature reviewed is the (often implicit) assumption that CI tools such as Lean involve programmatic changes. Successful changes require top and middle managers to constantly challenge and adjust the program to make sure the change delivers the desired results (Oakland and Tanner 2007). In this respect, an additional reason for unsuccessful transformation CI programs such as Lean may be that there is no, or limited, management of the change process during the transition (Nordin et al. 2012).

A third limitation of the literature review and synthesis in this dissertation is that we did not explicitly address the theoretical and philosophical foundations of the Context-Mechanism-Outcome approach used (Pascal et al. 2013; Van Burg and Romme 2014).

Fourth, the findings may not be generalizable outside the Netherlands. We have no direct evidence for this limitation, because the national cultural dimension has not been explicitly addressed in this study. Thus, future work should explore the potential impact of national culture (Hofstede 1998, 2011).

Fifth, although the results arising from this study are insightful, a large part of the research was performed within one organization, which implies that the results may not be generalizable. Therefore, future work in this area needs to engage in replication and validation efforts regarding the results of this study in other financial service organizations as well as organizations in other industries.

Sixth, in our research we did not explicitly ask about how long the participants have been practicing their management role; instead, we included the number of years working within the department and the number of years of experience with CI. One can assume the latter measurements to be highly correlated with management experience, given the fact that most participants have entered the bank through a management traineeship, after completing tertiary education (e.g. Oliver 2010).

Finally, as previously stated, the simulated nature of the experiment may not provide the same setting as a real-life context, especially when it comes to the emotional side of human perception (e.g. in middle management roles). A vignette experiment appears to be a valuable method for exploring the perceptions, beliefs and meanings of people about specific situations. However, participants in this type of experiment can assess situations more rationally than they would do in reality. This makes it difficult to clearly indicate the relationship between for instance belief and eventual actions (Collett and Childs 2011). This may limit the external validity of the vignette experiment conducted (Roe and Just 2009; Schram 2005). By drawing more on mixed-methods (Van Dun et al. 2017), one can possibly increase the validity of research findings in this area. Hence, we hope that future studies will replicate and/or extend our findings by using mixed method approaches. Moreover, future work in this area needs to engage in replication and validation efforts in other financial service organizations as well as organizations in other industries. The internal validity of our experiment can also be questioned (cf. Roe and Just 2009; Schram 2005). As such, it would be valuable to examine, for instance, in a real life case to what extent CI was accomplished in a specific situation, and what the impact of the different roles was on this accomplishment.

#### **5.4.3 Future Research**

CI will remain an important challenge within many organizations and those studying it (Dorval et al. 2019; Prashar and Antony 2018; Van Dun et al. 2017). There is a wide range of CI-related topics that should be further researched. For example, an increasing number of organizations are using Agile ideas, in addition to Lean, in order to improve organizational performance (e.g. Parker et al. 2015; Tripp et al. 2018). This raises the question whether Agile is likely to replace Lean, or whether a combination of both in so-called Leagile methods will arise (Krishnamoorthy and Ben 2019; Rahiminezhad and Helmi 2016). If we conceive Agile as a further development of Lean, it raises various questions for further research: What is the impact of an agile way of working (in autonomous teams) on the role of middle management? And which middle management (i.e. championing, synthesizing, facilitating or implementing) roles contribute mostly to accomplishing organizational agility?



Further research can also be done on how CI will further develop if we explore the assumptions about the need to properly adopt Lean, as well as the meanings of the success/failure rates of the processes of adoption. And what is the impact of corporate culture on embedding CI in the organization (Bhasin 2013; Pakdil and Leonard 2015)? As mentioned before, the word “Lean” appears to be equivocal and has been used in highly different ways, contingent on different research perspectives. This observation also provides opportunities for further research.

Our findings underline the need for studies that provide insight into the complexity of organizational change. Further research should be conducted to address this complexity and examine the impact of various middle management roles on the successful implementation of CI, for example by field observations across a long period of time (cf. Van der Weide and Wilderom 2006). These field studies can draw on various methods such as interviews, participant-observation, and participation in the life of middle managers (e.g. Garsten and Nyqvist 2013; Lewin 1946; Mintzberg 2004).

