Global Integration and Local Flexibility: Managing Contradictions in a Global Company

A Case Study of a Multi-National Service-Oriented Manufacturing Company

Margit Suurnäkki



Global Integration and Local Flexibility: Managing Contradictions in a Global Company

A Case Study of a Multi-National Service-Oriented Manufacturing Company

Margit Suurnäkki

Aalto University Publication Series BUSINESS + ECONOMY 4/2019

© Margit Suurnäkki

ISBN 978-952-60-8838-9 ISBN 978-952-60-8839-6 (pdf) ISSN 1799-4810 ISSN 1799-4829 (electronic)

Grano Oy Helsinki 2019

Finland

Aalto Executive DBA - Doctor of Business Administration

The Aalto Executive DBA (Doctor of Business Administration) program is designed for experienced executives who wish to complete a doctoral degree alongside their work. This working-life oriented program involves applied research. The DBA, which is recognized around the world, is offered by several leading institutions, such as Harvard Business School.

Like the Aalto Executive MBA and Aalto MBA degree programs, the DBA is not part of the Finnish degree system. However, it is conferred by the accredited Aalto University School of Business. The Aalto Executive DBA program can be completed, alongside work, in three to six years. This feebased program was launched at the beginning of 2013.

More information

www.aaltoee.com/dba

Aalto University Executive Education Ltd

Aalto University Executive Education offers thought provoking leadership development services (Aalto EE), professional development services for experts and managers (Aalto PRO), and creative solutions covering the whole life-cycle of entrepreneurship (Aalto ENT). Aalto University brings to our offering a multidisciplinary approach, together with innovative learning methods; this provides a unique combination of practical expertise with latest research.

Aalto University Executive Education's strengths lie in its global operating model and diverse offering. In addition to Finland and Singapore, we offer programs in several locations. Aalto University Executive Education holds three respected accreditations: AACSB, AMBA, and EQUIS certificates. This places it in the top 0.5 per cent of the world's institutions.



Abstract

This dissertation addresses strategic change from the viewpoint of managing strategic dualities in the growth and internationalization of a company. The theoretical framework builds on theories of international business, organizational capabilities, and managing contradictions in organizations. The overarching theme of this research is the management of strategic dualities. Based on a cross-theory review, I frame a qualitative single case study, which produces a research narrative of a long-term strategic change, introducing various perspectives to provide a description of the research phenomenon in its context: a multinational service-oriented manufacturing company going through a strategic change. The data for the single case study were drawn primarily from a set of documentary data. The documentary data consisted of in-house employee magazines, company internal presentations and memos, annual reports, and articles and books on the company.

This monograph starts with a review of existing literature. The literature review draws a line from traditional internationalization theories and managing the liability of foreignness to globalization and the needs to balance between global integration and local flexibility. A historical single case study follows the Finland-based multinational service-oriented manufacturing company and its growth and change. The research interest lies in the company's attempts to harmonize its ways of working globally across the company. The results describe the various harmonization efforts and their impact on the growth and productivity of the company. The results shed light on how the company has managed tensions arising from the conflicting demands between global integration and local flexibility, between productivity and innovation, and between company internal and external views. These contradictions are addressed from three different aspects: structures and processes and adaptation thereof: technologies and products and innovation thereof: and short-term and long-term view and renewal thereof. The findings of this study explicate how the case company has developed its global operating model, the "company way" and what choices the company has made in managing tensions it has faced in the integration efforts.

The key findings of this case study are the following. First, involving geographical business areas in global decision making has been helping the prioritization and allocation of scarce global resources across the network of local companies. Involving these businesses has also supported the global strategy - and the global mindset - of the company. Second, technological innovations have had a key role in developing global products and have thus supported the renewal from local to global business, differentiating the case company from many of its competitors. Third, harmonized ways of working are seen as key for agility and renewal, because the harmonized baseline enables faster changes. Fourth, the case company have chosen different approaches to manage the conflicting demands between global and local requirements. In many cases, the question has been about choices between global and local, and therefore about accepting possible trade-offs. However, in the case of an exceptional market situation in the emerging China market, local demands and pressure led to conflicts that in turn led to transformation and creation of even better ways of working by combining the global and local views. Finally, the results indicate how the drivers for harmonization have changed over time. The focus appears to have shifted from ensuring operational efficiency and economies of scale, towards making it possible for the company to integrate with external networks, especially as technological development has accelerated, and the locus of innovation has been moving outside companies.

The main theoretical contribution of this dissertation is to examine international management theories with a historical long-term case study, where the need for harmonization remains but the drivers for a global strategy change. Through an empirical case study, this dissertation demonstrates the role of harmonization in a global company. It applies the existing theories to practice and illustrates how the case company has been managing the tensions that it has faced during the harmonization programs. This research complements existing international business research with a real-life case study on the global integration process of one company operating in a traditional industry.

Key words: global integration, organizational capabilities, managing contradictions, historical research, international business, company renewal

Acknowledgements

The completion of this dissertation would not have been possible without the support of many individuals to whom I wish to express my gratitude.

First and foremost, I would like to thank Professor Henrikki Tikkanen for being my academic supervisor. Without his guidance and interest in my research topic, this dissertation would not exist. I was honored to have Professor Niina Nummela and Professor Karl-Erik Michelsen as external examiners of my dissertation. I have read through their examiner's reports countless times, and their comments helped me to improve my dissertation. I thank Professor Jaakko Aspara for his valuable comments on my manuscript.

I owe thanks to everybody in Aalto Executive DBA program for all the guidance and insights I have received. Only in the end of the project I can see, how much there is to learn. I thank Ulla-Maija Uusitalo, who kept me and my dissertation on track during the final sprint. I thank my fellow students in this program. We share the wish to complete doctoral degree alongside work, and the peer support – and the peer pressure – from this group kept me going. In particular, I want to thank Pauliina Airaksinen-Aminoff, with whom I shared the pains and the gains during our research projects.

I am thankful to Kone Corporation for investing in its people, including me, and to my Kone colleagues across the world. This unique, global team has provided me with a lens, through which I have seen how balancing between global and local views works in a global company.

I also want to take this opportunity to acknowledge a specific function at Kone. I owe special thanks to Kone's internal communications teams throughout the times. A major part of the research material of my study consists of employee magazines from the past. Reading them was perhaps the most enjoyable part of my research project. Such well-written, vivid descriptions of the past events helped to bring history back to life for me and my case study.

On a more personal note, I want to thank my family and my friends. I thank my husband, Jari, for encouraging me to take this challenge. Also, I am happy to extend my thanks to my extended family. Thank you Panu and Jessi, and little Jooa. Thank you Maria, my dear goddaughter. You help me see the future.

Helsinki, October 25th, 2019

Margit Suurnäkki

Contents

A	ostra	ct		7
A	ekno	vledgements		9
Co	onter	ts		11
Li	st of	Abbreviations a	and Symbols	13
Li	st of	Figures		14
Li	st of	Fables		15
1.	Inti	oduction		17
	1.1	Background		17
	1.2	Research Gaps		19
	1.3	Purpose of the S	ltudy	21
	1.4	Research Quest	ions	23
	1.5	Key Concepts		24
	1.6	Limitations of t	he Study	29
	1.7	Structure of the	Study	30
2.	Lite	rature Review		31
	2.1	International Bu	usiness Research	32
			onal Business as a Field of Research	32
			gy of Multinational Companies	34
		2.1.3 Theories	on International Business and MNCs	36
		2.1.4 Global Str	-	43
	2.2	Organizational (-	47
		2.2.1 From Res	ource-Based View to Dynamic Capabilities	48
		2.2.2 Process M	-	55
		-	ional Alignment	60
		-	ional Ambidexterity	63
	2.3		radictions in Organizations	68
		•	epts in Contradictions Research	68
		2.3.2 Strategies	for Managing Contradictions	
		in Organiz	zations	70

3.	Res	earch Framework	73	
4.	Met	hodology	77	
	4.1	Research Approach	77	
		4.1.1 Ontological and Epistemological Foundation	77	
		4.1.2 Intensive Single-case Study Based on Historical		
		Qualitative Data	78	
		4.1.3 Historical Methods in Organization Studies	79	
	4.2	The Choice of Case Company	81	
	4.3	Data Collection	82	
		4.3.1 Historical Documents	85 86	
	4.4	4.3.2 Historical Narrative as Starting Point	86 87	
	4.4	Data Analysis	• •	
	4.5	The Trustworthiness of the Study	90	
5.	Cas	e Study: Historical Narrative	93	
6.	Ana	lysis and Findings	109	
	6.1	Structure of the Findings	109	
	6.2		110	
		6.2.1 Global Development 1994-2004	111	
		6.2.2 Process Alignment 2005-2007	118	
		6.2.3 Common Vision 2008-2010	130	
		6.2.4 Differentiation 2011-2013	132	
	<u> </u>	6.2.5 Services and Digitalization 2014-2016	134	
	6.3	How Was the "Company Way" Construed	197	
		in the Case Company? (RQ1) 6.3.1 What Elements and Processes Were Subject to Global	137	
		Integration? (SRQ1.1)	137	
		6.3.2 What Differences Were There Between the "Company	107	
		Way" and Earlier Harmonization Programs? (SRQ1.2)	142	
	6.4	How Has the "Company Way" Dealt with Tensions		
		Arising from Contradictory Demands? (RQ2)	145	
		6.4.1 Global Integration and (or) Local Flexibility	147	
		6.4.2 Effectiveness and Exploration	148	
		6.4.3 Internal and External Focus	149	
		6.4.4 Approaches to Managing Contradictions in Reacting to		
		Global Integration Tensions	150	
7.	Con	clusions	155	
	7.1	Key Findings	155	
	7.2	Theoretical Contribution	159	
	7.3	Managerial Implications	161	
	7.4	Suggestions for Further Research	163	
Re	References 165			
	Appendix 1: List of Historical Documents 18			
	App	endix 2: Key Financial Figures of the Case Company	196	

List of Abbreviations and Symbols

CRM	Customer Relationship Management
DCV	Dynamic Capabilities View
E&E	Elevator and Escalator (industry)
EBIT	Earnings Before Interest and Taxes
EMEA	Europe, Middle-East, and Africa
ERP	Enterprise Resource Planning
ES	Enterprise Solution
IB	International Business
IR	Integration – Responsiveness (Framework)
IT	Information Technology
MNC	Multinational Company
MNE	Multinational Enterprise
MWB	Must-win Battles
R, ®	Registered Trademark
R&D	Research and Development
RBV	Resource-based view
RQ	Research Question
SRQ	Sub-research Question
TQM	Total Quality Management
VRIN	Valuable, Rare, Inimitable, and Non-substitutable
	(Resources)

List of Figures

- Figure 1: Approaches for managing contradictions
- Figure 2: Theoretical framework of this research
- Figure 3: Tools for analysing research findings
- Figure 4: Historical narrative development from outcome to its antecedents
- Figure 5: Example of data documentation and analysis
- Figure 6: Matrix organization structure
- Figure 7: The needs for change
- Figure 8: Renewal stages of the case company
- Figure 9: Illustration of the "company way" process architecture in the case company

List of Tables

Table 1:	Research questions and sub-research questions of this
	study
Table 2:	Summary of key theories and articles in this study
Table 3:	Definitions of key concepts in international business
	research
Table 4:	Definitions of key concepts in contradictions research
Table 5:	Qualitative research project model
Table 6:	Data collection stages of the research
Table 7:	Historical documents used in this research
Table 8:	The periodization of the historical narrative
Table 9:	Techniques for enhancing trustworthiness
Table 10:	The structure of the findings
Table 11:	Summary of the case periods
Table 12:	Development programs during strategy periods
	2005-2016
Table 13:	Key harmonization efforts during different
	harmonization stages
Table 14:	Approaches to managing contradictions in the case
	company
Table 15:	Mapping findings with the process model of managing
	contradictions in organizations

1. Introduction

1.1 Background

During the past decades, numerous large international companies have defined and implemented unified operating models in their organizations, to define 'the way we do things around here'. Traditional international business research has focused on the organization, operating models, and strategies of internationalizing firms. A couple of decades ago, many of the large companies that had grown geographically and were operating globally each introduced their "company way", comprising the values, organizational competences, mode of operation, and processes of the company. Well-known examples are the "CEMEX Way" of a Mexican cement company, "IKEA Way" of the Swedish furniture giant, and the "GE Way" of General Electric, that have aroused the attention of researchers of international business and general management alike (Lessard & Reavis, 2009; Slater, 2003; Vahlne & Jonsson, 2017). Oftentimes, introducing this type of "company way" model has been triggered by the globalizing development of the company, or by post-merger integration needs, or by the general need to increase the efficiency and productivity of the company worldwide. What is more, various quality management systems have made companies focus on process management for increased efficiency, and process management practices have become a central element of total quality management programs (Hackman & Wageman, 1995). All in all, the drive for operational excellence and globally integrated enterprise have enhanced the development of "company ways" of working.

Alas, it has been argued that process management techniques reduce innovation in companies because they stabilize and rationalize organizational routines while establishing a focus on easily available efficiency and customer satisfaction measures (Benner & Tushman, 2003). The global integration of companies has been supported and enabled by the opportunities afforded by information technology development, and especially by the introduction of so-called enterprise resource planning applications (Benner & Tushman, 2003; Davenport, 2006). Simultaneously, at the intra-firm level, the impact of digitalization on information processing, on the transfer of knowledge, and on resource allocation challenge theories about the firm's internal organization. Moreover, the rise of the digital age requires rethinking corporate strategies.

Indeed, in the 21st century, firms have faced unprecedented complexity, diversity, and pace. For example, emerging globalization, information technology development, and changing consumption patterns have forced organizations to manage new and evolving tensions, arising from conflicting demands that ascend, for example, from the need to be both globally integrated and locally responsive, or from the need to be both productive and innovative (Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017). These conflicting demands, together with the accelerating speed of change in the business environment, call for adaptability and continuous realignment of resources and capabilities. The existing literature recognizes this pressing need for increased organizational flexibility and agility (Birkinshaw, Crilly, Bouquet, & Lee, 2016; Doz & Kosonen, 2008; Doz & Kosonen, 2010; Kotter, 2014; Teece, Peteraf, & Leih, 2016).

As a result of the increased complexity associated with the implementation of a "company way", along with process standardization and IT solutions to support it, such implementations have not always succeeded in meeting the expectations set for harmonization initiatives. Thus, failures in implementing enterprise resource planning systems are a popular topic in information system research (particularly Brynjolfsson & Hitt, 2004; Huang, 2010). However, while some of this research, as well as companies' real-life knowledge management practices (Davenport, 1998; Zack, 1999; Davenport, Harris, & Cantrell, 2004; McAfee & Brynjolfsson, 2008), have mainly focused on IT-related complications and challenges, IT challenges only represent part of the challenges that companies are facing in this context. Studies on strategic change have addressed the success factors and challenges of this type of extensive change programs intended to harmonize ways of working company-wide (Leavy, 2014; Kotter, 2014; Hamel, 2009). Harmonization efforts have faced conflicting demands, requiring the right balance between cost efficiency and the need for organizational flexibility and strategic agility. Conversely, firms operating in more turbulent contemporary environments need to develop more "organic" systems with fewer formally defined tasks, more lateral coordination mechanisms, and less reliance on formalization and specialization (O'Reilly & Tushman, 2013).

It has also been claimed that well-established companies seem to be optimized more for efficiency than strategic agility (Kotter, 2014). In fact, recent research claims that extensive change programs, rigid processes, and traditional structures that are optimized for efficiency rather than for agility are no longer appropriate (Appelbaum, Calla, Desautels, & Hasan, 2017). Relatedly, the core capabilities of a company may transform into "core rigidities" (Leonard-Barton, 1992), creating inertia and preventing the organization from reacting to environmental or technological changes. At the same time, the literature on company survival calls for dualistic views enabling "both/and" approaches to ensure success in both the short and long term (Benner & Tushman, 2015; Farjoun, 2010).

Against this backdrop, the overall objective of the present research is two-fold. Firstly, it aims to describe and analyze how a multinational company has in fact defined and implemented its global operating model, and what elements their global "company way" comprises. Second, it aims to understand what contradictions arise from such global integration programs, especially when it comes to the challenge of incorporating both agility/innovativeness and efficiency to the operating model, and how the case company has managed these contradictions during its global harmonization program.

The case company in this study is Kone Corporation, a Finland-based, multinational service-oriented manufacturing company operating in the elevator and escalator industry. At the time of writing, Kone is among the top four elevator and escalator companies. Kone has a long history in internationalization, and it was the first Finnish company to conduct extensive international business, mainly grown through mergers and acquisitions. Kone started process development activities as early as in the 1980s, among the first companies in Finland. Since the mid-1990s it has invested extensively in the development and implementation of the processes and systems that successful operation in the global business environment requires. This work has been executed via several consequential change programs that have required remarkable management attention, as well as a lot of practical implementation work and other resources. The most recent harmonization program, the Kone Way, was initiated in year 2005 to support the new corporate strategy, and it seems to have been successful when measured by financial performance indicators such as growth, profitability, and share price (see Appendix 2). However, when harmonizing its operations, the company has also needed to manage various conflicting demands emerging from inside and outside of the company.

The primary research period of my historical case study covers the time period from 1994 to 2016. The research period ends in 2016, when the case company started a new strategy implementation. However, the harmonization program that is the unit of analysis in my research continues beyond this.

1.2 Research Gaps

Business research often starts with finding an interesting and current business-related topic, or a practical business problem that is to be researched through related theories and theoretical concepts (Eriksson & Kovalainen, 2008). International business research, in particular, typically addresses the concrete real-world problems of companies (Meyer, 2012), instead of solely theoretical scenarios. The real-world problem that triggered this research were the contradictions I faced in my personal work experience at Kone during its program of global harmonization.

Richliterature exists to address the questions of how firms internationalize and what it takes internally in firms to structure and organize for global business. The international business literature provides a foundation to understand how companies organize and structure themselves for international growth and how they manage information flows in their complex organizations. The main topic here is the question of global integration and local adaptation: how to build structures and systems that establish the right balance between the need to be globally integrated, the need to utilize home-country benefits, and, at the same time, the need to be locally adapted to utilize various host-country benefits (Doz & Prahalad, 1991; Dunning, 1988; Ghoshal & Bartlett, 1990; Johanson & Vahlne, 2009; Perlmutter, 1969).

As mentioned earlier, the fundamental tension in international business is the question of finding the balance between global and local demands. What is more, the long-term success of a firm may depend on its ability to exploit existing resources so as to guarantee short-term benefits and, at the same time, to explore new knowledge and resources to ensure long-term success (see for example Benner & Tushman, 2015; Farjoun, 2010; Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017). Process management tools have been utilized in order to increase efficiency, and they have been claimed (e.g. by Benner & Tushman, 2003; 2015) to favor efficiency-oriented "exploitation" at the cost of innovation-oriented "exploration". Even if companies need to decide the extent to which their business processes should be standardized, little research exists on the factors that drive this decision (Romero, Dijkman, Grefen, & van Weele, 2015). Even though researchers call for more comprehensive models of managing exploitation-exploration tensions, these studies have thus far been rare in international business research in particular, even if exploration-exploitation studies in general management research have been burgeoning.

What is more, internal capability development programs have been claimed to turn management attention increasingly towards companyinternal issues. Contradictory demands have been claimed to have emerged (e.g. by Benner & Tushman, 2015) when the locus of innovation has moved from inside the firm to take place increasingly outside the firm, as the concept of open innovation has evolved during the past years.

In the light of existing literature, the common "company way" may be regarded as consisting of organizational capabilities incorporated into its routines and processes. Organizational capabilities are defined as the "ability of an organization to perform a coordinated task, utilizing organizational resources, for achieving a result" (Helfat & Peteraf, 2003: 990). Organizational capabilities include both operational and dynamic capabilities (Helfat & Winter, 2011). Operational capabilities are resources and processes that support the daily operations of an organization, and directly impact the expected profit (Helfat & Winter, 2011). A firm's dynamic capabilities govern how it integrates, builds, and reconfigures internal and external competences to address changing business environments (Teece, Pisano, & Shuen, 1997: 516). Therefore, it is also interesting to see whether, and which parts of, the global "company way" represent dynamic capabilities supporting the company in succeeding both on short-term and long-term. The outcome of dynamic capabilities is not measured by the changes in the resources base as such, but rather by the performance impact of these changes. The reason for this is that, while dynamic capabilities may change the resource base, the outcome may not necessarily lead to competitive advantage (Helfat, Finkelstein, Mitchell, Peteraf, Singh, & Teece, 2007; Ambrosini & Bowman, 2009). Therefore, my study aims to understand whether the "company way" has also contributed to the dynamic capabilities of the firm in terms of adapting to the changing needs of its operating environment.

In fact, a research gap also exists in the concept of dynamic capabilities, especially between operational and higher-order capabilities (Easterby-Smith, Lyles, & Peteraf, 2009). Earlier research has identified a need for more fine-grained case studies of firms that have been able to sustain their competitive advantage over time in dynamic environments (Ambrosini & Bowman, 2009: 46).

All in all, multinational and increasingly global companies provide an interesting research context for organizational theories (Roth & Kostova, 2003), and the case company therefore provides a fruitful ground for this research.

1.3 Purpose of the Study

As described above, the purpose of this monograph-based dissertation is to investigate the development of global integration, that is, the implementation of a global "company way", and the impact of such organizational alignment for improving existing business and simultaneously seizing new opportunities. I will address this by taking the global integration process, or the "company way" as the case company describes it, as the main unit of analysis. The "company way" refers to a new common way of working in the case company. The closest definition of the "company way" is a global operating model, consisting of business processes, IT systems, and the role descriptions of employees. However, the "company way" concept in the case company was also used to refer to the overall change that the new strategy was bringing with it; it thus referred to various means for how the strategy was implemented, including, for example, the development of the company culture. The unit of analysis in this research consists of the elements of the operating model, namely, processes, tools, roles, and data: in other words, the mechanisms to implement global harmonization. Following Hamel (see Birkinshaw, Hamel, & Mol, 2008; Leavy, 2014; Hamel, 2011), the selected aspects of global integration in my research are adaptation (the need to

Introduction

adapt to the changing business environment), innovation (the need to ensure the innovativeness of the organization), and renewal (the need for continuous renewal of the firm). Also, I will explore the tensions emerging from conflicting demands during global integration. The research method in this research is a longitudinal single case study. The empirical research is conducted as historical research, and the method and its limitations are described in the methodology chapter (Chapter 4).

In my research, I hence seek to understand what global harmonization and the resulting "company way" mean and which implications they have. To address this, I aim to look at the various harmonization efforts that the company has undertaken, and how they have been initiated and carried out. What is more, I ask what made the most recent change program more successful than the previous ones. I am especially interested in understanding what role global integration has played in managing the contradictory demands and potential trade-offs between global integration and local adaptation, between efficiency and innovativeness, and between company internal and external focuses. I reflect my findings in light of existing literature and aim to find out what elements of the "company way" specifically support the company's preparations for the future. By approaching the global process model as an attempt to build dynamic capability, and by considering it in light of the history of the company, I aim to provide theoretical and empirical insights into some of the tensions that a company presently operating in a traditional industry has encountered during its quest for increased global integration.

I will approach the global harmonization process as a research phenomenon from different perspectives. First, international business research is used as an approach to understand the internationalization process of the firm and how it has impacted the configuration of resources and the structure of the firm as it meets requirements emerging from the international and global business environment (Doz & Prahalad, 1991; Dunning, 1988; Ghoshal & Bartlett, 1990; Penrose, 1959). Second, I will address the topic of global harmonization through the concept of organizational capabilities. In fact, routines, resources and capabilities are at the center of the theory of the firm (Nelson & Winter, 1982; Penrose, 1959) and a capacity of an organization to realign its resource and capability base has become crucial for the growth and long-term success of companies (Helfat, Finkelstein, Mitchell, Peteraf, Singh, & Teece, 2007; Ambrosini & Bowman, 2009). Therefore, the dynamic capabilities view provides a useful approach to evaluate how global integration and the unified "company way" has contributed to developing the dynamic capabilities of the firm, such as responding to changes in its environment and even influencing its environment (Eisenhardt & Martin, 2000; Teece, 2009). The question of the firm's (dynamic) capabilities to simultaneously exploit its existing resources and to explore new ones is critical for understanding the role and impact of the "company way" and the differences between so called 'ordinary' and dynamic capabilities. Organizational ambidexterity has also been claimed to be a central dynamic capability (Teece, 2014) and,

therefore, studies of organizational ambidexterity provide a further lens to consider the efficiency and innovativeness paradox of the firm (Benner & Tushman, 2003; 2015; Gibson & Birkinshaw, 2004; Birkinshaw & Gupta, 2013). Hence, the literature on organizational tensions and paradoxes is also reviewed, in order to develop a comprehensive research framework to address and analyze the ways in which the case company has dealt with various tensions during the harmonization process (Hargrave & Van de Ven, 2017; Farjoun, 2010; Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017; Putnam, Fairhurst, & Banghart, 2016).

The changing business environment itself is worthy of research and provides an interesting context for my study. Perhaps its most prominent feature is the accelerating speed of change and development as globalization and technological development are proceeding faster than before. This rapid technological development has made industry boundaries fuzzy (Bettis & Hitt, 1995) as large established companies face the entrance of new competitors from both inside and outside traditional industry boundaries. Finally, the concept of globalization is discussed and addressed. Globalization development, which has been one of the constants in international business research, may be challenged by more regional and even local views (Ghemawat, 2017; Livesey, 2017; Lessard, Teece, & Leih, 2016).

1.4 Research Questions

The overall purpose of my research is to investigate global integration development, that is, implementation of a global "company way", and the impact of such organizational alignment for improving existing business and simultaneously seizing new opportunities. In the mid-1990s, IT development provided firms with improved tools to manage information flows in complex global organizations. This development also encouraged companies to focus on process management and even process engineering activities. My research was triggered by the notion that the reasons for choosing an operating model today may be different from what the initial drivers of starting such development projects were ten or twenty years ago. In today's fast changing world, operating models need to be capable of supporting agility and change, and, at the same time, to improve efficiency (Benner & Tushman, 2003; 2015). Therefore, it is interesting to study the impact of the organizational alignment of the case company, and how it has addressed both operative and higher-order capabilities in order to improve existing businesses and seize new opportunities within a global firm.

I have formulated two research questions (RQs) with supporting subresearch questions (SRQs) and linked them to the acknowledged research gaps to which I aim to contribute. Table 1 summarizes these questions.

Table 1. Research questions and sub-research questions of this study.

Research questions (RQ) and sub-research questions (SRQ)				
RQ1:	: How was the "company way" construed in the case company?			
	SRQ1.1:What elements and processes of the case company's organization were subject to global integration?			
	SRQ1.2:Which differences were there between the "company way" and earlier global harmonization programs, and how did these differences contribute to the relative effectiveness of the former?			
RQ2:	How has the "company way" dealt with the tensions arising from contradictory demands?			
	SRQ2.1:How has the "company way" dealt with the tensions between global integration and local adaptation?			
	SRQ2.2: How has the "company way" dealt with the tensions between efficiency and innovation?			
SRQ2.3:How has the "company way" dealt with the tensions between company internal and external focus?				

I selected the single-case study as a research approach for my study. I conduct this study as historical research with which I seek to understand how the global harmonization efforts of the company have supported its growth and success. To address this, I aim to look at the various harmonization efforts that the company has taken. I am especially interested in understanding which role global integration has played in managing contradictory demands and possible trade-offs between global integration and local adaptation, between efficiency and innovativeness, as well as between company-internal and company-external focus.

1.5 Key Concepts

This section provides definitions for the key concepts that have been used in this study. First, it will define the concept of the internationalization process, which is central for understanding the context of the case company, as well as the concept of a multinational company (MNC), as it will be the object of this research. Related to this, I will then define the concept of global integration, as it is a key phenomenon in international business and MNC research. Subsequently, I will define the concepts of the organizational capabilities, resources, and dynamic capabilities, as they are the key elements of what companies often call their "company way". Then I will define the concepts of managing contradictions in organizations, and, related to this, the concepts of ambidexterity, exploration and exploitation. Finally, I will define the concept of the "company way", and also the concept of enterprise resource planning (ERP) systems, which are central in present-day study.

Firm Internationalization and Multinational Firms

Firm internationalization refers to a process of international expansion with a strategy of developing a greater presence in international locations (Tallman & Fladmoe-Lindquist, 2002). MNCs operate, "in more than one environment, and respond to a complex set of factors such as the diverse nationalities of employees, floating exchange rates, geographically imposed problems of communication, and so forth... MNCs can also be characterized as a group of geographically dispersed and goal-disparate organizations... essentially, they are workplaces where different ethnicities and cultural values are intertwined" (Chang & Taylor, 1999: 541–542).

Global Integration and Global Harmonization

The concept of global strategy has often been linked primarily with how the firm structures the flow of tasks within its world-wide value-adding operations and processes, and with its choice of countries in geographical expansion. The more integrated and rationalized the flow of tasks appears to be across countries, the more global the firm's strategy is assumed to be (Ghoshal, 1987).

Venaik, Midgley and Devinney (2004) reviewed and analyzed the conceptualization of the constructs of global integration and local responsiveness in international business literature and found out that the conceptualization is done based either on the environmental pressures or on the managerial responses to these pressures. The notions of global integration and local responsiveness have their roots in the classic work of Lawrence and Lorsch (1969) who pointed out the integration-differentiation issue as a central management concern. The concept of global integration was developed as a combined concept of strategic coordination and operational integration at the global level (Prahalad & Doz, 1987). A business unit's global integration strategy has been defined as the "centralized management of geographically dispersed activities on an ongoing basis" (Prahalad & Doz, 1987:14). However, multinational companies may offer a form of decentralized centralization (Roth & Morrison, 1992) instead of concentrating their activities at head office. Kobrin (1991) defines global integration strategy as "rationalization that may entail standardization of product, centralization of technological development, or the vertical or horizontal integration of manufacturing" (Kobrin, 1991: 18). Indeed, high global integration can entail two different scenarios: one in which all activity is centralized and another in which it is spread, but centrally coordinated (Porter, 1986). Harzing (2000: 109) defines the global integration as "interdependence, the extent to which various units of an MNC are dependent on each other and so the level of integration within the MNC". Similarly, local responsiveness was defined by Harzing as "the extent to which subsidiaries respond to local differences in customer preferences" (Harzing, 2000: 108).

In my research I will define the concept of global integration – together with the concept of local responsiveness – somewhere between the definitions of Prahalad and Doz (1987) and Harzing (2000) in order to describe the level to which ways of doing business are harmonized globally across the company's operating countries. On a more practical level, global integration is often manifested in the "company way" defining the degree to which the business processes, technology and organizational structures are standardized across the company.

Organizational Capabilities and Dynamic Capabilities

In this study, organizational capabilities are defined as the ability of an organization to perform a coordinated task, utilizing organizational resources, for achieving a result (Helfat & Peteraf, 2003: 999). Similarly, a resource refers to an "asset or input to production (tangible or intangible) that an organization owns, controls, or has access to on a semi-permanent basis" (Helfat & Peteraf, 2003: 999). An important note is that this definition also includes external resources that are not directly owned by the company, rather than considering only those firm assets, organizational processes, and capabilities that are controlled by the firm (Barney, 1991). Organizational capabilities include both the operational and dynamic capabilities of the firm (Helfat & Winter, 2011), consisting of routine-based and knowledge-based capabilities (Nelson & Winter, 1982; Grant, 1996; Kogut & Zander, 1993).

The concept of dynamic capabilities is central to the field of strategic management. Yet the word "dynamic" indicates the changing nature of capabilities. The common definition of dynamic capabilities has developed slowly, and this may be because its scholars come from different research traditions (Easterby-Smith, Lyles, & Peteraf, 2009). The different definitions of dynamic capabilities indicate that dynamic capabilities are organizational processes the role of which is to change the firm's resource base. In the case of dynamic capabilities, the "capabilities" are always processes. This differentiates the dynamic capabilities view from the resource-based view (see Barney, 1991; 1995) where capabilities can be processes or any other kind of organizational resources (Ambrosini & Bowman, 2009).

Dynamic capabilities are also defined as a set of specific and identifiable meta-processes, such as product development, strategic decision-making, and alliancing (Eisenhardt & Martin, 2000). Dynamic capabilities are the firm's processes that use resources to match and even create market change. They are also defined as the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, change or disappear: in other words, tools that reconfigure resources.

This study will rely on Teece and colleagues in the definition of dynamic capabilities: a firm's dynamic capabilities govern how it integrates, builds, and reconfigures internal and external competences to address changing business environments (Teece, Pisano, & Shuen, 1997). Dynamic capabilities define the firm's capacity to innovate, adapt to change, and create change that is favorable to customers and unfavorable to competitors. The types of dynamic capabilities are the sensing of unknown futures, the seizing of opportunities, and continued renewal (Teece, Pisano, & Shuen, 1997). Interestingly, two clusters of the dynamic capabilities approach prevail, one represented by Eisenhardt and Martin (2000) and the other by Teece, Pisano, and Shuen (1997). The main difference is whether dynamic capabilities can

Introduction

be captured as best practice or not, and whether they are therefore imitable by rivals, and thus cannot be a source of competitive advantage (Peteraf, Di Stefano, & Verona, 2013; Teece, 2014).

Following this, I will define operating capabilities and dynamic capabilities in my study as follows. Operating capabilities are resources and processes that support the daily business operations of the organization. Dynamic capabilities are in turn those meta-level processes that support the integration, building, and reconfiguration of the organization's aforementioned operating capabilities (i.e. resources and processes).

Managing Contradictions in Organizations

The question of managing oppositional demands is at the center of my research, and I will address the dualities between global integration and local responsiveness, as mentioned above. Additionally, my research will examine the tension between efficiency and innovativeness, and the balance between exploiting of existing resources and exploring the new. Thirdly, I will consider the swifts between company internal and external focus. Therefore, I looked into the literature on duality. Duality scholars describe oppositional elements as conceptually different and contradictory yet also mutually enabling (Farjoun, 2010). Accordingly, duality also often encourages a broader conceptualization of opposing elements (Bledow, Frese, Anderson, Erez, & Farr, 2009)

The notion that innovation and change involve a complex set of tensions, competing demands, conflicts, contradictions, and dilemmas is well established in the organizational literature (see for example Bledow, Frese, Anderson, Erez, & Farr, 2009). However, there is a tendency in parts of the organizational literature to treat tensions as independent oppositions that can be solved with an either/or trade-off (Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017). Poole and Van de Ven (1989) have called for a dialectical transcendence of competing demands to enable change: a "both/and" rather than an "either/or" approach.

Farjoun (2010) constructs an alternative conceptualization of stability and change not as a dualism but as a duality. The term duality retains the idea of two essential elements, viewed as interdependent, rather than detached and opposed. Following Farjoun (2010), I define the concept of managing oppositional demands as managing strategic dualities, building on Farjoun's idea of the duality approach as increasing understanding of the underlying elements, mechanisms, and the dynamics of co-existing contradictory elements in change and stability.

Organizational Ambidexterity, Exploration and Exploitation

Organizational ambidexterity is a key term in this research. Literally, the word ambidexterity means the ability of an individual to use both the right and the left hand equally well. In organization studies, the word organizational ambidexterity is used to describe the ability of an organization to simultaneously exploit existing knowledge and resources, in order to be effective and productive, and to explore new knowledge and resources, in order to be innovative (Grant, 1991; Benner & Tushman, 2003; 2015; Gibson & Birkinshaw, 2004; Teece, 2014).

Exploitation can be defined as competing in mature technologies and markets where efficiency, control, and incremental improvement are prized. Similarly, exploration is competing in new technologies and markets where flexibility, autonomy, and experimentation are needed. (O'Reilly & Tushman, 2013)

How to Define a "Company Way"

The expression "company way" is common among management consultants, however, it is seldom used in academic literature. One definition of the "company way" can be found in the articles describing the standardization of business processes in a Mexican concrete company that needed to adapt to changes required by the globalization of the company (Lessard & Reavis, 2009). CEMEX introduced their "CEMEX Way", which consisted of standardized business processes, technology, and organizational roles (Lessard & Reavis, 2009). This definition provides a practical starting point – standardized business processes, technology and organizational roles – and is close to the idea of the case company in this research. However, the definition may need to be somewhat extended from this narrow scope. Therefore, I will explore what the "company way" consisted of in the case company, and what other elements supported the global harmonization effort.

One possible definition of the "company way" is close to the definition of a business model, i.e. organizational architecture, that defines one part of the business model. A business model can be defined as "the design by which an organization converts a given set of strategic choices – about markets, customers, value propositions – into value, and uses a particular organizational architecture – of people, competencies, processes, culture and measurement systems – to create and capture this value" (Smith, Binns, & Tushman, 2010: 450).