Also, future work needs to explore whether the assumed benefits of Lean are substantial or merely rhetorical. Lean’s downsides, or weaknesses, can be further reviewed and studied (Magnani et al. 2019; Minh et al. 2019). Based on the CMO patterns outlined in Chapter 2, these various downsides often co-exist and overlap. Future work in this area will not only need to test the bundle of hypotheses arising from each figure in Chapter 2, but must also explore and assess the interaction between multiple bundles of causal patterns in settings where the two contextual conditions appear to co-exist. Finally, future research would benefit from broadening the research domain by involving more cases within and outside of the financial service industry.

## **5.5 Closing Remarks**

The findings in this dissertation suggest that commitment and a change in behavior and attitude from the entire organization, is a critical factor for achieving sustainability. Creating sustainability in lean management practice has been an enormous challenge within many organizations. Important is to what extent is CI/Lean sustained over time and supported by the efforts of (most if not all) employees and managers and has become part of the way of working throughout the organization. If an organization does not succeed in creating some level of sustainability in its CI practices, it will very likely fall back to ways of working that prevailed before the intervention.

It is realistic to expect that middle management will continue to play an important role within organizations. Organizations are undergoing major changes, including the roles of all types of managers in these organizations. The importance of effective management has not changed, but the way we do this is changing fundamentally. Organizations are changing at a rapid pace, in response to changing customer behavior, shorter times-to-market, and changing expectations of employees. Therefore, they have to become more agile, also in the context of an increasing digitalization. Middle management is an important link in this

rapidly changing world, which requires personal adaptability and a new interpretation of the role of middle management.





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## Chapter 1 Introduction

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## Chapter 2 The Role of Middle Managers in Becoming Lean: A Systematic Review and Synthesis

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### Chapter 3 A Vignette Study of Middle Managers' Responses to Continuous Improvement Initiatives by Top Management

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## Chapter 4 An Exploratory Study of Middle Manager's Roles in Continuous Improvement

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## Chapter 5 Conclusion

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## Appendices

## Appendix A Overview References Used In Systematic Literature Review

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## Appendix B Vignette Questionnaire

### Background

The continuous improvement of operational processes is an enormous challenge for many organizations. Managers play an important role in this matter. The creation of a sustainable continuous improvement practice demands the development of a new way of working (this means: “the continuous improvement of operational processes”) and its integration within the daily routines throughout the organization. In order to achieve this, involved managers experience pressure. Since you are a manager that participated in the Customer Excellence programme of XXXXX, you are approached to participate in this study.

### Our request?

Please read the questions below carefully and subsequently answer them. The main objective of the first questions is to establish a general impression of your role as a manager. If you have any questions, please do not hesitate to contact (XXXXX). Your contribution to this research is highly appreciated.

### Propositions

Please answer the questions below within the context of the above stated information. Execute this by answering each question with totally disagree, disagree, not disagree/ not agree, agree or totally agree.

- 1) I consider GOLD as an implementation of the continuous improvement philosophy.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree
- 2) I consider GOLD as a programme that results in a permanent shift of our organisational culture.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree
- 3) I consider GOLD as an implementation of cost-cutting tools from a “lean” toolbox.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree
- 4) I consider GOLD as an effort to increase the efficiency of the organisation.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree
- 5) I expect that the top management allows me sufficient time to transfer GOLD into a concrete action plan for my department and to realise the objectives of GOLD.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree
- 6) I consider GOLD as a threat to my function.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

7) I expect sufficient support from the top management for the implementation of change (GOLD).  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

8) I expect that GOLD will lead to resistance within the organization.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

9) GOLD results in the implementation of continuous improvement within our culture.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

10) GOLD results in a drastic cost decrease.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

11) The working atmosphere will improve due to the implementation of GOLD.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

12) I will support the top management by the implementation of the change (GOLD).  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

13) I will fulfil a pioneering role in making GOLD a success.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

14) I perceive my role as crucial within the GOLD programme.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

15) Because of GOLD, I focus on fulfilling customer needs.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

16) I will investigate how GOLD can contribute to customer satisfaction.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

17) I will integrate GOLD and adapt it to the current way of working within my department(s)  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

18) In the context of GOLD, I will adapt the organisation in order to meet customer needs in the best possible way.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

19) Because of GOLD, I focus on fulfilling customer needs at the lowest possible costs and shortest lead time.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

20) I select the proper tools to achieve and monitor the GOLD objectives.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

21) I will determine specific KPI's to timely realise the efficiency objectives of GOLD.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

22) In the context of GOLD, I actively monitor individual and team KPI's in order to identify improvement possibilities.