Enterprise Resource Planning (ERP) Systems

The concept of the enterprise resource planning (ERP) systems is central in the discussion on global integration and related "company ways". ERP systems are commercial software packages that enable a company to integrate the data used throughout its entire organization. The core of the ERP system is a central database that draws data from and feeds data into a series of applications supporting diverse company functions (Davenport, 2006). Enterprise resource planning applications have long been associated with process change; as companies configure and implement their systems, they may also reengineer their business processes, restructure their organizations, and change management processes to take advantage of integrated data (Davenport, Harris, & Cantrell, 2004).

1.6 Limitations of the Study

As with any research, this study is subject to several limitations. First, the research object gives the possibility to further elaborate the theories of corporate culture, however, this research concentrates on the operating model of the case company and the main area of interest is the ways of working, routines, resources and capabilities of the firm. Therefore, my research explores neither the theory nor the empirical phenomenon of corporate culture comprehensively, and it remains to be examined in future research.

Second, I have limited the scope of the empirical research to a single-case study. This limitation is discussed in more detail in the methods chapter together with the opportunities that the single-case study approach provides.

The third limitation of my research is due the fact that most of my data sources are secondary. In qualitative research, primary data is often regarded as unique and representing part of the added value that the researcher brings to the table (Myers, 2013). The main concern with the secondary data is related to the credibility, confirmability, dependability, and transferability of the data (Gill, Gill, & Roulet, 2018). I have applied techniques suggested by Gill and colleagues for enhancing the trustworthiness of historical narratives. They include, for example, source criticism, active citation, and footnoting, as well as archiving the research documents. I have also used triangulation of various data sources whenever applicable.

The fourth limitation is the access to data. For the empirical research, I had a broad range of both data in use. It consisted mainly of published documents, as explicated in research methods in Chapter 4. However, because of the magnitude and the richness of these data sources, I decided not to request access to classified documentation, such as meeting presentations or the meeting minutes of management meetings.

My final note on the limitations of the study is on the broadness of the research topic and the importance of the clear definition of the research scope. The literature on research methodologies typically states that in qualitative research, it is important to write a lot about a little, rather than a little about a lot. When covering more than one hundred years of a company's history, with a global scope, and an operating model covering the full range of business processes, the researcher gets easily distracted and risks losing focus. When navigating through the case company history, I have tried to keep a tight hold of the common thread of global harmonization and tried to focus on aspects most relevant to it. However, the broadness of the research topic also provides several interesting avenues for future research, and I will discuss them later in the discussion chapter (Chapter 7) in this manuscript.

1.7 Structure of the Study

The study is organized as follows. In the second chapter, which follows this introductory chapter, I will review the main international business theories and organizational capabilities theories, and then continue with the dynamic capabilities and organizational ambidexterity literatures. Also, a literature review on managing paradox, tensions and dualities is central for my research. In the third chapter, I will put together the research framework for my empirical study, building on the above-mentioned literatures.

The fourth chapter explicates the methodological choices of this research. It briefly explains the ontological and epistemological assumptions adopted in this study. I also explain the historical and longitudinal single case study methods used in my research. The fifth chapter documents the empirical case study as a historical narrative. It starts with a brief introduction to the case company and its industry, sets the context for the case study, and provides a foundation for the actual findings of the case.

Chapter 6 explicates the findings and results of the case study, starting with an analytical chronology of the object of this case study, namely the case company's global harmonization programs. It addresses the different drivers for the definition and implementation of the global "company way" and how the various tensions arising from contradictory demands have been addressed. In the seventh chapter, which is the discussion chapter, I will revisit the research questions and summarize the results with the contribution to theory as well as the managerial implications of the study. Also, some ideas for possible future research will be proposed.

2. Literature Review

The purpose of this literature review is to explore the earlier research relevant to the subject of my research, and, thereby, gather an understanding of the research phenomenon. The literature review has been organized into sections that identify research trends and contemporary theoretical, empirical and methodological themes within the topical area of this study (Eriksson & Kovalainen, 2008). The literature has been selected to provide a broader context for the research topic. The purpose is to explore the fields on which this research builds and to which it will contribute. The literature review consists of three parts: international business literature; organizational capabilities research; and research on managing contradictions in organizations.

The literature review starts with an overview of international business theories and theories on multinational companies. The latter is necessary in order to describe a multinational company, a parameter of the unit of analysis in my research. I will also review the typology of multinational companies. International business theories define the context for my research, and the literature review will support an understanding of the internationalization process of a company. As described in the introduction chapter, the unit of analysis in my research is the implementation of a global harmonization program in a multinational company. International business research provides information on how companies have built the systems and processes they need in order to meet the requirements emerging from the international and increasingly globalizing business environment.

The literature review then continues with an overview of the organizational capabilities literature. The purpose is to understand what it takes internally for firms to develop, deploy, and renew corporate capabilities, knowledge and resources to cope with these needs. Building on this, I will then address the drivers for global process harmonization and the key elements of a common "company way" of working in my research. In fact, as described in the introduction chapter, the unit of analysis in my research is the implementation of a harmonized "company way" of working to support global strategy implementation. Hence, the global strategies literature is reviewed in order to address the focal question of the global integration and local responsiveness strategies of a firm.

Finally, the literature review will conclude with reviewing the relevant literature on the management of contradictions in organizations. Building on the existing literature, the theoretical framework of my research is outlined in Chapter 3. A summary of key theories and articles in the relevant fields of research is included in Table 2.

Field of Research	Key Theories	Key Research	Area of Interest
International Business	The eclectic paradigm of international production (OLI paradigm)	Dunning, 1988	How firms develop, deploy, and renew their ways of working to respond to needs arising from global business environment
	Internationalization process of a firm	Perlmutter, 1969; Johanson & Vahlne, 2009	
	MNC as a research context	Roth & Kostova, 2003	
	IR framework	Prahalad & Doz, 1987; Bartlett & Ghoshal, 1989; Devinney, Midgley & Venaik, 2000	
Organizational Capabilities	Process management	Garvin, 1998; Benner & Tushman, 2003; 2015; Romero, Dijkman, Grefen & van Weele, 2015	What purpose do the ordinary and dynamic capabilities of the organization serve; How does process harmonization support the capability
	Enterprise Systems	Davenport, 1998; Davenport, Harris & Cantrell, 2004; McAfee & Brynjolfsson, 2008; Brynjolfsson & Hitt, 2004	development of a global company; How do dynamic capabilities support renewal; How to balance between stability and change
	Dynamic capabilities	Teece, 2014; Ambrosini & Bowman, 2009	
	Organizational Ambidexterity	Birkinshaw & Gupta, 2013; Doz & Kosonen, 2008; Teece, Peteraf & Leih, 2016; Schmitt, Raisch & Volberda, 2018; Leavy, 2014	
Organizational Paradoxes	Paradox and dialectics perspectives; Managing contradictions	Farjoun, 2010; Smith & Lewis, 2011; Putnam, Fairhurst, & Banghart, 2016; Hargrave & Van de Ven, 2017; Smith, Erez, Lewis & Jarvenpaa, & Tracey, 2017	What are the conflicting demands that global companies face; How do they manage these contradictions in organizations

Table 2. Summary of key theories and articles in this study.

2.1 International Business Research

2.1.1 International Business as a Field of Research

Existing literature recognizes global, internationalized firms also as multinational firms, multinational companies (MNC), or multinational enterprises (MNE). In addition, the concept of diversified multinational companies (DMNC) is used in existing research, and it has been used to emphasize the highly complex nature of multinational companies as a consequence of multidimensionality and heterogeneity (Doz & Prahalad, 1991). This requires managing multiple stakeholders and multiple perspectives in their decision-making, and calls for more multifocal approaches with trade-offs, instead of the simple centralized or decentralized approaches highlighted in the early international business literature. Heterogeneity results from the differences between the optimal trade-offs for different businesses, countries, functions and tasks. In the increasingly global business environment, best practices travel fast, and the competing companies easily achieve parity in access to resources between various parts of the world. Therefore, sources of competitive advantage shift from location-specific to firm-specific factors and organizational capabilities (Ghemawat, 2011).

Multinational companies are an important vehicle for economic development and globalization, and there is a growing interest among strategy and management scholars, also outside traditional international business research, in understanding various phenomena related to MNCs (Roth & Kostova, 2003). In fact, MNCs and their multifaceted structures provide a rich level of analysis in organizational research (Roth & Kostova, 2003) as "one cannot study organizational structure without addressing the complexity of the MNC" (Devinney, Pedersen, & Tihanyi, 2012: 36).

Recently, international business research has been said to be at the crossroads at sorts (Devinney, Pedersen, & Tihanyi, 2012). In the increasingly globalizing business environment, the uniqueness of international management may have lost its special meaning, because global business is ubiquitous rather than being a distinctive domain of its own. International business as a distinctive field may be declining; however, international business theories and constructs have become an elemental part in established areas of management research (Devinney, Pedersen, & Tihanyi, 2012). It may be so that international management grows its importance as a field of research, because even if globalization accelerates business interfaces across countries, it only marginally reduces differences in national context (Meyer, 2012).

What is international business research about? International businesses face opportunities and challenges arising from their position as an outsider to a local context. Therefore, they develop organizational structures and processes to exploit opportunities and to manage challenges arising from the multiple contexts they operate in (Meyer, 2012; Johanson & Vahlne, 2009). International business scholars explore how and why cross-national differences matter and how businesses can transcend national and other differences, and, in fact, international business research is typically about real-world problems (Meyer, 2012). International business studies integrate context and general theories to generate new theoretical and practical insights, and Meyer (2012) identifies their contribution to be three-fold. Firstly, they relate to explaining the relevance of national context for business, for example national institutions. Secondly, they relate to theories

of businesses bridging across contexts, including theories of multinational firms and internationalization process models of firms. Thirdly, they relate to individuals crossing borders for business. This literature review focuses on the theories of multinational firms and internationalization process models of firms.

2.1.2 A Typology of Multinational Companies

International business literature recognizes the existence of different types of multinational companies. Existing literature uses terms such as polycentric, geocentric, ethnocentric, multidomestic, international, global, transnational and born-global (Harzing, 2000; Perlmutter, 1969; Bartlett & Ghoshal, 1989; Knight & Cavusgil, 2004). Bartlett and Ghoshal (1989) were the first to provide an extensive typology of multinational companies. Their typology was further tested and analyzed by Harzing, who developed a three-fold typology of multinational companies (Harzing, 2000). These three types of MNCs differ significantly from each other in aspects of interdependence and local responsiveness and this is elaborated in what follows.

Harzing's research (2000) categorized firms by the type of strategy that the corporate headquarters followed, i.e. the level of integration on the global level and the level of responsiveness in local contexts, following the integration-responsiveness framework by Prahalad and Doz (1987). MNC studies distinguish three types of firms: multidomestic companies, combining low integration and high responsiveness; global companies, combining high integration with low responsiveness; and transnational companies, combining high integration with high responsiveness (Bartlett & Ghoshal, 1989; Bartlett, 1986; Prahalad & Doz, 1987; Roth & Morrison, 1992; Ghoshal & Nohria, 1993; Porter, 1986; Doz, 1980). An interesting notion is that international companies do not fit easily in this scheme and were therefore excluded from the typology (Harzing, 2000).

Based on the typology, multidomestic companies combine low integration and high responsiveness. The main strategic thrust of multidomestic firms is to respond to national differences, and they are more oriented toward domestic competition (Bartlett & Ghoshal, 1987; Harzing, 2000). The multidomestic firm is characterized by a decentralized and loosely coupled organizational structure (Bartlett & Ghoshal, 1987; 1992). They are also characterized by a lower overall flow of products, people, and information (Perlmutter, 1969; Harzing, 2000). In fact, the multidomestic company has been characterized as a loosely coupled federation of rather independent national subunits (Bartlett & Ghoshal, 1989; 1992).

In contrast, global companies combine high integration and low responsiveness. Their strategic orientation is building cost advantages through the realization of economies of scale (Bartlett & Ghoshal, 1987). Their organizational structure is centralized and globally scaled, and their subsidiaries are expected to implement parent company strategies (Bartlett & Ghoshal, 1989; 1992). In global companies, the flows of products, people and information go mostly from headquarters to subsidiaries (Bartlett & Ghoshal, 1989; 1992). In global companies, operations are typically integrated, manufacturing is concentrated in a limited number of locations, and many strategic functions are centralized at headquarters (Bartlett & Ghoshal, 1989; 1992). For example, global companies may be less likely to locate production and R&D close to the end customer.

Following the integration-responsiveness continuum, transnational companies combine high integration and high responsiveness. A transnational company functions as an integrated and interdependent network, with a large flow of products, people, and information between subsidiaries (Bartlett & Ghoshal, 1989; 1992). Subsidiaries may have specialized roles and function as centers of excellence in specific fields, and the headquarters does not necessarily have a dominant role (Harzing, 2000). Transnational companies combine characteristics of global and multidomestic companies, as they try to respond to the needs of global efficiency and local responsiveness.

What is more, scholars have introduced the concept of a meta-national enterprise. Meta-nationals seek out and exploit the uniqueness of their home base (or local ecosystems), but are strongly linked to other ecosystems (see for example Doz, Santos, & Williamson, 2001; Lessard, Teece, & Leih, 2006).

Table 3 summarizes the key concepts and their definitions in the field of international business.

Key concept	y concept Definition	
International Business	Research on how and why national business context matter and how individuals and corporations manage such contextual variations	Meyer, 2012
Globalization	Increasing worldwide interdependence that involves integration of economies, countries, and peoples worldwide	Govindarajan & Gupta, 2001
Firm Internationalization	A process of international expansion with "a strategy of developing a greater presence in international locations"	Tallman & Fladmoe- Lindquist, 2002: 123
Firm Globalization	A process of global integration, a "strategy of consolidating international markets and operations into a single worldwide strategic entity"	Tallman & Fladmoe- Lindquist, 2002: 123
Multinational Company (MNC)	A multinational company consisting of a group of geographically dispersed and goal-disparate organizations that include its headquarters and the different national subsidiaries can be conceptualized as "an interorganizational network that is embedded in an external network consisting of all other organizations such as customers, suppliers, regulators, and so on, with which the different units of the multinational must interact"	Ghoshal & Bartlett, 1990: 603

Table 3.	Definitions	of key	concepts i	n international	business research.
----------	-------------	--------	------------	-----------------	--------------------

Global Company	A multinational company with high global integration and low local responsiveness.	Bartlett & Ghoshal, 1989; Harzing, 2000
Meta-national Company	A multinational enterprise that is stateless in the sense that operations are spread across nations, but also maintain some central authority	Doz, Santos & Williamson, 2001; Lessard, Teece & Leih, 2016
Global Mindset	A mindset that combines an openness to and awareness of diversity across cultures and markets with a propensity and ability to synthesize across this diversity	Gupta & Govindarajan, 2002
Global Integration	The extent to which various units of a multinational company are dependent on each other	Harzing, 2000

2.1.3 Theories on International Business and MNCs

Multinational companies are faced with conflicting demands and potential tensions and trade-offs between the demands. In multinational companies, there is a trade-off between repeatability and learning, and a key asset of MNCs is their opportunity to learn from multiple markets and environments. However, heterogeneity also creates tensions between global integration and local flexibility, demonstrated as conflicting global and local demands, and as tensions between centralization and decentralization. In practice, the choices are not that clear, because the question of a choice between centralized and de-centralized organizations may not apply to multinational companies that face strategic, structural and political multi-dimensionality. Also, some business units and functions may be more global than others. Therefore, existing research emphasizes the need to incorporate a differentiated approach to businesses, countries, and functions, as well as to allow sufficient flexibility (Doz & Prahalad, 1991). Even if early scholars of the MNC phenomenon focused on the tension between fragmentation and unity in MNC management (Perlmutter, 1969) and the economic and competitive models of the MNC (Hymer, 1960; Vernon, 1966), the conflicting demands for fragmentation and unity is one of the strategic dualities that a multinational company needs to manage.

International business has been seen to lead to the elimination of diversity and to reducing distances, or in more populistic terms, globalization development would lead to a "flatter world" (Friedman, 2006). Opposite views challenge the idea of globalism as world citizenship and as ignoring geographic boundaries and, instead, suggest that global companies should learn how to live with the differences and the concept of "a rooted cosmopolitan corporation" has been used to emphasize adaptation to local and more regional approaches (Ghemawat, 2011). Research and development (R&D) activities have been used as an example of this development: "Corporate R&D labs located close to home in advanced markets may excel at creating technology, but firms seeking to develop products and business systems for markets abroad will increasingly need the informed creativity that only boots on the ground in those markets can provide" (Ghemawat, 2011:98).

International business and MNC theories have developed during the past decades, and, at the same time, the surrounding business environment has become increasingly globalized. Existing literature includes various theories on the management of multinational companies. Well-known international business theories include the eclectic paradigm, also known as OLI framework (Dunning, 1988); integration-responsiveness (IR) framework (Prahalad & Doz, 1987); and theories on internationalization process of a firm (Johansson & Vahlne, 1977; 2009).

Early international business theories include the application of institutional economics theories to MNC research, for example using a transaction cost perspective (Buckley & Casson, 1998; Hennart, 1982). Transaction cost analysis analyses choices between institutional forms but does not address management issues (see Doz & Prahalad, 1991), whereas agency theory aims at analyzing management control issues but does not include the contingencies arising from the complex web of network relationships in MNCs (see Doz & Prahalad, 1991).

Environmental adaptation theories deal with issues of how organizations adapt to their environment to survive and succeed within it (for a comprehensive review see Doz & Prahalad, 1991). These theories include three main streams, namely population ecology (Hannan & Freeman, 1984; Prahalad & Doz, 1987); institutional theory (DiMaggio & Powell, 1983; Bartlett & Ghoshal, 1987); and contingency theories (Lawrence & Lorsch, 1967).

As mentioned earlier, well-known international business theories include the eclectic paradigm, also known as the OLI framework (Dunning, 1988); integration-responsiveness (IR) framework (Prahalad & Doz, 1987); and the theories on internationalization process (Johansson & Vahlne, 1977; 2009). The earlier worldview addressed multinational firms from the owner and home country viewpoint, and the initial theories often focused on the headquarter-subsidiary relationship.

IB literature defines how firms develop, deploy, and renew their ways of working in order to respond to needs arising from the global business environment. IB theories have evolved throughout the past decades. The focus has moved from traditional mother-daughter structures to viewing MNCs as intra-organizational networks. Similarly, the debate has moved from 'simple choices' between global and local or centralized and decentralized to more flexible systems and structures embracing different needs. The questions of how to adapt to local markets and how to overcome the liability of foreignness in the host country have changed to views on how the MNC operates in the networks of local and global stakeholders. All in all, international business requires MNCs to manage multiple stakeholders and multiple perspectives in their decision-making, and it calls for more multifocal approaches with trade-offs, instead of a simple centralized or decentralized approaches described in the early literature. Heterogeneity results from the differences between the optimal trade-offs for different businesses, countries, functions and tasks. In the increasingly global business environment, best practices travel fast, and the competing companies easily achieve parity of access to resources across various parts of the world. Therefore, sources of competitive advantage shift from location-specific to firm-specific factors and organizational capabilities (Ghemawat, 2011).