- totally disagree   
  disagree   
  not disagree/not agree   
  agree   
  totally agree

23) By implementing GOLD, I will solely focus on activities that are beneficial for me.

- totally disagree   
  disagree   
  not disagree/not agree   
  agree   
  totally agree

24) Because of GOLD, I will steer the department on efficiency.

- totally disagree   
  disagree   
  not disagree/not agree   
  agree   
  totally agree

25) Because of GOLD, I will steer the department on customer satisfaction.

- totally disagree   
  disagree   
  not disagree/not agree   
  agree   
  totally agree

26) Because of GOLD, I will steer the department on achieving continuous improvement and the adaption to a new organisational culture.

- totally disagree   
  disagree   
  not disagree/not agree   
  agree   
  totally agree

## General questions

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<b>Gender</b>	
<b>Age</b>	
<b>Function</b>	
<b>Education level</b>	<input type="checkbox"/> Elementary school <input type="checkbox"/> High school <input type="checkbox"/> MBO <input type="checkbox"/> HBO <input type="checkbox"/> University <input type="checkbox"/> Post doctoral education
<b>Amount of years working at ABN AMRO</b>	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 3-5 years <input type="checkbox"/> 6-10 years <input type="checkbox"/> more than 10 years
<b>Amount of years at current department</b>	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 3-5 years <input type="checkbox"/> 6-10 years <input type="checkbox"/> more than 10 years
<b>Years of experience with CE/CI</b>	

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## Open question

Do you believe that you the organisation will still work according to Customer Excellence within 5 years? Why yes/no?

## Appendix C Floyd and Wooldridge Self-Test of Middle Management Strategic Involvement

1) Monitor and assess the impact of changes in the organisation's external environment.

Never  Rarely  Occasionally  Regularly  Frequently

2) Implement action plans designed to meet top management objectives.

Never  Rarely  Occasionally  Regularly  Frequently

3) Integrate information from a variety of sources to communicate its strategic significance.

Never  Rarely  Occasionally  Regularly  Frequently

4) Evaluate the merits of new proposals.

Never  Rarely  Occasionally  Regularly  Frequently

5) Evaluate the merits of proposals generated in my unit, encouraging some, discouraging others.

Never  Rarely  Occasionally  Regularly  Frequently

6) Translate organizational goals into objectives for individuals.

Never  Rarely  Occasionally  Regularly  Frequently

7) Provide a safe haven for experimental programs.

Never  Rarely  Occasionally  Regularly  Frequently

8) Assess and communicate the business-level implications of new information to higher-level managers.

Never  Rarely  Occasionally  Regularly  Frequently

9) Search for new opportunities and bring them to the attention of higher-level managers.

Never  Rarely  Occasionally  Regularly  Frequently

10) Communicate and sell top management initiatives to subordinates.

Never  Rarely  Occasionally  Regularly  Frequently

11) Define and justify the role of new programs or processes to upper-level managers.

Never  Rarely  Occasionally  Regularly  Frequently

12) Encourage multidisciplinary problem-solving teams.

Never  Rarely  Occasionally  Regularly  Frequently

13) Proactively seek information about your business from customers, suppliers, competitors, business publications, and so on.

Never  Rarely  Occasionally  Regularly  Frequently

14) Monitor and communicate to higher-level managers the activities of competitors, suppliers, and other outside organizations

Never  Rarely  Occasionally  Regularly  Frequently

15) Justify to higher-level managers programs that have already been established.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

16) Provide resources and develop objectives/strategies for unofficial projects.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

17) Translate organizational goals into departmental action plans.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

18) Relax regulations and procedures in order to get new projects started.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

19) Propose new programs or projects to higher-level managers.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

20) Monitor activities within your unit to ensure that they support top management objectives.

Never                       Rarely                       Occasionally                       Regularly                       Frequently

## Appendix D Experiment Questionnaire

Please answer the questions below. Execute this by answering each question with totally disagree, disagree, not disagree/ not agree, agree or totally agree.