The Eclectic (OLI) Paradigm

The concept of the eclectic paradigm of international production (Dunning, 1988) emphasized the need to include several aspects of economic theory to extensively explain the transnational activities of firms. The eclectic paradigm stated that the extent, form, and pattern of international production was determined by the configuration of three sets of advantages as perceived by enterprises (Dunning, 1988). The eclectic paradigm is also known as OLI paradigm and it distinguishes between influences on IB activities associated with different advantages: ownership advantages (O), that is, the nationality of ownership of firms engaged in international business; internalisation advantages (I) which affect the boundaries of the multinational company; and location advantages (L) of the places in which international business activities are sited. Hence, the eclectic paradigm was essentially about how to appropriately combine issues of capabilities (O), transaction costs (I), and the resources, capabilities and institutions of locations as host production sites (L) (Cantwell, 2014).

The OLI paradigm has been widely recognized as the preeminent theoretical paradigm within international business research (Cantwell, Dunning, & Lundan, 2010). Multinational companies are seen as a coordinated system or network of cross-border value-creating activities, some of which are carried out within the hierarchy of the firm, and some of which are carried out through informal social ties or contractual relationships (Cantwell, Dunning, & Lundan, 2010). Value creation consists of the production and distribution of goods and services, involving the exploitation and augmentation of ownership (O) specific advantages related to resources, capabilities and markets (Dunning, 2006).

Integration-Responsiveness (IR) Framework

In multinational companies, major conflicting demands arise from the contradictory needs for global integration and for local responsiveness of the owner company and its subsidiaries. One of the tools to address these demands is the integration-responsiveness (IR) framework (Prahalad & Doz, 1987). It has been a leading analytical tool of global strategy. The strategies of multinational companies are commonly conceptualized with the integration-responsiveness (IR) framework.

The IR framework deals with finding the balance between integration and flexibility, in other words finding the balance between centralization and decentralization (Prahalad & Doz, 1987), but it may be less valuable in explaining the heterogeneity of strategic choices for subsidiaries within an MNC (Meyer & Estrin, 2014). The IR framework was originally developed for the analysis of MNCs at the global level and it implicitly assumes that subsidiaries provide local markets with the products and services of the MNE and that MNE strategies are adopted uniformly and consistently across all subsidiaries (Meyer & Estrin, 2014). An ultimate example is the replication strategy, also known as the McDonalds strategy, where the strategy is developed centrally and copied exactly in all locations (Winter & Szulanski, 2001). Indeed, the starting point for a lot of international business theory has been the relationship between the owner company and its subsidiaries. As the degree of internationalization increases, companies tend to move from a structure with autonomous subsidiaries to international division, to global product or geographical structures or even complex matrix structures (Stopford & Wells, 1972; Ghoshal & Bartlett, 1990). In a mother-daughter structure, the highly autonomous foreign subsidiaries report directly to corporate headquarters rather than to regional headquarters (Hedlund, 1984). A growing degree of internationalization and increasing product and geographical diversity often require other mechanisms for integrating and coordinating the foreign and domestic activities, such as a global matrix organization (Stopford & Wells, 1972). The strategy-structure paradigm (Chandler, 1962) is one of the key elements in managing the conflicting demands for global integration and local adaptation. It suggests that structural change is a response to changes in the environment and corporate strategy. The strategy is redesigned to meet environmental requirements and consequently organizational structure is adapted to the new situation (Chandler, 1962; Marschan, 1996).

Network Theories

The integration-responsiveness framework (Prahalad & Doz, 1987) discussed above, aimed for an understanding of the relationship between the headquarter and its subsidiaries, however, it left the interaction between different subunits unexplained. The inter-organization theory (Ghoshal & Bartlett, 1990) aimed to fill this gap and addressed the multinational company as an internally differentiated interorganizational network. This meant conceptualizing the MNC as an interorganizational system rather than as an organization, and applying exchange theory and network methodologies to MNC research. The improvements in communication and transportation infrastructures lowered the influence of structural embeddedness, and MNCs enjoyed more freedom in where to locate their resources and how to plan their resource configurations (Ghoshal & Bartlett, 1990). A dominant characteristic of this view is to see an MNC as an integrated network rather than as a hierarchical pyramid with the headquarters at the top. This view acknowledges the fact that most assets and competences are located outside the home country and are geographically dispersed. Inter-unit communication plays a crucial role in the full utilization of competences and knowledge embedded in the entire subsidiary network (Marschan, 1996). Without extensive exchange of information between units, these resources may remain underutilized from the viewpoint of the entire organization.

Network theory addresses an MNC as an interorganizational network (Ghoshal & Bartlett, 1990; Andersson, Forsgren, & Holm, 2002). This is based on viewing an MNC to consist of a group of geographically dispersed and goal-disparate organizations that include its headquarters and the different national subsidiaries. Such an entity can be conceptualized as an interorganizational network that is embedded in an external network consisting of all other organizations such as customers, suppliers, regulators, and so on, with which the different units of the multinational must interact (Ghoshal & Bartlett, 1990). The late 1980s witnessed a significant evolution of academic interest in the multinational corporation (Kogut, 1989), and the focus of research shifted away from the dyadic headquarters-subsidiary relationship in MNCS, to the coordination tasks of managing a network (Ghoshal & Bartlett, 1990).

The Liabilities of Foreignness and Outsidership

Companies that have internationalized to conduct business outside the home country are outsiders in the various host countries they operate in. International business theories have addressed this phenomenon as the liability of foreignness (Zaheer, 1995) or the liability of outsidership (Johanson & Vahlne, 2009). This was first acknowledged by Zaheer (1995) who studied ways to overcome the liability of foreignness. Hymer's seminal international business research theorizes that MNCs conducting business abroad face costs arising from the unfamiliarity of the environment (Hymer, 1960). This liability of foreignness has been driving theories of MNC (Buckley & Casson, 1998; Dunning, 1988; Hennart, 2010). Existing research emphasizes the need for integration strategies and suggests that MNCs need to provide their overseas subunits with some firm-specific advantage, often in the form of organizational or managerial capabilities (Buckley & Casson, 1998; Dunning 1988). Resource-based views on strategy (Wernerfelt, 1984; Penrose, 1959: Barney, 2001; Nelson & Winter, 1982) also stress that subunits will try to overcome the liability of foreignness by importing capabilities embodied in the organizational practices of their parent companies (Zaheer, 1995). Institutional theory scholars (Powell & DiMaggio, 2012; Rosenzweig & Singh, 1991) claim that subsidiaries will tend to become similar, or isomorphic, to the practices of local firms and that they tend to mimic local practices. Indeed, firm-specific advantage, as embodied in imported organizational practices, may be a more effective way for subunits of multinational enterprises to overcome the liability of foreignness (Zaheer, 1995). The concept of the liability of foreignness was later extended to the concept of liability of outsidership, referring to the fact that the companies operating outside their home country are outsiders in other countries, which requires building trust in a local network (Johanson & Vahlne, 2009).

Institutionalism

The institutional aspects of the environment for IB activity have steadily become more important for MNEs over time, particularly since the advent of the knowledge-based economy and contemporary globalization (Cantwell, Dunning, & Lundan, 2010). MNEs have responded to the more profound nature of uncertainty in part by shifting towards more open business network structures (Chesbrough, 2006; Cantwell, Dunning, & Lundan, 2010). In a seminal article DiMaggio and Powell (1983) identify three mechanisms for institutional diffusion: coercive, normative and mimetic. This has underpinned the later research of Kostova and Zaheer (1999) and Kostova (1999). Leading institutional scholars in the IB field have, however, begun to re-examine the assumptions of this earlier work (Kostova, Roth, & Dacin, 2008). Although MNEs do indeed exhibit some sign of isomorphism, this may be through choice, rather than as a result of a need for legitimacy (Cantwell, Dunning, & Lundan, 2010). In many institutional contexts, MNEs are as powerful as the local institutional actors. In such circumstances, MNE subsidiaries may be valued for their differences from local actors, which increase local variety, and not just for their capacity to conform with, or adjust to, local norms of behavior.

What is more, the neo-institutional model essentially holds that organizational survival is determined by the extent of alignment with the institutional environment, and, therefore, organizations have to comply with external institutional pressures; that incorporation of institutionally mandated elements allows organizational actors to portray the organizations as legitimate, thereby enhancing its likelihood of survival (Kostova, Roth, & Dacin, 2008). This approach emphasizes adaptation to the local environment. However, multinational organizations are substantially different from domestic firms, and, as all units in an MNC might be viewed as belonging to the same intra-organizational institutional field, this field may exert an even stronger influence over its members than the traditional external fields discussed in neo-institutionalism (Westney & Zaheer, 2001; Kostova, Roth, & Dacin, 2008).

The Internationalization Process Model

How, then, do companies internationalize and become multinational or global enterprises? As described earlier, the research focus in international business has shifted from the headquarter-subsidiary relationship towards understanding the MNC as a network of units and as part of various local networks. Johanson and Vahlne (1977) introduced an internationalization model as a result of their research on how Swedish companies had expanded internationally. This model, often referred to as the Uppsala model, explains the characteristics of the internationalization process of the firm. The conceptual origin of the Uppsala model lies in the liability of foreignness (Hymer, 1976; Zaheer, 1995), as discussed earlier, and it is categorized as a behavioral theory. The underlying assumption in the internationalization process model is that an internationalizing company needs to manage its

foreignness in the host country. This model was revised twenty years after its introduction (Johanson & Vahlne, 2009) and this revision was triggered by the emerging role of networks in the internalization of firms. In contrast to the original 1977 Uppsala model, the authors claim that successful internationalization needs a both-side commitment between the company and its partners, and that a company without a position in a relevant network is an outsider. Instead of the challenge of competing under the liability of foreignness (being foreign in host countries), they emphasize the liability of outsidership (being an outsider in local networks) and add trust-building and knowledge-building as central elements in their revised theory. Worth noticing is also that internationalization resembles entrepreneurship and depends more on developing opportunities than on overcoming uncertainties.

Network Position and Spill-overs

Multinational companies have a strong impact on local host countries where subsidiaries reside. Hence, internationalization has also been seen as the outcome of a firm's actions to strengthen its network positions, where existing business relationships have a considerable impact on the geographical market the company decides to enter (Johanson & Vahlne, 2009). Research exists on the spillover impact of multinational companies in their host locations. Since the late 1970s, large MNCs have increasingly extended their fields of technological competence through their use of internationally integrated networks for technological development. In each location, MNCs connect to specialized sources of local expertise thereby differentiating their technological capability through exploiting geographically distinct streams of innovative potential (Cantwell & Piscitello, 2002).

MNC research often views research phenomena through the MNC lens, focusing on the performance of the MNC either from either the headquarters' or the subsidiary's point of view. The business environment is something that affects the MNC, either helping or hindering it to succeed. Hence, Meyer (2004) argues that international business scholars have been comparatively uninterested in analyzing this role of MNCs and encourages more international business scholars to engage in research on MNC spillovers in emerging economy contexts. Meyer sees that MNCs link rich and poor economies, and transmit capital, knowledge, and ideas and value systems across borders, and that the spillover effects can naturally be both positive and negative.

Knowledge and Capabilities

In general, a major portion of the knowledge in international firms is local, i.e., deposited in local subsidiaries (Bjerre & Sharma, 2003). Identical themes can be found in research that explores the embeddedness of MNCs in external networks (Andersson, Forsgren, & Holm, 2002). Their research further builds on the notion that the subunits of MNCs are embedded in different local networks (Ghoshal & Bartlett, 1990; Johanson & Vahlne, 2009). The results of their research suggest that the technical embeddedness of the subunit has a positive impact on its competitive capability in its own market. MNCs can create new value by combining resources from several subsidiaries and, thereby, upgrade the competencies in the whole company. Literature also provide interesting evidence of the subsidiary's role in the competence development within the MNC. The possibility of transferring knowledge between subsidiaries in different contexts may bring competitive advantage in MNCs. However, knowledge transfer within organizations may be difficult to accomplish. Relevant knowledge may be tacit, or non-codified, and therefore hard to transfer, or the recipients may be unwilling to absorb the knowledge (Cohen & Levinthal, 1990; Kogut & Zander, 1993; Szulanski, 1996) even if the subsidiary's corporate embeddedness enhances the transfer of competences developed from (local) external embedded units to other units (Andersson, Forsgren, & Holm, 2002). On the other hand, strong external embeddedness may cause unwillingness to share competence with the rest of the company. Often an MNC subsidiaries function as a bridging tie between the external and the internal network (Andersson, Forsgren, & Holm, 2002; Kauppila, 2010).

2.1.4 Global Strategies

MNC research cannot be considered without understanding it in the context of evolving globalization. Emerging global business required world-wide production, sales, and service networks tied together by supporting information systems and common goals. In the mid-1990s, the world economy was characterized by the nature of globalization which began to emerge from the beneath the surface of the old economy. Large international firms transferred production to East Asia because of lower production costs and lots of potential new customers in the emerging markets. Increased distance and complexity required companies to renew their business models and controls systems, and the development of information technology solutions enabled this development (Brynjolfsson & Hitt, 2000; 2004; Davenport, 1998). The first phase of globalization was caused by reducing transportation costs and improving transportation means, which ended the necessity of making goods close to the point of consumption. In turn, reducing communication and coordination costs and improved communication technologies have enabled the next phase of globalization, in which manufacturing stages need not to be performed near each other (Brynjolfsson & Hitt, 2004; McAfee & Brynjolfsson, 2008). These developments are also referred to as the first unbundling and the second unbundling (see e.g. Baldwin, 2006; Schwab, 2017).

Global strategies deal with differences and distances among people, cultures, and places, and they may be more regional than truly global. Researchers claim that the world may be neither a collection of autonomous nations nor perfectly

flat, but rather semi-globalized (Ghemawat, 2011). Most firms are deeply rooted in their home countries, like their customers, employees, investors, and suppliers, and truly global firms and managers are required to understand and work with differences rather than against them (Ghemawat, 2011). In other words, having a global strategy and a global organization in such a world must not be based on the elimination of differences and distances among people, cultures, and places, but on a deeper understanding of them. A firm with a significant international presence typically has both a global strategy and regional one (Ghemawat, 2011). It has been acknowledged that the right regional strategy can create more value than purely global or purely local ones can. What is more, it appears that the differences in national contexts are only marginally reduced, even if globalization accelerates business interfaces across countries (Meyer, 2012).

The question of how global strategies emerge is a central element in understanding the evolution of global ways of working and conducting business in a multinational or global company (Bouquet & Birkinshaw, 2011). One central aspect is the overall international attention in MNCs, and how organizational and environmental factors are shaping it. Based on the attention-based view of an organization as a socially structured pattern of activity (Ocasio, 1997), the international attention of a company is a significant predictor of how the firm performs in international markets (Bouquet, Morrison, & Birkinshaw, 2009). Based on this view, firms that emphasize the global rules of the game, global leadership development, and global issues in their annual reports have a high level of international attention. In addition to what the firm does, it is important how its managers act to achieve their global objectives. In practice, global strategy creation is a combination of industry-level, firm-level, and individual-level efforts. Even very practical things, like job titles, reward systems, physical artefacts, and what the company says in public have an impact on international attention in a firm (Bouquet & Birkinshaw, 2011).

Global strategies are typically manifested in common rules and unified ways of working across and inside a company. As described above, earlier theories, such as the integration-responsiveness framework, implicitly assume that MNC strategies are adopted uniformly and consistently across all subsidiaries, whereas, in practice, subsidiaries vary considerably in what they do and how they partake global strategies (Meyer & Estrin, 2014).

Global Integration

The concept of global integration was developed as a combination of the concepts of strategic coordination and operational integration at the global level (Prahalad & Doz, 1987). Global integration defines the extent to which various units of an MNC are dependent on each other (Harzing, 2000). Multinational companies need to manage multiple alignments (see e.g. O'Reilly & Tushman, 2016).

In general, harmonization of business processes across organization world-wide has been a central mean of integrating a company into a globally managed entity. What then are the business processes about? Organizational capabilities research provides an approach for this topic. To provide value to their customers, an organization needs to design and execute work practices commonly referred to as business processes or operating processes (Davenport, 1993; Hammer, 1996; Srivastava, Shervani, & Fahey, 1999). These processes demand the integration of a sequence of related work tasks in order to achieve organizational goals. This requires assets such as resources, personnel and knowledge that together constitute organizational capabilities (Grant, 1991). In order to create value for their customers, organizations need to leverage three core business processes: product development management, supply chain management, and customer relationship management (see e.g. Srivastava, Shervani, & Fahey, 1999). With these processes, the organization develops new solutions and reinvigorates existing solutions, acquires the necessary inputs and transforms them into desired customer outputs, and addresses all aspects of identifying customers, building customer knowledge and managing customer relationships. Each core process consists of several sub-processes which, in turn, are further refined to a more detailed level as detailed work instructions or digitalized tasks. The core processes are also interdependent on each other. The existing process management literature will be reviewed as part of the organizational capabilities literature review below.

The ability of a multinational enterprise to succeed depends on its dynamic capabilities during international expansion. Luo (2000) defines dynamic capabilities as "...an MNE's ability to create, deploy, and upgrade organizationally embedded and return-generating resources in pursuit of sustained competitive advantages in the global marketplace" (Luo, 2000: 355). This topic will also be further elaborated as part of dynamic capabilities literature review section.

Global Leadership and the Global Mindset

Global leadership capability plays a central role in the internationalization development of a company, and in the development of its global process architecture and global operating model. Business processes are, indeed, a way of describing the roles and responsibilities, information flows, and collaboration between organizational units, as well as between individuals in the organization. However, the management literature has not answered questions about what happens when people across nations and cultures work closely together (Hinds, Liu, & Lyon, 2011; Saarinen, 2016). Global business processes also need to take a stand on the language(s) used in global organizations. It would appear that the implications of communication barriers, and more specifically of language, for MNC management have been largely ignored (Marschan-Piekkari, Welch, & Welch, 1999). International management and global leadership development are in a central role in building a global operating model. Despite the significance of the global mindset to the competitive advantage of organizations, and despite the interest in this topic the amount of empirical research on global mindset, and how to define, measure, and develop it, is still fairly limited (Osland, Bird, & Mendenhall, 2012). Notions of global leadership often overshadow the concept of the global mindset. The definition of a global mindset has evolved over time, from simply being a state of mind, or orientation, to being a highly complex knowledge structure. The concept of the global mindset first appeared in Perlmutter's (1969) taxonomy of the mindsets found in senior MNC executives: ethnocentric (home country mindset): polycentric (host country mindset): and geocentric (world mindset) (Perlmutter, 1969). Later, and Bartlett & Ghoshal (1989) expanded the notion of the geocentric mindset to the transnational mindset.

A rich literature exists on global leadership development (see Osland, Bird, & Mendenhall, 2012). The global mindset is essentially a "way of thinking" that help leaders see the world from multiple perspectives, make decisions that work both globally and locally, and enhance the organization's capability to compete in the global environment (Khilji, Davis, & Cseh, 2010). Global leadership is a multilevel construct, in that it is not individuals alone who may have a global mindset (Levy, Beechler, Taylor, & Boyacigiller, 2007). It can be shared with others in a group setting and be conceptualized as a "...shared cognitive structure, which emerges out of the actions and interactions among individuals" (Levy et al., 2007: 28). A global mindset at the organizational and team levels is the aggregation of global mindsets of a group of individuals. However, little research has focused on exactly what constitutes a global mindset (Khilji, Davis, & Cseh, 2010).

A global mindset links environmental complexity, strategic demands, and organizational capabilities (Bartlett & Ghoshal, 1998). A global mindset combines an openness to, and an awareness of, diversity across cultures and markets, with a propensity and ability to synthesize across this diversity (Gupta & Govindarajan, 2002). Learning is argued to be a critical element of global leadership incorporating a global mindset (Khilji, Davis, & Cseh, 2010). Morrison (2000) provides a conceptual framework for evaluating alternative mindsets, based on the degree of integration (ability to integrate diversity across cultures and markets) and the degree of differentiation (openness to diversity across cultures and markets). A global mindset assumes that both are high. When integration is high and differentiation low, the mindset is more parochial than global. In contrast, when differentiation is high and integration low, the mindset is diffused. Morrison (2000) also notes that the quest for a global mindset is a ceaseless journey, requiring curiosity about the world, articulating the current mindset, cultivating knowledge regarding diverse cultures and markets, and developing an integrated perspective.

To compete and succeed in today's complex, dynamic, and uncertain environment, organizations need leaders with a global mindset, who are flexible, adaptable, and able to transcend cultures. Scholars agree that it is neither new technologies nor systems or processes that can lead organizations to competitive advantage (Khilji, Davis, & Cseh, 2010). Building a global mindset and global leadership capability is a journey for the entire management of an MNC. Globalization has created an intense competitive environment, and as a result, achieving a competitive advantage has become the core purpose in international business and management. Today's dynamic marketplace thus often requires a shift in thinking (Khilji, Davis, & Cseh, 2010). The global mindset is a relatively recent concept, and it emerged as a critical success factor for global organizations in response to the heightened competition and the increased complexity of today's global business environment.

Bartlett and Ghoshal (1990) famously argue that operating in a complex and dynamic environment requires a shift in thinking from structural and administrative competencies to mindset-based competences. This creates a basis for much of the literature on global mindset. Global mindset has become a term that covers everything that is global "from individual attitudes, skills, competences and behaviors to organizational orientations, structures and strategies, to policies and practices" (Levy et al., 2007: 4). Similarly, Govindarajan & Gupta (2001: 2) claim that "Success is all in the global mindset". In the past, the study of global leadership oftentimes focused on expatriate management, especially in the U.S. literature, and has recently shifted from expatriates to global managers (for a summary see Khilji, Davis, & Cseh, 2010). Global leadership has been defined as being goal-directed, process-based, and influence-oriented, i.e., aimed at influencing other people (belonging to diverse cultural, political, social and institutional systems) in order to achieve organizational goals (Beechler & Javidan, 2007).

2.2 Organizational Capabilities

In this section, I will review the existing literature on organizational capabilities and capability development that are relevant to my research. In fact, resources, organizational capabilities and routines are claimed to be key concepts in understanding the impact of external and internal change in organizations (Nelson & Winter, 1982; Feldman & Pentland, 2003), and this provides a foundation for understanding how MNCs develop their capability to manage their complex organizations.

It is highly interesting how these organizations build their capacities to support existing businesses, and if, and how, these capabilities support change for the future. Therefore, this literature review will especially address the concepts of dynamic capabilities and organizational agility (see e.g. Doz & Kosonen, 2010; Birkinshaw, Zimmermann, & Raisch, 2016; Teece, Peteraf, & Leih, 2016). The key issue to address is the conflicting demands that companies face, especially as it is foreseen that the firms of the future will face an increasing number of conflicting demands (Benner & Tushman, 2015; Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017). For example, when building the systems and structures needed for global business, MNCs also need to manage the need for local flexibility, and this challenge has been addressed in the international business literature, as reviewed above. Similarly, MNCs need to secure both short-term profits and long-term success, requiring managing the need to maintain stability and enable change at the same time. The dynamic capabilities literature aims to answer this challenge, and especially the literature on organizational ambidexterity, the ability to simultaneously exploit existing resources and to explore novel ones, and is useful in understanding the balance between efficiency and innovation demands. I will also briefly review the basics of process management and innovation management in order to understand their relationship. What is more, as part of process management, I will provide a brief overview of the role of information technology in process management, and especially in global enterprises, therefore this review also partly relies on existing information systems literature. I will review the relevant literature on dynamic capabilities and organizational ambidexterity, which is also claimed to be a dynamic capability. Finally, I will review relevant literature on paradoxical leadership, including the dualism view mentioned above (Farjoun, 2010; Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017; Andriopoulos & Lewis, 2010).

2.2.1 From Resource-Based View to Dynamic Capabilities

Studies on organizational capabilities provide an avenue to approach business process architecture as a research phenomenon, and dynamic capabilities theories in particular are interesting from the organizational change and renewal viewpoint. The existing literature generally distinguishes between ordinary capabilities, which are about existing resources, and dynamic capabilities, which are about changing the resource base (Teece, Pisano, & Shuen, 1997). The definitions of dynamic capabilities thus indicate that dynamic capabilities are organizational processes, the role of which is to change the firm's resource base. The existing literature identifies both dynamic and ordinary capabilities as described in the following definition: "Defining ordinary or 'zero-level' capabilities as those that permit a firm to 'make a living' in the short term, one can define dynamic capabilities as those that operate to extend, modify or create ordinary capabilities" (Winter, 2003: 1). Based on this, one can assume that the whole process architecture of a corporation would include both operative and dynamic capabilities, ensuring an organization to run its operations in the short term and renewal in the long term, thereby ensuring both stability and change in the organization. In the case of dynamic capabilities, the capabilities are always processes, whereas in the resource-based view (RBV) the capabilities can be processes or any kind of resources, and the word 'dynamic' refers to change in the resource base (Ambrosini & Bowman, 2009).

The seminal work of Nelson and Winter (1982) positions organizational routines at the center of explaining organizational and industrial change, whereas the resource-based view has taken resources as main units of analysis (Barney, 1991; Nelson & Winter, 1982; Peteraf, 1993; Wernerfelt, 1984). For example, Barney (1991) used VRIN-criteria to explain the heterogeneity of resources, arguing that resources need to be valuable (V), rare (R), inimitable (I), and non-substitutable (N) in order to provide sustainable competitive advantage and to explain the differences in the performance of firms. The resource-based view is close to the knowledgebased view (Grant, 1996; Kogut & Zander, 1993), which considers knowledge to be the key asset in the resource base. Grant (1996) emphasizes the organization's ability to create value based on intangible knowledge-based resources. Instead of resources, the knowledge-based view takes organizing principles as its key units of analysis.

Helfat and Peteraf (2003) have defined organizational capabilities as the ability of an organization to "perform a coordinated task, utilizing organizational resources for achieving a particular result" (Helfat & Peteraf, 2003: 999). The dynamic capability view has added an understanding of the link between firm capabilities and the external environment, especially in industries where change is rapid, and innovation is in a central role (Dosi, Nelson, & Winter, 2002; Helfat & Winter, 2011). The development of the dynamic capabilities view is discussed in the following.

The dynamic capabilities view has its origins partly in creative destruction theories (see for example Schumpeter, 1934). The main difference between resource-based and dynamic capabilities views is the difference between resource picking (prior to the acquisition of resources) and capabilitybuilding (after resources are acquired). According to the resource-based view, firms create economic value when they are more effective than their competitors when selecting resources, whereas according to the dynamic capability view, they create value when they are more effective at deploying resources. In other words, capabilities are afirm's capacity to deploy resources, often a combination of resources, by using organizational processes (Amit & Schoemaker, 1993) to improve the productivity of the other resources of the firm. Helfat and Peteraf (2003) introduced a capability lifecycle (CLC) model to elaborate the patterns in the evolution of organizational capabilities over time, during the three main stages of a capability lifecycle: founding, development, and maturity (Helfat & Peteraf, 2003).

The dynamic capabilities view focuses on how an organization can create new resources, and develop and change its resource mix when facing a change (Teece, Pisano, & Shuen, 1997). The conceptual starting point of dynamic capabilities can be found in, for example, Teece & Pisano (1994), who claim that more important than the resources as such are the mechanisms through which firms learn and accumulate new skills and capabilities. They build on the evolutionary theory of economic change, addressing the role of routines and the way they shape and constrain the ways in which firms grow and manage when the environment changes (Nelson & Winter, 1982). The dynamic capability perspective is about the survival and growth of firms (Teece, 2007; Doz & Kosonen, 2010), and it builds also on the Schumpeterian view of destruction and innovation-based competition (Schumpeter, 1934). On the other hand, it has been said that the roots of the dynamic capabilities paradigm lie in Carnegie School concepts of the 1950s and 1960s that have impacted the development of economics, simulation models, organization theory, and management (Augier & Teece, 2009). Other underpinnings of the dynamic capabilities are the knowledge-based view of the firm (Grant, 1991) and the core competence perspectives (Prahalad & Hamel, 1990) both originating from the theory of the growth of the firm (Penrose, 1959). All the different views mentioned here build on the resources the firms have; the focus has been on shifting from the resources that the firm has in its use, to how the firm uses the resources it needs for competitive advantage, to how the firm creates and modifies the resources to meet changes in its environment. If a firm possesses the (VRIN) resources but does not use dynamic capabilities, it may not succeed in a sustainable way (Barney, 1991). As mentioned earlier, Leonard-Barton (1992) wrote about core competences that may become core rigidities, when the resources that used to be valuable become obsolete (Leonard-Barton, 1992).

The dynamic capabilities framework addresses the question of why some firms are better than others at adapting and reconfiguring resources and capabilities to manage innovative change in a dynamic business environment. A firm's dynamic capabilities govern how it integrates, builds, and reconfigures internal and external competences in order to address changing business environments (Teece, Pisano, & Shuen, 1997). Dynamic capabilities define the firm's capacity to innovate, to adapt to change, and to create change that is favorable to customers and unfavorable to competitors. The microfoundations of dynamic capabilities are the organization's capacities for sensing of unknown futures, seizing the opportunities, and reconfiguring its capabilities (Teece, 2007; Doz & Kosonen, 2010).

Dynamic capabilities research builds on several research traditions, and this has influenced the development of the definition of dynamic capabilities and related concepts (Easterby-Smith, Lyles, & Peteraf, 2009). Collis (1994) grouped capabilities in two categories. The first category of capabilities is those that demonstrate an ability to perform the activities of the firm more efficiently than competitors and the second category shares the common theme of dynamic improvement to the activities of the firm. Collis illustrates them by providing a plant layout, distribution logistics, and marketing campaigns as examples of these capabilities developed in functional areas (Collis, 1994; Amit & Schoemaker, 1993). According to Grant, capabilities can be identified using a standard functional classification of the firm's activities (Grant, 1991); and Treacy and Wiersema further define capabilities as one of three value disciplines, which they identify to be operational excellence, customer intimacy, and product leadership (Treacy & Wiersema, 1993: 84). According to Collis (1994) the value of organizational capabilities depends on context. Collis introduced the concept of meta-capabilities, meaning a higher-order capability of learning to learn. As an example, Collis (1994) gives the ability to innovate the structures that produce better product innovation. Collis builds on the concept of meta-capabilities in his critical

view on the importance of organizational capabilities (e.g. a set of business processes). On the other hand, Teece and Pisano (1994) rely on earlier literature on how firms can develop their capability base in order to adapt to and capitalize on rapidly changing environments. The competitive advantage of a firm is based on dynamic capabilities that are rooted in high-performing routines operating inside the firm, and that are embedded in the firm's processes, and conditioned by the firm's history. Dynamic capabilities are built rather than bought. Extending this idea, Teece, Pisano, and Shuen (1997) draw an outline for a dynamic capabilities framework to analyze the sources and methods of firms in environments of rapid technological change. They define dynamic capabilities as the ability to achieve new forms of competitive advantage, meaning the capacity to renew core competences according to a new business environment.

The concept of dynamic capabilities has a strong link with business process architecture. Eisenhardt and Martin (2000) define dynamic capabilities as a set of specific and identifiable processes, such as product development, strategic decision-making, and alliancing. In other words, dynamic capabilities are the firm's processes that use resources to match and even create market change. They are also defined as the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, change or disappear, in other words tools that reconfigure resources. Zollo and Winter (2002) combine the theories of learning and dynamic capabilities to describe the mechanisms that are used to develop dynamic capabilities at the first place. According to them, dynamic capabilities arise from learning, and they redefine dynamic capabilities as "a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness" (Zollo & Winter, 2002: 340). The existing literature thus often highlights different types of capabilities. Winter defines operative capabilities as "those that permit a firm to 'make a living' in the short term" and similarly dynamic capabilities as "those that operate to extend, modify or create ordinary capabilities" (Winter, 2003: 6). They are also called 'zero-level' and 'higher order' capabilities. Interestingly, Winter claims that it is possible for firms to change without relying on dynamic capabilities, in a way that is here called *ad hoc* problem solving. Change often occurs by *force majeure* from the environment, forcing the organization to change even without dynamic capabilities. Ad hoc problem solving is not routine, and it appears as a response to novel challenges from the environment or other relatively unpredictable events. Thus, ad hoc problem solving, and the exercise of dynamic capabilities are two different ways to change (Winter, 2003).

In a widely cited paper, Teece (2007) deepens the dynamic capabilities discussion by introducing their micro-foundations. According to Teece, the micro-foundations of dynamic capabilities are the distinct skills, processes, procedures, organizational structures, decision rules, and disciplines, which underpin firm-level sensing, seizing, and reconfiguring capabilities and are usually very difficult to develop and deploy. Teece refers to the concepts of 'technical' fitness and 'evolutionary' fitness (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece & Winter, 2007; Teece, 2007). Technical fitness is defined by how effectively a capability performs its function, whereas evolutionary fitness refers to how well the capability enables a firm to succeed on long term. Evolutionary fitness references the selection environment. Dynamic capabilities assist in achieving evolutionary fitness, by helping to shape the environment. The element of dynamic capabilities that involves shaping (and not just adapting to) the environment is entrepreneurial in nature.

The existing literature also addresses the dependence of a firm's capabilities on its history. The firm's past and present guide and constrain its future and therefore "bygones are rarely bygones" (Teece, Pisano, & Shuen, 1997: 522). The value creation process consists of the process of creating dynamic capabilities and the resource base that is needed for the firm's outcomes. The internal environment, paths, and positions impact this value creation process. Similarly, the external environment, paths, and positions impact the outcomes of the value creation process (Ambrosini & Bowman, 2009). Dynamic capabilities might be commonly found within an industry, and they may not be differentiated across a collection of firms (Eisenhardt & Martin, 2000; Ambrosini & Bowman, 2009). Indeed, the abstract description of a dynamic capability might be very similar across competing firms, and Ambrosini and Bowman (2009) expect that the performance aspect of the routine, the dynamic capability in practice, would display subtle but important differences between firms.

How exactly do dynamic capabilities affect the performance of firms, and why do firms in the same industry perform differently? In order to understand the link between dynamic capabilities and firm performance, Zott (2003) develops a model in which dynamic capabilities are treated as a set of routines guiding the evolution of a firm's resource configuration (Zott, 2003). This model includes timing, cost, and learning as attributes and illustrates the indirect link between capabilities and performance. Different firms may possess similar dynamic capabilities, but the costs of dynamic capabilities and the timing of their use impact the performance of a firm. Probably the best-known example to illustrate this viewpoint is the Toyota Way, the processes, ways of working, and culture that made Toyota a leading car manufacturer. They eagerly share their philosophy, knowing that it took them 35 years to implement in Toyota.¹

The actual performance of dynamic capabilities is also addressed by Zahra and George (2002). Absorptive capacity has been identified as one of the dynamic competences. Zahra and George (2002) use the absorptive capacity (ACAP) construct (Cohen & Levinthal, 1990) to explain the potential absorptive capacity (PACAP) of a firm, and its realized absorptive capacity (RACAP); and to outline the conditions that influence the capacities

¹ Discussion in a meeting with Dr. James Morgan and Kone Technology & Innovation management team on 3rd October, 2018.

and thereby the firm's competitive advantage (Cohen & Levinthal, 1990; Zahra & George, 2002). Building on Eisenhardt & Martin (2000), Zahra and George (2002) define absorptive capacity as a dynamic capability enabling knowledge creation and utilization, and, thereby, enhancing, gaining, and sustaining competitive advantage, suggesting that 'social integration' reduces the gap between potential and realized capacity of a firm. This links to the need for sharing knowledge and experience across the whole network of companies in the MNC, which has been one of the key focus areas in the global integration in the case company of this research. Knowledge transformation and exploitation capabilities (RACAP) include transformational capabilities, which help firms to develop to manage changes, and exploitation capabilities, which convert knowledge into new products. Knowledge acquisition and assimilation capabilities (PACAP) include acquisition and assimilation capabilities, which help to track changes in the industry (Zahra & George, 2002).