1) I consider GOLD as an implementation of the continuous improvement philosophy.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

2) I consider GOLD as a programme that results in a permanent shift of our organisational culture.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

3) I consider GOLD as an effort to increase the efficiency of the organisation.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

4) I consider GOLD as a threat to my function.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

5) GOLD results in the implementation of continuous improvement within our culture.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

6) GOLD results in a drastic cost decrease.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

7) The working atmosphere will improve due to the implementation of GOLD.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

8) I will support the top management during the implementation of the change (GOLD).  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

9) I will fulfil a pioneering role in making GOLD a success.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

10) I perceive my role as crucial within the GOLD programme.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

11) Because of GOLD, I focus on fulfilling customer needs.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

12) I will investigate how GOLD can contribute to customer satisfaction.  
 totally disagree     disagree     not disagree/not agree     agree     totally agree

13) I will integrate GOLD and adapt it to the current way of working within my department(s)  
 totally disagree     disagree     not disagree/not agree     agree     totally agree



14) In the context of GOLD, I will adapt the organisation in order to meet customer needs in the best possible way.

totally disagree       disagree       not disagree/not agree       agree       totally agree

15) Because of GOLD, I focus on fulfilling customer needs at the lowest possible costs and shortest lead time.

totally disagree       disagree       not disagree/not agree       agree       totally agree

16) I select the proper tools to achieve and monitor the GOLD objectives.

totally disagree       disagree       not disagree/not agree       agree       totally agree

17) I will determine specific KPI's to timely realise the efficiency objectives of GOLD.

totally disagree       disagree       not disagree/not agree       agree       totally agree

18) In the context of GOLD, I actively monitor individual and team KPI's in order to identify improvement possibilities.

totally disagree       disagree       not disagree/not agree       agree       totally agree

19) By implementing GOLD, I will solely focus on activities that are beneficial for me.

totally disagree       disagree       not disagree/not agree       agree       totally agree

20) Because of GOLD, I will steer the department on efficiency.

totally disagree       disagree       not disagree/not agree       agree       totally agree

21) Because of GOLD, I will steer the department on customer satisfaction.

totally disagree       disagree       not disagree/not agree       agree       totally agree

22) Because of GOLD, I will steer the department on achieving continuous improvement and the adaption to a new organisational culture.

totally disagree       disagree       not disagree/not agree       agree       totally agree

## General questions

<b>Gender</b>	
<b>Age</b>	
<b>Function</b>	
<b>Education level</b>	<input type="checkbox"/> Elementary school
	<input type="checkbox"/> High school
	<input type="checkbox"/> MBO
	<input type="checkbox"/> HBO
	<input type="checkbox"/> University
	<input type="checkbox"/> Post doctoral education
<b>Amount of years working at ABN AMRO</b>	<input type="checkbox"/> 0-3 years
	<input type="checkbox"/> 3-5 years
	<input type="checkbox"/> 6-10 years
	<input type="checkbox"/> more than 10 years
<b>Amount of years at current department</b>	<input type="checkbox"/> 0-3 years
	<input type="checkbox"/> 3-5 years
	<input type="checkbox"/> 6-10 years
	<input type="checkbox"/> more than 10 years
<b>Years of experience with CE/CI</b>	

### Open question

Do you believe that you the organisation will still work according to Customer Excellence within 5 years? Why yes/no?





## Summary

## **Summary The role of middle management in achieving continuous improvement: a demanding playing field**

Many organizations in financial services and other industries are constantly trying to adapt to an ever-changing environment. Since the beginning of the 21st century, many of these organizations have been exposed to growing competition and cost pressure. As a result, these companies have been looking for ways to improve their business: that is, providing better services at lower cost, improving customer satisfaction, and staying competitive. One particular example is the Dutch banking sector, which is changing drastically in many ways. Banks are facing increased competition from technology companies outside the traditional financial sector which are offering various new financial technologies (fintech) and other services. Top managers of banks often adopt a strategy of Continuous Improvement (CI) in their organizations as a means to cope with all, or at least some of, these changes. CI practices such as Lean appear to have the potential to position financial institutions for long-term success. Studies in both industrial and service-oriented organizations demonstrate that (initial) results arising from such projects are often not sustained. Previous studies have established that making CI work is more than just the implementation of a tool box; it requires effectuating a management philosophy in combination with the help of (middle) management to make the implementation adhere.