When a marketplace is becoming increasingly hypercompetitive, high velocity, and rapidly changing (Ilinitch, D'Aveni, & Lewin, 1996; Eisenhardt, 1989; Teece, Pisano, & Shuen, 1997), the question of how firms achieve a dynamic fit is getting even more important than before. Earlier, the need for stability was a dominant paradigm in organizational theory, including uncertainty avoidance through structures and processes. This may be insufficient for global hyper-competitive environments (Ilinitch, D'Aveni, & Lewin, 1996; Rindova & Kotha, 2001). Changes in the environment quickly make capabilities that firms have acquired earlier obsolete, and call for new competences to be developed (Danneels, 2002). Danneels studied five technology firms to examine how new product development can serve organizational renewal, and suggests product innovation as one potential avenue for such renewal. Product innovation both draws on the competences of a firm, but also contributes in developing them. Existing research confirms that some firms may have good 'first-order' competences, such as customer and technology competences, but, without 'second-order' competences, a firm is not able to renew and build new competences. In fact, Eisenhardt and Martin (2000) argued that product development is a dynamic capability of the firm, because of its ability to alter the resource configuration of the firm. Product development is one of the mechanisms by which firms create, integrate, recombine, and shed resources.

Eisenhardt and Martin (2000) claim that dynamic capabilities are a set of specific and identifiable processes such as product development, strategic decision making, and alliancing, and they have significant commonalities across the firms and in certain circumstances, dynamic capabilities may even be best practices (Eisenhardt & Martin, 2000). In moderately dynamic markets, dynamic capabilities resemble the traditional conception of routines. They are detailed, analytic, stable processes with predictable outcomes. In contrast, in high-velocity markets, where industry structure is blurring, dynamic capabilities take on a different character. They are simple, experimental, unstable processes that rely on quickly created new knowledge

and iterative execution to produce adaptive, but unpredictable outcomes. This would support the view that best practices are unlikely to constitute dynamic capabilities (Teece, 2007). Process architecture typically aims to standardize and harmonize ways of working by identifying and sharing routine-related best practices across an organization. What is more, the use of consulting and the implementation of the enterprise resource planning (ERP) solutions have contributed to the sharing of best practices within companies and between companies in the same and different industries.

Contemporary dynamic capabilities research has been influenced by historical thought on the process of change and different historical models of change. Wadhwani and Jones identify three different models of change: evolutionary, dialectical, and constitutive (Wadhwani & Jones, 2016). Based on the evolutionary model, dynamic capabilities develop as firms develop the knowledge to deploy and combine their ordinary capabilities and resources in new ways. For example, Kahl (2014) has examined the development of production planning capabilities. He found out that production planning capabilities were first established to serve the operational needs of managing the supply of the components and later they shifted to serve the dynamic purposes of reconfiguring ecosystems and developing new products (Kahl, 2014). According to the dialectical model, firms also shape the environments they work within. Teece (2007) defines this as 'entrepreneurial' fitness, referring to the element of dynamic capabilities that involves shaping of the environment, not only adapting to it.

The degree of uncertainty has dramatically increased as the global economy has become more advanced and more integrated. This has been said to require superior managerial cognitive capabilities in relation to sensing and seizing the opportunities as well as reconfiguring and transforming the resources (Helfat & Peteraf, 2015; Teece, Peteraf, & Leih, 2016). The concept of dynamic capabilities has been extended with the capability of firms to manage risks and uncertainties (Teece, Peteraf, & Leih, 2016). Organizational agility is often treated as a crucial quality of firms who are in a constant state of transformation. Trade-offs are unavoidable, and firms should not necessarily organize for continuous agility. Knowing how much and when agility is needed is a crucial managerial capability. Strong dynamic capabilities are needed in order to have the organizational agility necessary to address deep uncertainty (Teece, Peteraf, & Leih, 2016).

Agility is "the capacity of an organization to efficiently and effectively redeploy its resource to value creating and value protecting (and capturing) higher-yielder activities as internal and external circumstances warrant" (Teece, Peteraf, & Leih, 2016: 17). Organizational agility is costly and usually has a trade-off with efficiency (Sorescu, Chandy, & Prabhu, 2003). In stable markets it may be productive to aim to achieve efficiency at the expense of agility, however in the case of deep uncertainty, the situation is different. The underpinnings of agility rely on two independent elements: entrepreneurial management capable of combining and recognizing technologies, and flexible

Literature Review

structures that can be rapidly modified. Achieving organizational agility often involves sacrificing technical efficiencies (Doz & Kosonen, 2008).

The existing literature does not explain when agility is desirable, the nature of its foundations, or how, if at all, it relates to strategy (Teece, Peteraf, & Leih, 2016). Limited attempts have been made to offer advice to managers regarding how to negotiate this trade-off. As explained earlier, the dynamic capabilities framework helps to understand the costs and trade-offs related to agility, when to build agility and when not to; and when to sacrifice it.

As described earlier, the dynamic capabilities framework seeks to explain how firms acquire and maintain competitive advantages under conditions of change and uncertainty in the environment. It provides tools to understand why some firms rather than others can adapt or reconfigure resources and operational capabilities so as to respond to (disruptive) change. The dynamic capabilities framework is suggested as a tool to help managers understand the need for agility.

Strong capabilities are not based entirely on routines or fixed rules, even if they are vital components of dynamic capabilities (Teece, Peteraf, & Leih, 2016). Dynamic capabilities must be congruent with the strategic direction emerging from the strategy process. Managers are supposed to act entrepreneurially and override the rules if needed. The strength of a firm's ordinary capabilities is a measure of its technical fitness. The level of ordinary capabilities can be measured for a task or a standard, as is the case with benchmarking best practices. The operations and administrative function of a business is the main place where solid ordinary capabilities are manifested. Dynamic capabilities require a longer-term focus and involve subordinating short-run cost cutting, optimization, and other best practices to innovation enhancing strategies.

2.2.2 Process Management

At the same time, when multinational companies are harmonizing their processes, critical views on process harmonization and process management have emerged. Process management activities can be addressed from two viewpoints: One viewpoint addresses business process management (BPR) (Davenport, 1993; Davenport, Harris, & Cantrell, 2004; Hammer, 1996) focusing on the concept of core business processes that are needed for value creation and the accomplishment of the central organizational tasks (Srivastava, Shervani, & Fahey, 1999). The other viewpoint focuses on process management activities as a central element of total quality management (TQM) which became popular in the 1980s and 1990s (Hackman & Wageman, 1995). This section concentrates on the first view, the role of business processes, and how they contribute to the short-term and long-term success of a firm (Garvin, 1998).

According to process management philosophy, all business operations are based on core processes that cut across the different functions of the enterprise, and a company is managed and organized based on these processes, rather than functions. These processes address the fundamental business tasks critical for achieving the organization's goals. Typical core processes are, for example, new product and service development, customer base management, and order-to-delivery processes (Hannus, 1993). These core processes are applied across various business functions and they extend beyond the organization to also cover customer, resale, subcontractor, and other stakeholder operations. The core of process management ideology is horizontal, customer needs-based operations management. Similarly, Srivastava and colleagues claim the core market-oriented business processes to be product development management (PDM), customer relationship management (CRM), and supply chain management (SDM) (Srivastava, Shervani, & Fahey, 1999). This set of macro-level processes address fundamental business tasks that are critical for achieving the organization's goals and contribute to customer value creation. A wellknown example of an early process management adopter is IBM. IBM used process management to solve the issues of increasing organizing load and alienation from customers already in the 1980s. In Finland, Kone was one of the early adapters of process management (Hannus, 1993).

Process management is a view of an organization as a system of interlinked processes including the efforts to map, improve, and adhere to organizational processes (see e.g. the seminal work of Ishikawa, 1985). Process management has shifted the view of organizations as systems of different functions to systems of different processes across the organization and its business network. Processes consist of activities that together produce outputs to customers (Garvin, 1998). Process management started as improving manufacturing efficiency, and it has migrated beyond operations to other parts of organizations, like developing technological innovations (Tikkanen, 1998). Benner and Tushman (2003) explore how process management activities affect both technological innovation and organizational adaptation and argue that process management technologies stabilize and rationalize organizational routines and lead the organization to focus on efficiency and customer satisfaction measures that are easily available (Benner & Tushman, 2003). This diffusion of process management techniques favors exploitative innovation at the expense of explorative innovation. This evoked a rich discussion on the impact of process management activities and the need for organizational ambidexterity in organizations. It follows a change in the strategic literature that had earlier mainly focused on stability, effectiveness and competition, towards a new focus shifting to disruptions in the environment and technological change.

In practice, business processes consist of different types of processes that serve different purposes: support, execution and development (Garvin, 1998). When looking at process architecture, the focus in the beginning is often on the business processes that serve the purpose of execution, such as logistics, development, manufacturing, and customer service. However, the most crucial processes to examine may be the enabling or background

Literature Review

processes that support investment decisions. These include, for instance, how plans and budgets are negotiated, and, most importantly, how key resources are allocated. These processes are where many organizations' most serious disabilities in creating disruptive growth businesses reside (Christensen & Raynor, 2003).

In principle, process architecture is about managing information flows such as financial and accounting information, human resource information, supply chain information, customer information etc. - in and between business processes as a prerequisite for consistent operating practices. In a multinational company, the structures and related information flows are highly complex (Marschan, 1996). Information technology evolution provided tools to manage information and, in fact, enabled process development and business process engineering. So-called enterprise resource planning systems (ERP) are commercial software packages specifically meant for the seamless integration of all the information flowing through a company (Davenport, 1998). Therefore, in the mid- to late 1990s, many large corporations undertook ambitious information systems project to implement enterprise resource planning systems, with an objective to manage information flows across multifaceted organizations and to automate complex transaction processes (Davenport, Harris, & Cantrell, 2004). The underlying assumption of the enterprise solution implementation was to reengineer business processes, restructure organizations, and change their management processes to take advantage of new data (Davenport, Harris, & Cantrell, 2004). In fact, information technology, and especially enterprise resource planning systems, have enabled large-scale process development and process engineering activities in large organizations.

The existing literature on information technology evolution and its impact on process management describes the development of conceptualizing enterprise and its information flows in processes and supporting solutions. Whereas the emerging information technology solutions enabled the development of process management and knowledge management in complex organizations, such as multinational enterprises, it also proved to be challenging to implement these solutions and reach the targeted benefits (Brynjolfsson & Hitt, 2004; Davenport, 1998; Davenport, Harris, & Cantrell, 2004; McAfee & Brynjolfsson, 2008).

Processes define how an organization transforms inputs into something with greater value. Processes – often also referred to as routines - are the fundamental building blocks of organizational capability and competitive advantage. Competitive advantage is seen to be achieved by developing better processes than competitors and replicating effective behaviors (Nelson & Winter, 1982). Once established, routines are difficult to change (Hannan & Freeman, 1977. Processes have been variously called organizational capabilities, dynamic capabilities or core competencies and seen as a source of competitive advantage (Collis, 1991; Teece & Pisano, 1994; Prahalad & Hamel, 1990).

As process management techniques aim for continuous improvement in routines and for variation reduction, their usage affects the balance between exploratory and exploitative innovation (Benner & Tushman, 2002). The promise of process management includes several benefits, such as productivity improvement because of streamlining activities to eliminate non-value-adding activities. However, as the existing empirical research does not always support this view, Benner and Tushman (2003) famously argued that the promise of process management has been a false one. They claim that organizations may be using process management techniques to follow the example of other organizations, and that these pressures may also lead to process management utilization in contexts where it is ineffective and harmful. Similarly, they argue that extending the scope of process management beyond manufacturing may cause unintended effects in the innovation and adaptation. What were meant to be core capabilities of the organization, may eventually turn into core rigidities, if the environment changes rapidly (Leonard-Barton, 1992). Benner and Tushman (2003) also identify several ways in which process management activities may influence technological innovation. Firstly, they stabilize resource allocation and impact which technological projects will be supported (Christensen & Bower, 1995). Secondly, they tighten the internal communication and influence of the types of technological changes that are recognized and addressed (Henderson & Clark, 1990). Thirdly, when extended to innovation design and development processes (Harry & Schroeder, 2000), process management activities may impact the types of innovation in the organization (Benner & Tushman, 2003).

Process management practices were expected to result in lower costs and products with higher quality, but as already stated in the "productivity dilemma", short-term efficiency and long-term adaptability are inherently incompatible (Abernathy, 1978). Organization theorists have conceptualized Abernathy's dilemma as the challenge of balancing exploitation and exploration (March 1991). Process management activities may be suitable in a limited set of conditions: during periods of stability, and during incremental innovation for existing customers (Benner & Tushman, 2003). However, organizations need to succeed in both the short and the long run. As process management activities increase exploitation and efficiency, thus helping organizations to succeed in the short run, the same activities, at the same time, often reduce the amount of exploration and long-term adaptation in organizations.

In addition to the resources – people and assets that the company has access to – and the processes, the organization's way of working is largely characterized by its values. The concept of capabilities has also been unpacked into three sets of factors that define what an organization can and cannot accomplish. This framework includes the resources, processes and values (RPV framework) of an organization (Christensen & Raynor, 2003). Resources are people or assets that the organization owns or has access to. The values of an organization are the standards by which employees make prioritization decisions (Christensen & Raynor, 2003). Whereas resources and processes are enablers, which define what an organization can do, values are constraints, which define what an organization cannot do (Christensen & Raynor, 2003).

Process Management and Information Technology

In the mid- to late-1990s, many large corporations carried out ambitious information systems projects and implemented packaged enterprise resource planning (ERP) systems, also knowns as enterprise systems (ES). These are packaged software applications that connect and manage information flows within and across complex organizations, automating complex transaction processes and providing real-time information for the decision making (Davenport, 1998; Davenport, Harris, & Cantrell, 2004). The underlying assumption of the implementation of this enterprise system was to reengineer business processes, restructure organizations, and change management processes (Davenport, Harris & Cantrell, 2004). ES implementations required substantial investments of time, money and internal resources (Davenport, Harris, & Cantrell, 2004). The opportunities with information technology had existed for decades but gave rise to what was called the productivity paradox (Brynjolfsson & Hitt, 2004). For years, it seemed that cumulative investment in information technology should have produced economy-wide productivity results, but it led rather to a clash of expectations and statistics (Brynjolfsson & Hitt, 2004).

Until the late 1990s, investments in IT-driven productivity growth usually produced an organically grown, heterogeneous technology environment with high complexity and operating costs (Brynjolfsson & Hitt, 2000). This may have been due to competing technologies and standards that predominantly decentralized IT decision-making models. It has been argued, that the situation changed because of IT investments made in resolving the so-called Y2K dilemma. The approaching year 2000 created fears that computer programs storing year values as two-digit figures would cause problems. Solving these problems required upgrading software solutions and discarding the oldest legacy systems. It has also been argued that the economic downturn in the early 2000s compelled companies to invest more in IT efficiency in order to improve overall efficiency. Organizations started to integrate the multiple, regional enterprise solution systems into unified, global enterprise solutions models.

For a long time, the high cost of information exchange was a dominant feature. In fact, many still-used organizational practices reflect the historically high cost of information processing. Hierarchical organizational structure is one example of this, as it can reduce communications costs by minimizing the number of communications links required to connect multiple actors compared with more decentralized structures (Radner, 1993). When entering the emerging globalization development of the 1990s, there were few companies in the world whose organizations, operational models and strategies supported truly global business operations (Steger, 2001; Michelsen, 2013). The middle of the 1990s marked the mainstream of the adoption of the internet and commercial enterprise solutions. The concept of reengineering business processes led to large wave of enterprise solution implementation in 1990s (Davenport, 1993; Davenport, Harris, & Cantrell, 2004). The quality and quantity of information technology increased, coinciding with the accelerating competition in the global market. McAfee and Brynjolfsson (2008) identified a pattern in the most apparent competitive dynamics in industries that spent most in information technology. IT seems to be more strongly correlated with changes in competitive dynamics than R&D (McAfee & Brynjolfsson, 2008). Information technology was the technology trigger for the process engineering and emerging ERP solutions to manage the information flows in the increasingly international enterprises in early 1990s. For example, the German software company SAP introduced its first enterprise solution (SAP R/2) in 1992 (McAfee & Brynjolfsson, 2008).

Computers have significantly contributed to business performance and economic growth. Investments in information technology are linked to higher productivity and organizational transformation (Brynjolfsson & Hitt, 2000). Firstly, a significant component of the value of information technology is its ability to enable complementary organizational investments such as business processes and work practices. Secondly, these investments, in turn, lead to productivity increases by reducing costs and by enabling firms to increase output quality. Information technology can be described as generalpurpose technology that facilitates complementary innovations (Bresnahan & Trajtenberg, 1995; Brynjolfsson & Hitt, 2000) and it complements changes in other aspects of an organization. Firms need to adopt information technology as part of other changes, and a merely partial implementation can create significant productivity losses as achieved benefits may be outweighed by negative interactions with existing organizational practices (Brynjolfsson, Renshaw, & Van Alstyne, 1997).

2.2.3 Organizational Alignment

Organizational alignment needs depend on the evolution of the firm, and businesses require different operating models in their early stages than are required by more mature business. O'Reilly and Tushman (2016) emphasize the importance of organizational alignment in different needs for exploration and exploitation. The dimensions they use are critical tasks (key success factors), culture, people, and formal organization directed by strategy and executive leadership (O'Reilly & Tushman, 2016; Tushman & O'Reilly, 1996). These elements define what specific tasks must be done in order to implement the strategy, what are the norms, values, attitudes, and behaviors needed, what the formal organization is (structure, controls, rewards, careers), and whether the people in the organization are motivated and equipped with the necessary competences. On top of this is the organization's vision and strategy. Moreover, O'Reilly and Tushman (2016) have listed how organizational alignment differs in the exploration and exploitation phases of the business lifecycle (O'Reilly & Tushman, 2016). For the exploration phase, the central characteristics are search, speed, autonomy, flexibility, discovery, and variance enhancement. For the exploitation phase, the characteristics are predictability, stability, efficiency, variance reduction, and control.

In an MNC, there are typically businesses, units or geographical areas in different phases of evolution. New business models, products or emerging markets, for example, may require more flexibility and exploration, whereas most of the businesses may benefit of the predictability and stability provided by the harmonized ways of working. This requires the ability to have multiple alignments, various levels of exploration and exploitation simultaneously. In the early stage of a firm's evolution, its operating model is characterized by explorative features, whereas following growth the characteristics are more exploitative (O'Reilly & Tushman, 2016).

Different business processes serve different purposes. The business processes can be addressed through theories of exploration and exploitation (Grant, 1991; Srivastava, Shervani, & Fahey, 1999). The focus of exploration theories is on creating new business opportunities through new business models, new customer functionalities, or insights about how to shape the future (Drucker, 1994; Prahalad & Hamel, 1994; Fahey & Randall, 1997; Srivastava, Shervani, & Fahey, 1999). In contrast, exploitation theories focus on the execution and leveraging existing assets and capabilities. The concepts of exploration and exploitation can be used to understand the purpose of the different business processes and their impact on the capabilities of an organization, as described earlier. Process management techniques are used to stabilize and rationalize organizational routines, focusing on efficiency and customer satisfaction measures. Research on how stable processes impact technological innovation and organizational adaptation has challenged process management techniques and claim that these techniques favor exploitative innovation at the expense of explorative innovation (Benner & Tushman, 2003; 2015).

The concept of a business model has been one way to describe how firms do business and create value. Thus, the business model literature is interesting for understanding operating models. The concept of business models has gained interest since the dawn of the internet, the main interests being e-business and the use of information technology in businesses (see literature review in Zott, Amit, & Massa, 2011). The business model discussion also addresses value creation, competitive advantage and firm performance, as well as innovation and technology management. One of the common themes in the research on business models is that they emphasize a system level, holistic approach to explaining how firms conduct business. What is more, firm activities play an important role in the conceptualization of business models and they seek to explain how value is created in the company. Business models have been defined as "the content, structure, and governance of transactions designed to create value through the exploitation of business opportunities" (Amit & Zott, 2001: 511, in Zott, Amit, & Massa, 2011). The business model definition includes the activities of the firm and its partners. Magretta defines business model as "stories that explain how enterprises work" (Magretta, 2002: 4), taking customer and revenue generation logic into account. According to Magretta (2002), the business model of a firm defines who is the customer, what the customer value means, and what is the underlying economic logic to deliver value to customers.

Scholars have also emphasized that the business model can play an important role in a firm's strategy. According to Richardson (2008), the business model explains how the activities of the firm work together to execute its strategy, thus bridging strategy formulation and implementation. According to Teece, the business model reflects a "hypothesis about what customers want, and how an enterprise can best meet those needs, and get paid for doing so" (Teece, 2007: 1329).

Zott, Amit, & Massa (2011) identified two complementary themes in business model literature: The first is that companies commercialize innovative ideas and technologies through their business models, unlocking the value potential embedded in new technologies and converting it into market outcomes. The second is that the business model represents a new subject of innovation, which complements the traditional subjects of process, product, and organizational innovation and involves new forms of cooperation and collaboration. Chesbrough (2006) introduced the notion of open innovation as a mode of innovation in which firms look outside their boundaries to leverage internal and external sources of ideas to advance business. A concept that comes close to that of open innovation is collaborative entrepreneurship, which is "the creation of something of economic value based on new jointly generated ideas that emerge from the sharing of information and knowledge" (Miles, Miles, & Snow, 2006: 2). There is an increasing consensus that business model innovation is key to firm performance (Zott, Amit, & Massa, 2011). In the technology and innovation management field, the business model is mainly seen as a mechanism that connects a firm's (innovative) technology to the needs of its customers' and other firms (Zott, Amit, & Massa, 2011). The business model "embodies nothing less than the organizational and financial 'architecture' of the business" (Teece, 2010: 173).

The concept of the business model is partly related to the process architecture and operating model of a company, but a business model is not equal to business processes (Shafer, Smith, & Linder, 2005); nor it is equal to corporate strategy (Richardson, 2008); nor to the senior leadership team processes and structures (Smith, Binns, & Tushman, 2010). However, business model literature provides elements to consider when exploring the elements of a firm operating model.

2.2.4 Organizational Ambidexterity

Benner and Tushman (2003) argue that process management techniques stabilize and rationalize organizational routines because these activities typically create a focus on easily available efficiency and customer satisfaction measures. This may lead to favoring exploitative innovation at the expense of explorative innovation. Process management activities are positively associated with organizational effectiveness under certain conditions, for example in the case of incremental change, or incremental innovation for existing customers. However, under turbulent change, process management may lead to resistance to change and may limit organizational variability. Benner and Tushman (2003) suggest that process management activities ought to be buffered from exploratory activities and that organizations need to deal with the inconsistent demands of exploitation and exploration simultaneously to succeed in both short and long run, and they also suggest that ambidextrous organizational forms build architectures that are internally inconsistent that support both exploitation and exploration.

Benner & Tushman (2015) reflect on the recent changes in the business landscape. One recent change is the concept of open innovation, which addresses how the locus of innovation has moved from inside the company to outside. The nature and locus of innovation have changed fundamentally during the past decade. The decreased costs of communication and information sharing, as well as the increase in the modularity of products and services, have enhanced open innovation and moved innovation from within the organizations to communities external to organizations. Also, because the speed of development has increased, the companies may not have time to develop the new competences and invest enough in research into new technologies, even if they would have the money and the will to do so. This makes incumbent companies to search for the best partners to innovate with. Benner and Tushman (2015) point out, that the continued false promise of universal best practices (i.e. process management) remains, and they point out that the innovation domain itself has changed with the digital revolution, when open and peer innovation communities are replacing internal organization-based innovation. Benner and Tushman (2015) call for the organization, innovation, and leadership literature to reflect and reconcile the implications of open innovation models.

In fact, well-established companies today seem to be optimized more for efficiency than strategic agility (Kotter, 2014). This has a lot to do with the role of organizational routines and practices in the innovativeness of the company. The literature on innovation management provides insight into dynamic capabilities and organizational ambidexterity theories. Organizational capabilities, especially dynamic capabilities, impact the innovation capability of the organization, and innovation management can be viewed as a form of organizational capability (Lawson & Samson, 2001). Radical innovations are claimed to be engines of economic growth (Sorescu, Chandy, & Prabhu, 2003), and one of the conflicting demands that the companies face today is the need for finding the right balance between effectiveness and innovativeness.

When studying large multi-national corporations, one finds literature addressing the term "incumbent's curse", which refers to a perception that large, incumbent firms rarely come up with radical product innovations (Chandy & Tellis, 2000). Chandy and Tellis (2000) note that this perception may not always be valid, and suggest possible causes to answer the question of why some dominant firms maintain their innovative vigor? This can be explained by incumbent firms' dynamic organizational climates and strong technological capability. The incumbent's curse may not be as inevitable as it seems. Dynamic organizational structures and strong technological capabilities may keep large incumbent organizations innovative.

Innovation is about the exploration of new ideas and resources, about the exploitation of existing ones, and about organizational learning. In a classic article, March (1991) considered how exploration and exploitation are related and how they compete over scarce resources, as well as the choices the organization needs to make between investing in new possibilities and old certainties. According to March, exploration includes things captured by terms such as "search, variation, risk taking, experimentation, play, flexibility, discovery, innovation" and exploitation includes such things as "refinement, choice, production, efficiency, selection, implementation, execution" (March, 1991: 71). The choices between these two are inbuilt in features of organizational forms and customs.

Institutionalized capabilities might lead to 'incumbent inertia' in the face of environmental changes (Lieberman & Montgomery, 1998) and technological discontinuities could enhance or destroy existing competencies within an industry (Tushman & Anderson, 1986) when even 'seemingly minor' innovations can undermine the usefulness of deeply embedded knowledge (Henderson & Clark, 1990) building on the finding that all innovation requires some degree of 'creative destruction' (see Schumpeter, 1934). There is a conflict between the need for innovation and retention of important capabilities, and development projects reveal frictions between technology strategy and corporate practices (Burgelman, 1991). The gap in research-based knowledge on how the interface between the project and the organization, as well as the interaction between development and capabilities (Leonard-Barton, 1992; Van de Ven, 1986) has been addressed in several fields of research, for example in the organizational ambidexterity literature.

New product development requires bringing together competences relating to technology and customers. New product development can serve as a vehicle for organizational renewal. Product innovation serves to develop firm competences and contribute to firm renewal. Changes call for new competences to be built. In a dynamic world, firms that can continuously build new strategic assets will succeed in the long run. Radical innovation is an important driver of the growth and success of both firms and nations. Such innovation is driven by, for example, government policy and labor, capital, and culture at the national level. Tellis, Prabhu, and Chandy, (2009) investigated the impact of corporate culture on radical innovation and found out that corporate culture is the strongest driver of radical innovation. Tellis, Prabhu, and Chandy (2009) claim that internal corporate culture is an important driver of radical innovation for many reasons (e.g. globalization, mobility of skills and labor etc.). Corporate culture is unique, intangible, sticky, and difficult to change, and Tellis, Prabhu, and Chandy (2009) address the attitudes and practices that are the core components of corporate culture. They identified the firm attitudes that enable radical innovation to be the willingness to cannibalize existing assets, the future orientation, and the risk tolerance in an organization (see also Chandy & Tellis, 1998; Olson, Walker, & Ruekert, 1995).

The current theory of exploration and exploitation raises the question of how organizations manage to explore at all (Greve, 2007). Based on earlier research, innovation rates seem not just to depend on the knowledge entering organizations, but also on how knowledge is turned into innovations that are developed into products. Various researchers have tried to identify internal organizational routines that efficiently generate innovations or factors that prevent them (Burgelman & Sayles, 1986; Leonard-Barton, 1992 Van de Ven, Polley, Garud, & Venkataraman, 1999); managerial problem solving and risk taking in particular seem to make the difference.

The research on exploration and exploitation has focused on exploration and exploitation concerning firms' technologies, and their extension the exploration and exploitation to customers and markets (Aspara, Tikkanen, Pöntiskoski, & Järvensivu, 2011). The starting point is the central strategic concern about how much to invest in innovation. They build on the multidimensionality within the resource classes and relativity of resource newness, and develop a three-dimensional conceptualization of the types of the business development projects of firms. They conclude that an important dynamic capability is a firm's ability to manage business development projects in order to find options to combine new and existing resources in a balanced way.

Research exists looking at product innovation from the point of view of marketing, and whether market orientation promotes or restrains product innovation. Lukas and Ferrel found that customer orientation increases the introduction of new-to-world products, whereas competitor orientation increases the introduction of products and innovation similar to those of competitors (Lukas & Ferrell, 2000). Earlier research suggested that inter-functional coordination in organizations would be a source of "true" innovation (Wheelwright & Clark, 1992). However, Lukas and Ferrel (2000) found that new product development through inter-functional coordination creates stress in the organization, and that one way to avoid this stress is to stick to existing organizational routines and avoid unfamiliar projects. Business may prefer to develop current product offerings, and may prefer them to the breakthrough opportunities.

New service development is different from traditional new product development. Nijssen and colleagues brought new service development and product development research together (Nijssen, Hillebrand, Vermeulen, & Kemp, 2006). This is important, especially now that many traditional companies are converting their physical product strategies to services (Vargo & Lusch, 2004). Existing research argues that new service development requires more flexibility from established routines and processes (Nijssen, Hillebrand, Vermeulen, & Kemp, 2006). New product development and new service development can be addressed separately. The main difference between the development of new product and new services is that internal organizational factors are more important in the context of new service development (Nijssen, Hillebrand, Vermeulen, & Kemp, 2006). The development of a new service and the delivery of it are closer to each other than in the context of new products. New service development requires integration of the new service operations and processes with existing business activities and therefore enabling capabilities, communication and coordination; reducing intra-organizational conflicts and power struggles are critical for new service development. On the other hand, new service development requires less R&D investment than new product development. Also, service innovation involves more of the development of new procedures and concepts than new core technology.

Many companies introduce services to complement their products, and, in many cases, the earlier merely physical products transform to services. This requires developing new services and solutions that follow a different logic and business models than the traditional products, and requires changes in the processes and routines in the company, including the possible need for different mindset and customer centricity than before. It also allows new competitors entering the market also outside from own industry. New service development requires the company to have a willingness to cannibalize its organizational routines, because the new products or services will make current organizational skills obsolete (see Chandy & Tellis, 1998; Nijssen, Hillebrand, & Vermeulen, 2005). New services typically also require changes in IT infrastructure for their delivery (see Tatikonda & Zeithaml, 2001), and are likely to require country units' employees to learn new skills in order to master new service procedures (see Atuahene-Gima, 1996).

In addition to new product development and new service development, new business models also need to be developed and are a source for innovation. Indeed, there have been calls for bringing new business model development to the same level as new service development and new product development (Winter & Szulanski, 2001).

Organizational Agility

How much change and agility is sufficient in a world where constant change is the only thing that endures? Agility and change are highly advertised, but it has also been argued that they may not always be necessary or even possible, and the managers need to calibrate the required level of organizational agility (Teece, Peteraf, & Leih, 2016). Dynamic capabilities define how a firm integrates, builds, and reconfigures its internal and external competences in a changing business environment. Dynamic capabilities define how capable the firm is of innovating, adapting to change, creating the change ("disrupt or be disrupted"); sensing, seizing, and transforming are essential for a firm to succeed. According to Teece, Peteraf, and Leih (2016), the dynamic capabilities framework helps to understand the costs and payoffs of agility, when to build flexibility and when not to, as well as highlighting the value of ordinary capabilities.

Harmonized ways of working are also about structures. Jarzabkowski (2008) studied how strategy is shaped as a structuration process, building on Pettigrew's (1990) idea of shaping strategy reflecting the structuration nature of strategizing. Top management indirectly influences and shapes the evolving path of a strategy through their interactions and the organizational practices. Strategy process research describes the interplay between top managers and the structural context they make (Jarzabkowski, 2008). Structural context consists of the administrative procedures and systems that enable top managers to establish links between corporate strategy and the actions of middle and operational level managers (see Chakravarthy & Doz, 1992). These procedures include planning, resource allocation and monitoring and control systems. How these procedures interact with other factors in shaping strategy is relatively underexplored (Jarzabkowski, 2008). This would mean explaining strategy processes by showing how top managers embed strategy in administrative structures that guide the actions of others. However, a paradox has also surfaced in top managers' relationships with their structural contexts. Top managers can shape strategy through their control over a structural context, but once they embed strategy within an administrative procedure, such as resource allocation, they find it hard to alter or shape related activity. As Noda and Bower (1996) noted, structural context, once designed and institutionalized as part of a firm's administrative systems and processes (operating model), seems to present a strong source of a firm's inertia, regardless of possible subsequent changes in top managers' intention. Top managers' influence over structural context is important in institutionalizing strategy, yet it is unclear how they then retain the ability to shape strategy or to introduce new strategies (Jarzabkowski, 2008).

An interesting aspect emerges from the research on how administrative systems provide a structural context for strategy evolution (Bower, 1970; Burgelman, 1983; Chakravarthy & Doz, 1992; Noda & Bower, 1996) and from the literature on managerial influences over the administrative procedures that comprise a structural context. Top managers establish these procedures, yet much research has focused on the way that administrative procedures subsequently constrain managerial action (e.g. Bower, 1970; Burgelman, 1983, 1991 Noda & Bower, 1996), emphasizing their institutionalized and inertial properties. Integrative strategizing provides a potential analytic resource for addressing this gap in the assumption that change is more "strategic" than

stabilizing a strategy and ensuring its ongoing implementation (Tsoukas & Chia, 2002; Wilson & Jarzabkowski, 2004).

2.3 Managing Contradictions in Organizations

2.3.1 Key Concepts in Contradictions Research

When implementing process harmonization, organizations may face various contradictions, such as tensions between global and local requirements, as well as tensions between productivity and innovativeness. In order to explain and understand how these tensions are managed, it is important to define the concepts of tensions, contradictions or conflicts, that existing literature has sometimes used interchangeably (Putnam, Fairhurst, & Banghart, 2016). It is also vital to define the different views - paradoxical and dialectic perspectives - that are used to view these opposing demands (Hargrave & van de Ven, 2017), and what is meant with dualism and dualities (Farjoun, 2010). The definition of these concepts and examples of existing studies on organizational tensions are described in the following.

The key concepts to be defined are tensions, contradictions, dualism, dualities, dialectics, and paradoxes. Putnam, Fairhurst and Banghart (2016) provide definitions for these key constructs based on their review on a vast literature that focuses on organizational contradictions, dialectics, and paradoxes that offer copious definitions of these concepts (for detailed review, see Putnam, Fairhurst, & Banghart, 2016). They define tensions as "stress, anxiety, discomfort, or tightness in making choices, responding to, and moving forward in organizational situations" (Putnam, Fairhurst, & Banghart, 2016: 70). They define contradictions as "bipolar opposites that are mutually exclusive and interdependent such that the opposites define and potentially negate each other" (Putnam, Fairhurst, & Banghart, 2016: 70). Contradictions can be addressed as dualisms or dualities, depending on whether the opposites are mutually exclusive or interdependent. Thus, Putnam, Fairhurst, and Banghart (2016: 69) define dualism as "the existence of opposite poles, dichotomies, binary relationships that are able to create tensions, but can be separated" and dualities as the "interdependence of opposites in a both/and relationship that is not mutually exclusive or antagonist". Duality scholars describe oppositional elements as conceptually different and contradictory, however, they are also mutually enabling (Farjoun, 2010). Management scholars use different perspectives, paradox and dialectic, for understanding organizational contradictions (Hargrave & Van de Ven, 2017). The paradox perspective focuses on the coexistence of tensions between opposite elements, whereas the dialectical perspective views tensions as transformed through conflict. Putnam, Fairhurst, and Banghart (2016: 72) define paradox as "contradictions that persist over time, impose and reflect back on each other, and develop into seemingly irrational or absurd situations because their continuity creates situations in which options appear mutually exclusive, making choices between them difficult". Consequently, dialectics is defined as "interdependent opposites aligned with forces that push-pull on each other like rubber band and exist in an ongoing dynamic interplay as the poles implicate each other" and it "focuses on the unity of opposites and the forces or processes that connect them" (Putnam, Fairhurst, & Banghart, 2016: 71). Table 4 summarizes the key concepts in contradictions research (based on Putnam, Fairhurst & Banghart, 2016).

Key concept	Definition (based on Putnam et al., 2016)		
Tension	Stress, anxiety, discomfort, or tightness in making choices, responding to, and moving forward in organizational situations		
Contradiction	Bipolar opposites that are mutually exclusive and interdependent such that the opposite define and potentially negate each other		
Dualism	The existence of opposite poles, dichotomies, binary relationships that can create tensions, but can be separated		
Dualities	Interdependence of opposites in a both/and relationship that is not mutually exclusive or antagonist		
Paradox	Contradictions that persist over time, impose and reflect on each other, and develop into seemingly irrational or absurd situations because their continuity creates situations in which options appear mutually exclusive, making choices between them difficult		
Dialectics	Interdependent opposites aligned with forces that push-pull on each other and exist in an ongoing dynamic interplay as the poles implicate each other		

Table 4. Definitions of key concepts in contradictions research.

Paradox was introduced into the management and organizations literature in the late 1980s (Poole & Van de Ven, 1989; see also Hargrave & Van de Ven, 2017). In fact, paradox has become a key topic in organization and management research (Putnam, Fairhurst, & Banghart, 2016; Smith & Lewis, 2011) and the paradox perspective is used in explaining various organizational phenomena (Schad, Lewis, Raisch, & Smith, 2016). According to Farjoun (2010), most organizational theories have sustained that stability and change, and, furthermore, the practices, processes, and methods that support them, are largely incompatible and mutually exclusive according to the paradox perspective. However, according to the dialectical perspective, the relationship of contradictory elements, such as change and stability, is adverse and transformed through conflict (Hargrave & Van de Ven, 2017).