Therefore, it is important to understand the role of middle managers in implementing organizational change initiatives such as CI. Overall, the role and influence of middle management within CI appears to be under-researched. This is remarkable because middle managers can be considered key agents in facilitating CI initiatives and can play a key role in striking a balance between continuity and change. So a better understanding can help organizations to determine what is expected of middle managers and how conditions set by top management influences middle management. As a result, organizations will have more instruments to exert influence, thereby increasing the likelihood of successfully implementing CI. This dissertation investigates how and to what extent middle managers influence CI efforts in the financial service industry.

The main research question of this dissertation is: *How and to what extent do middle managers contribute to accomplishing CI in the financial service industry?*

This dissertation contains three different studies that serve to further explore the influence of middle managers on CI (implementation) within organizations.

### **Insights from study 1**

First, a systematic review of the literature is conducted to develop a mechanism-based framework that explains the success and failure of CI initiatives (incl. Lean) in which middle managers are key agents.

This first study (chapter 2) results in two frameworks. Each of these frameworks assumes that top management consistently seeks to implement a particular (archetypical) philosophy of CI: the first framework assumes an integral management approach and the second starts

from the assumption that a cost-cutting strategy is adopted. Each of these two frameworks in itself reflect some of the key tensions and challenges arising from any CI change effort, especially for middle managers. In practice, the two conditions may overlap, which creates an additional level of complexity. Overall, our review provides an understanding of the (non) conditions in which continuous improvement initiatives are likely to succeed or fail, and as such also provides a starting point for future research as well as practical work in this area. Future work in this area will not only need to test the bundle of hypotheses arising from each framework in this study, but also explore and assess the interaction between the two bundles of causal patterns in settings where these two contextual conditions appear to co-exist.

### **Insights from study 2**

Secondly, an experimental vignette study (chapter 3) serves to identify the differences in adopting a CI approach as a management philosophy versus a cost-cutting program. The second study examines the effect of different ways of implementation. The vignette study was carried out at a large bank in the Netherlands.

The findings arising from this study suggest that the expectation is that C1 is more likely to be integrated in the organizational culture, may enhance the customer orientation among employees, and could improve the work atmosphere when it is implemented as an integral management approach rather than to implementing CI as a cost-cutting tool. These findings suggest that embedding CI in the organizational culture apparently contributes to the sustainability of CI in the organization. We also found some confirmation that, if top management implements CI as an integral management approach, middle managers expect that the organization will become more customer-focused. Finally, middle managers appear to perceive less negative associations regarding the work atmosphere when CI is implemented as an integral management approach rather than as a cost-cutting tool.

Middle managers can only help reduce the risk of perceiving C1 as another downsizing method focused on short-term financial targets, if top managers commit themselves to it as an integrated management philosophy, and continually communicate this in a consistent manner throughout the entire organization.

### **Insights from study 3**

Thirdly, the different roles that middle managers can play in CI are analyzed and compared. A widely-cited model of Floyd and Wooldridge (1996), which links organizational performance directly to middle management, is used. The main findings from this study (in Chapter 4) suggest that middle management can be perceived as a change agent, involving both upward and downward activities. In line with Floyd and Wooldridge, our results show support for the integrative roles (implementing and synthesizing) that middle managers may play when the organization aims to adopt CI. In particular, middle managers who fulfill an implementing

role within the organization are more likely to perceive CI initiatives as a sustainable cultural change and are more likely to take action in this respect.

### **Overall**

The three studies conducted reveal that middle managers engage in a dynamic playing field in which they play a pivotal role in organizational change. More specifically, top management's conceptualization of the rationale of a CI program appears to affect the role of middle management in getting CI implemented. From a practical perspective, this means that if top management perceives CI as an integral management approach, this may have a positive effect on middle management's expectation that CI can be incorporated into the organizational culture in a sustained manner. The findings of this doctoral dissertation suggest that the middle management role is not an easy one, because middle managers have to change their own mindset and behavior and lead by example, in order to create and sustain changes in the entire organization. We concluded that it is important that middle managers understand the purpose of the change.

While top and middle managers often deliberately try to plan change to make it more manageable, organizational realities tend to be more messy and noisy than can be effectively planned for. Cooperation between top management and middle management thus appears to be essential for accomplishing CI. Using their link between top management and shop floor, top management needs to create the conditions in which middle managers can ensure that improvements are actually implemented and guaranteed within the organization.

Organizations are undergoing major changes including the roles of all types of managers. It is expected that middle management will continue to play an important role within them. The importance of effective management has apparently not changed, but the way one engages in management may be changing fundamentally. In response to altering customer behavior, shorter times-to-market, shifting expectations of employees, and increasing digitalization, organizations are changing rapidly and need to become more agile. Middle management is an important link in these transformation processes. This in itself requires personal adaptability and a new interpretation of the role of middle management. Thus, the impact that an agile way of working has on the role of middle management is an interesting area for future research, in particular to find out which roles (i.e. championing, synthesizing or implementing) can contribute the most to accomplishing organizational agility.

## Further Readings for Practitioners

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## **Additional Publications and Conference Presentations**

### **Additional publications**

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## **E-books**

Hermkens, F.J.A. (2019) "The road to continuous improvement: Reflections of a dynamic playing field" [De weg naar continue verbetering: Bespiegelingen van een dynamisch speelveld]

Hermkens, F.J.A. (2017) "A brief look into the flexible world: First steps in an agile environment" [Een korte blik in de wendbare wereld: Eerste stappen in een agile omgeving]

Hermkens, F.J.A. (2016) "An important link in the middle: Middle management viewed" [Een belangrijke schakel in het midden: Midden management bekeken]

Hermkens, F.J.A. (2016) "A practical view of Lean: Amazements from a consultant" [Een praktische kijk op Lean: Verwonderingen van een consultant]

## **Conference and professional presentations**

Agile Coach Company (November 19, 2019) Webinar "Middle management, a blessing or a curse in a changing organization?" [Middenmanagement, een zegen of een vloek in een veranderende organisatie?] <https://www.youtube.com/watch?v=ODfclGU4ZnU&feature=youtu.be>

IIBA (November 12, 2019) Workshop for business analysts "BPM in a fast changing world" [BPM in een snel veranderende wereld]. Amsterdam, the Netherlands.

ING (February 20, 2019) Workshop for product owners "From brainstorm to improvement initiative" [Van brainstorm naar verbeterinitiatief]. Capelle aan de IJssel, the Netherlands.

ING (November 14, 2018) Workshop for product owners "The backlog as the basis for continuous improvement" [De backlog als basis voor continu verbeteren]. Capelle aan de IJssel, the Netherlands.

ING (June 18, 2018) Workshop for product owners "From improvement initiative to Sprint" [Van verbeterinitiatief naar Sprint]. Dordrecht, the Netherlands.

ABN AMRO (November 28, 2017) Presentation "Continuous improvement: Wondering and creativity" [Continu verbeteren: verwonderen en creativiteit] Amsterdam, the Netherlands.

European Lean Educators Conference (November 9, 2017) Presentation "The role of Middle Management in Implementing Lean in Financial Service Firms" Nijmegen, the Netherlands.

Business School Netherlands (June 13, 2017) Presentation for alumni students "Continuous Improvement and the impact of managers on the results" [Continu verbeteren en de impact van managers op het resultaat]. Buren, the Netherlands.

De kleine consultant (January 25, 2017) Presentation for student association "Continuous improvement in a bird's eye" [Continu verbeteren in vogelvlucht] Utrecht, the Netherlands.

Nederlands Netwerk voor Kwaliteitsmanagement ( March 15, 2016) Presentation “A practical look at Lean management” [Een praktische kijk op Lean management]. Utrecht, the Netherlands.

ABN AMRO (May 10, 2016). Workshop for mid-office employees “Continuous improvement: what’s your story” [Continu verbeteren: wat is jouw verhaal?]. Eindhoven, the Netherlands.

ABN AMRO (January 4, 2016 ). Presentation for internal Customer Excellence consultants “9 practical implementation tips for Lean” [9 praktische implementatie tips voor Lean] Amsterdam, the Netherlands.

European Lean Educators Conference (September 18, 2015) Presentation “Lean hitting, fielding and pitching at the same time: a whole new ballgame for Middle Management” Södertälje, Sweden.

Nederlands Netwerk voor Kwaliteitsmanagement (April 21, 2015) Presentation “The importance of wondering for continuous improvement” [Het belang van verwonderen bij continu verbeteren]. Utrecht, the Netherlands.

Colloquium Organizational Change & Development (September 12, 2014) Presentation “Lean hitting, fielding and pitching at the same time: the role of Middle Management in change management”. Essen, Germany.

PGGM (March 27, 2014) Workshop for employees “Voice of the customer game”. Zeist, the Netherlands.

Adidas (December 2012) Training for employees “Process optimization and continuous improvement”. Herzogenaurach, Germany.

Business Process Management Conference (October 26, 2011) Presentation: “It’s not about the design but about how to make it work: Attitude, behavior and skills of the operational manager” [Het gaat niet om het ontwerp, maar hoe je het laat werken: Houding, gedrag en vaardigheden van de operationeel manager]. Zeist, the Netherlands.

Rabobank Bollenstreek (October 26, 2010) Presentation for board and management team “Role of operational management”. Sassenheim, the Netherlands.

Rabobank NL (September 2010) Training productmanagers directoraat bedrijven “Training Lean Six Sigma” Utrecht, the Netherlands.

### **Dutch university guest lectures**

Zuyd University of Applied Science (September 24, 2019) Lecture “The dynamic playing field of the middle manager” [Het dynamisch speelveld van de midden manager].

Tilburg University (March 14, 2019) Lecture “Continuous Improvement with agile project management”.

Erasmus University Rotterdam (February 8, 2019) Lecture “The Role of Middle Management in accomplishing CI in Financial Service Industry”.

Zuyd University of Applied Science (November 23, 2018) Lecture “The voice of the customer and continuous improvement” [De stem van de klant en continu verbeteren].

Zuyd University of Applied Science (September 25, 2018) Lecture “The role of middle managers in continuous improvement” [De rol van midden managers bij continu verbeteren].

Tilburg University (March 14, 2017) Lecture “Continuous Improvement and Change”.

Zuyd University of Applied Science (October 21, 2016) Lecture “Continuous improvement of processes” [Het continu verbeteren van processen].

Tilburg University (March 8, 2016) Lecture “9 practical tips for implementing continuous improvement”.

Zuyd University of Applied Science (October 16, 2015) Lecture “Continuous improvement” [Continu verbeteren].

Zuyd University of Applied Science (October 8, 2015) Lecture “Business Process Improvement the future” [Business Process Improvement de toekomst].

Utrecht University of Applied Science (March 5, 2015) Lecture “Introduction Lean: continuous improvement” [Introductie Lean: continu verbeteren].

Zuyd University of Applied Science (January 9, 2015) Masterclass “Voice of the customer and continuous process improvement” [Stem van de klant en continue procesverbetering].

Zuyd University of Applied Science (October, 2014) Lecture “Continuous improvement” [Continu verbeteren].

VU (February 2010) Lecture “Performance management”.

## About the Author

Freek Hermkens was born in Heerlen, the Netherlands, on May 16 1974. He obtained a Master's degree in Economics at Maastricht University in 1999. He wrote his master thesis on the "Consequences of downsizing and integral management in organisations". After his study, Freek worked as a teacher at Maastricht University, and subsequently started working as a consultant. He is currently employed as a Principal Consultant at MLC ([www.m-lc.nl](http://www.m-lc.nl)) and manager of the MLC Academy. Freek has extensive experience in supporting organizations that are implementing business process optimizations with the aim of achieving continuous improvement. In 2011, he started working on a doctoral dissertation at Eindhoven University of Technology, in the ITEM group of the department of Industrial Engineering and Innovation Sciences. The results of his studies of the role of middle managers in achieving continuous improvement are presented in this dissertation. Freek has published articles in the *Journal of Economics, Management & Trade* and in the *International Journal of Business and Social Science*. Furthermore, he presented his research at the *Colloquium on Organisational Change and Development (2014)*, the *European Lean Educator Conference (2015, 2017)*, and the *European Group for Organizational Studies (2016)*. Freek can be contacted at: [Freek.hermkens@middle-management.eu](mailto:Freek.hermkens@middle-management.eu)









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