The paradox and dialectic perspectives provide a starting point for the current research. My study builds on the international business and organizational capabilities research, as described earlier in this literature review. For example, following contradicting demands can be identified based on literature review. Firstly, International business research is characterized by the discussion on conflicting demands arising from the needs for global integration and local flexibility, needs for centralization and de-centralization, as well as needs for having global and regional (or local) focus, to mention a few. Similarly, the research on organizational capabilities and especially dynamic capabilities, is, to a great extent, about the contractionary demands for being both innovative and productive at the same time; guaranteeing short-term and long-term success; being able to both exploit existing resources and explore new resources (Andriopoulos & Lewis, 2009; Benner & Tushman, 2003; March, 1991; O'Reilly & Tushman, 2013); about how to achieve both operational stability and responsiveness to a changing environment (Burns & Stalker, 1961; Thompson, 1967); and, all in all, about how to manage the needs for stability and change at the same time (Farjoun, 2010).

2.3.2 Strategies for Managing Contradictions in Organizations

Organizational contradictions have been examined from different views, by applying paradox and dialectical perspectives (Hargrave & Van de Ven, 2017). The paradox perspective focuses on the coexistence of tensions and the management of tensions between opposite elements (Lewis, 2000; Lewis & Smith, 2014; Smith & Lewis, 2011), accepting them, and finding a balance or a synergy between the opposites. The dialectical perspective, in turn, views the tensions as transformed through conflict (Hargrave & Van de Ven, 2017), as resulting from resistance, and leading to something new. Hargrave and Van de Ven (2017) introduced an integrated model to incorporate both the paradox and dialectics views and, what is more, combinations of them. They address contradictions through the sensemaking approach (acceptance or resistance) on one hand, as described above, and the power distribution (stable or unstable) on the other hand. Following this, they identify four managerial actions to manage contradictions (Hargrave & Van de Ven, 2017). The process model of Hargrave and Van de Ven (2017), provides a useful approach to address the different ways that an organization addresses contradictory demands. Figure 1 illustrates the different categories of strategies of managing contradictions in organizations.

		Distribution of systemic po	Distribution of systemic power	
		Stable, symmetrical	Unstable and/or asymmetrical	
Sensemaking approach	Acceptance both/and	Q1 Paradoxical management (synergy)	Q2 Assimilation	
	Adversarial	Q3 Mutual adjustment	Q4 Dialectics (mobilization and conflict)	

Figure 1. Approaches for managing contradictions (Hargrave & Van de Ven, 2017).

Synergy and conflict strategies have been the main approaches taken in paradox and dialectical research for the management of contradiction (Hargrave & Van de Ven, 2017). The key difference is in the sensemaking approach. Sensemaking approaches are the "processes by which organizations enact and interpret their environments" (Hargrave & Van de Ven, 2017: 329). Here, the sensemaking approach is about accepting the contradiction (both/and) or resisting the contradiction (either/or). Following this, the paradox perspective builds on the assumption that the contradiction is accepted and the right balance, synergy, is sought. The dialectics view, however, builds on the assumption that the contradiction is resisted, and that resistance leads to action to transform the contradiction and create something new out of it. Synergy and conflict strategies are illustrated in Figure 1 in the upper-left and lower-right quadrants.

Hargrave and Van de Ven (2017) complement the sense-making approach with another factor, which is the distribution of systemic power. By combining these two dimensions, they broaden the contradiction management approaches with assimilation and mutual adjustment strategies. Under stable and symmetrical systemic power relations, proponents of both elements accept the persistent coexistence of opposite elements because conflict is seen as fruitless. Therefore, they conclude that coordinating through with the other party synergy (quadrant 1) or mutual adjustment (quadrant 3) is the most effective means of proceeding. In contrast, when the balance of systemic power between the two elements is either unstable or asymmetrical (or both), the proponents of one or both contradictory elements are motivated to try to change the balance of power rather than accept it and work within it. Following dialectics, we expect that when systemic power is distributed asymmetrically, proponents of the subordinate element will recognize that their interests are not being served, and will make institutional change (quadrant 4). At the same time, under such conditions, proponents of the dominant element will be motivated to negate the subordinate element and maintain their position (assimilation, quadrant 2) (Hargrave & Van de Ven, 2017: 330).

Assimilation strategies. When power is distributed relatively asymmetrically, the acceptance of the coexistence of contradictory elements is expressed not through synergy, but through assimilation (Hargrave & Van de Ven, 2017). Assimilation occurs when practices and arrangements which have been associated with a subordinate element come to be incorporated into the dominant element (Thornton, Ocasio, & Lounsbury, 2012). Proponents of the dominant element use assimilation when they accept that aspects of the contradictory element as useful, yet they also seek to maintain their dominant position. To do so, they adopt these aspects by justifying them within the logic of the dominant element.

Mutual adjustment strategies. Under conditions of a stable and symmetrical distribution of systemic power, contradictory elements are not always coordinated through synergy, because actors may make sense of the relationship of the elements as adversarial. Although proponents of

the two elements may recognize their interdependence and accept their coexistence, they may not see each other as legitimate, or they may not view forms of synergy, such as cooperation and collaboration, as useful to their own goal achievement. Therefore, they may manage their interdependence through mutual adjustment (Lindblom, 1963). Mutual adjustment strategy involves a range of negotiating tactics including bargaining, compensation, and reciprocity, which can produce mutually satisfactory but not necessarily mutually advantageous outcomes (Hargrave & Van de Ven, 2017: 331).

3. Research Framework

As described in the introductory part, I am especially interested in understanding what role global integration has played in managing contradictory demands and possible trade-offs between global integration and local adaptation, between efficiency and innovativeness, and between company internal and external focus. In order to do this, my research investigates why and how the case company has developed and implemented the systems and processes necessary for global operations. As stated earlier, there are two main research questions in this study. The first question is: How was the "company way" construed in the case company? This research question is approached by identifying the key elements that the "company way", the global operating model, of the case company consists of. The second question is: How has the "company way" helped management to deal with the tensions arising from contradictory demands? This research question is approached by identifying the main contradictions and the choices that the case company management has made in managing them.

By building on the international business literature, organizational capabilities literature, and contradiction management literature, I have defined a research framework for this study. Figure 2 outlines the research framework for this study. The research framework is illustrated in a matrix format, combining the different aspects of global integration with the different contradictions arising from the global integration efforts. This framework builds a structure, a 3x3 matrix, to be used to position and analyze the contradictions and related actions identified in the case study.

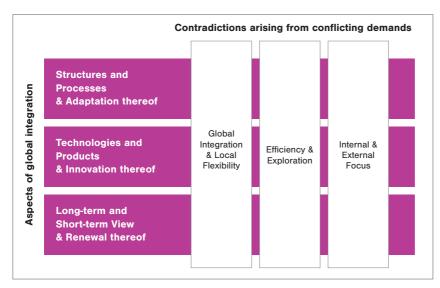


Figure 2. Theoretical framework of this research.

This research framework combines the global integration view on one hand, and the contradictions management view on the other. The horizontal dimensions describe the three aspects of global integration. One way to consider the global integration efforts in the case company is to see the structures and processes developed in order to adapt to the increasingly global business environment and the complexity emerging from the growth and international expansion of the company. The second way to address these efforts is to see how the company has managed the technologies and products and innovation thereof. This includes managing the exploration of new resources while streamlining and standardizing its processes for efficiency. The third way to explore the global integration is to see how the company has been able to manage in the long term and short term, and to renew itself. These three viewpoints on global integration, i.e. the processes and systems needed in a global company, are labelled in this study as adaptation, innovation and renewal (following Hamel, 2009).

The first aspect (structures and processes and adaptation thereof) considers how the case company has defined, developed, and implemented its common way of working and, moreover, how its success has been measured and realized. As illustrated in previous chapter, the key background literature for this part consists of international business, international management, and MNC theories, as well as theories on organizational capabilities.

The second aspect (technologies and products and innovation thereof) concerns the role of the innovation and technology leadership of the case company. As part of my case study, I aim to see how harmonized operating models and process management in general has impacted the innovativeness of the case company. The key underpinning literature here includes research on exploration, exploitation, and process management, as well as innovation management, dynamic capabilities, and organizational ambidexterity.

The third aspect (long term, short term, and renewal thereof) addresses the continuous renewal and survival of companies in the long term. The aim is to describe whether – and how –integration efforts have impacted the continuous renewal of the case company, and whether there have been any trade-offs between achieving short- term results and ensuring success in the long term in the changing business environment. On one hand, process standardization and harmonization have been argued to serve the purpose of efficiency and stability, supporting mainly short-term results (Benner & Tushman, 2003). On the other hand, however, existing research has identified that stability could also be a source for change (Farjoun, 2010; Smith, Erez, Lewis, Jarvenpaa, & Tracey, 2017). As indicated, key underpinning literature includes both dynamic capabilities and organizational ambidexterity theories.

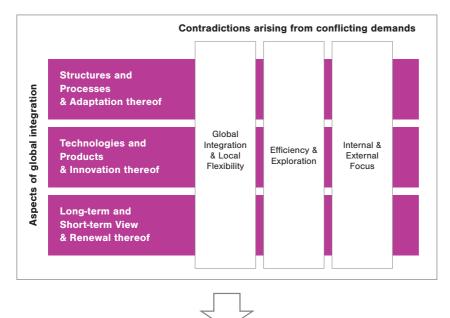
The vertical dimensions of the research framework describe the three contradictions, or strategic tensions, explored in the case study. In fact, multinational companies face various contradictions arising from conflicting demands. Based on the literature review, three contradictions were selected in the research framework. As described earlier, the main interest of my research is to understand the different conflicting demands that the company has faced during its global harmonization programs.

The first contradiction, or strategic tension, is the question of whether it is possible to fulfil the simultaneous demands for having globally integrated systems and structures and, at the same time, fulfil the specific requirements of local business. This is a central dilemma in international business and MNC research.

The second contradiction is related to the question of whether the harmonization of a firm's processes and practices impacts exploration in leading the organization, and whether it is possible to be both innovative and efficient at the same time. The question is: will the process standardization efforts, aimed to improve efficiency and productivity, favor exploitation of existing resources and reduce the explorative activities that are essential for innovation?

Finally, the third contradiction is between a company-internal focus versus an outside focus. Process harmonization and the focus on organizational efficiency have been claimed to result in an increasing focus on companyinternal issues at the cost of a reduced external focus. All in all, these leadership paradoxes are central for sustaining both stability and change to manage the present and to secure the future success. Organization theories have often sustained that stability and change, as well as the processes, practices; and methods supporting them are largely incompatible and mutually exclusive (Farjoun, 2010).

The findings of this study are analyzed by using the research framework as described above to summarize the contradictions related to global integration, and the choices that were made to manage the contradictions. Also, the strategy framework for managing contradictions in organization (Hargrave & Van de Ven, 2017) will be used in conjunction with this framework. Figure 3 illustrates, how these two tools are used to analyze the findings of this research.



Approaches for managing contradictions (based on Hargrave & Van de Ven, 2017)

		Distribution of systemic power	
		Stable, symmetrical	Unstable and/or asymmetrical
Sensemaking approach	Acceptance both/and	Q1 Paradoxical management (synergy)	Q2 Assimilation
	Adversarial	Q3 Mutual adjustment	Q4 Dialectics (mobilization and conflict)

Figure 3. Tools for analyzing research findings.

Hence, the research framework is used to map the findings of the case study. It is used to position the global integration activities (adaptation, innovation, renewal), and the contradictions faced during the global harmonization programs of the case company. The approaches to managing contradiction (Hargrave & Van de Ven, 2017), as described in the previous section (2.3.2) provide an illustrative frame to address the contradictory demands that the case company faced in its harmonization program during the research period. The actions that the case company has taken to manage the contradictions are then categorized and analyzed by using the contradiction management strategy framework proposed by Hargrave and Van de Ven (2017), as described in the literature review (Section 2.3.2).

4.1 Research Approach

The current research is conducted as process research in the form of a qualitative longitudinal single-case study; it produces a historical research narrative of a long-term strategic change of the case company. The case study introduces a description of the research phenomenon in its context: a multinational elevator and escalator company going through a strategic change to become a "truly global company". The research follows the historical research tradition (Üsdiken & Kipping, 2014; Vaara & Lamberg, 2016; Kipping, Wadhwani, & Bucheli, 2014; Gill, Gill, & Roulet, 2018), and the data for the single case study are primarily documentary in nature. The documentary data consist of, most notably, company annual reports, inhouse employee magazines, publications on company history, and company internal presentations and memos.

This methodology chapter discusses the ontological and epistemological foundation of the study, and it introduces the data that were used in the empirical study of this dissertation. It details the philosophical assumptions, research method, data collection techniques, and data analysis approach, as well as the approach toward writing up the results and findings. This chapter also presents the main analytical techniques that were used in the empirical study, and provides justification for its methods.

4.1.1 Ontological and Epistemological Foundation

All research is based on some underlying assumptions guiding the conduct of field research. The key concepts related to this idea in the philosophy of social sciences are ontology, epistemology, methodology, methods, and paradigms (Eriksson & Kovalainen, 2008).

Ontology answers the question "What is there in the world?" and concerns the "ideas about the existence of and relationships between people, society and the world in general" (Eriksson & Kovalainen, 2008: 13). The current research is based on the ontological assumption that an objective reality exists (i.e., scientific realism) and it can be studied, even if perceptions and experiences of that reality may differ across informants, observers, and researchers of that reality.

Epistemology, in turn, answers the question "What is knowledge and what are the sources and limits of knowledge?" (Eriksson & Kovalainen, 2008). Epistemological assumptions define the criteria for knowledge, as well as the role of the researcher in the knowledge creation process. The epistemological view underpinning my research is interpretive. Methodologies, then, are more practical in nature and concerned with the question "How do we come to know about the world?" (Eriksson & Kovalainen, 2008), whereas methods define in detail the methods of data collection and data analysis. The present research follows qualitative and historical research methodologies and methods.

4.1.2 Intensive Single-case Study Based on Historical Qualitative Data

Qualitative research, overall, is a rich field of inquiry and suitable for studying business-related topics, issues, and research questions. Qualitative business research gives researchers an opportunity to focus on the complexity of business-related phenomena in their contexts (Eriksson & Kovalainen, 2008). Qualitative research methods are designed and used to enable researchers to understand people and what they say and do (Myers, 2013). One of the key benefits of qualitative research is that it provides the researcher with the opportunity to see and understand a context within which the decision is made and actions take place. Questions that qualitative researchers typically ask are what, why, how, and when questions, and this is the case also in the current research. Qualitative research is used to study a subject in depth. A major disadvantage of qualitative research is claimed to be that it is often difficult to generalize to a larger population (Myers, 2013). Still, it is possible to generalize from qualitative research to theory (Yin, 2009).

The choice of the research methodology should be made based on the topic, the research question, and the interest and experience of the researcher (Myers, 2013). I have adopted the historical research approach and an intensive, longitudinal case study as research methodology in this study. The case study methodology allows one to approach the research phenomenon holistically and to incorporate the context into the analysis, which is important in historical research. A case study is defined here as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2009: 13). A case study approach is often applied in longitudinal research design, particularly for theory building and development (Eisenhardt, 1989). Case study has also been defined

as a research strategy that "examines, through a variety of data sources, a phenomenon in its naturalistic context, with the purpose of 'confronting' theory with the empirical world" (Piekkari, Welch, & Paavilainen, 2009: 569). In contrast, a longitudinal case study examines the case over a long period of time and investigates processes in context across multiple, interrelated levels of analysis in order to link patterns of events to analytical frameworks (Pettigrew, 1990; 1997).

Business research often starts with finding an interesting and up-todate business-related topic or a practical business problem that is then researched considering theories and theoretical concepts (Eriksson & Kovalainen, 2008). Similarly, international business research is typically about real-world problems (Meyer, 2012). Equally, historical research often starts with a phenomenon, rather than with a theory (Yates, 2014). Many of the classic organization and management studies are case studies, where the research questions are related to understanding the case in depth, and the main purpose is to investigate the case in relation to its historical, economic, technological, social, and cultural context (Eriksson & Kovalainen, 2008). In case studies, the researcher often begins her study with preliminary topics and problems that drive the collection of empirical data, and new questions and interests are likely to emerge during the study. This type of case study research process, which includes an interplay between "what is going on, available theories, the case that gradually evolves, and the analytical framework" is called systematic combining (Dubois, Gadde, & Mattsson, 2003:3).

The aim of intensive case study research is to understand a unique case from the inside by providing a thick, holistic and contextualized description (Eriksson & Kovalainen, 2008). The case is explored in its economic, social, cultural, technological, historical and physical settings in business research, the economic or business context often being the most evident (Eriksson & Kovalainen, 2008). According to Eriksson and Kovalainen (2008), intensive case study research often extends over time, and this is an advantage of case studies in business. The main target of intensive case studies is not to produce knowledge that could be generalized, but rather to explore and understand how the chosen case works as a configurative and ideographic unit of analysis (Eriksson & Kovalainen, 2008). Case studies include several benefits, and they are usually considered more accurate, convincing, diverse and rich when they are based on several sources of empirical data.

4.1.3 Historical Methods in Organization Studies

In this study, I aim to follow the tradition of in-depth historical case studies on the effects of market and technological changes on a firm, and the response of the firm in question. Longitudinal case studies or process studies often analyze historical data. Yates (2014) states that history research starts typically with a phenomenon rather than a theory, and

moreover; Witkowski and Jones (2006) note that history refers more to a subject than a specific method. In the current research, I use a historical approach to guide my empirical research. This approach focuses on past events, especially when describing the events that took place during the time before the actual research period (1994-2016). Historical inquiry is always a perspective on the events that have occurred, and the goal of a historian is to produce an accurate description of the phenomena based on careful evaluation of all the relevant and available material (Golder, 2000).

Historical research has been defined as "a process that examines events or combinations of events to uncover accounts of what happened in the past" (Berg & Lune, 2012: 306). Historical texts are defined so as to include written documents, spoken word, and artefacts that constitute traces of the past (Kipping, Wadhwani, & Bucheli, 2014). There has been a growing interest in historical research in organization studies. Despite this growing interest, little has been written on how this research should be conducted (Kipping, Wadhwani, & Bucheli, 2014). Researchers have even been warned that they "should be cautious in the use of archival data" and "use multiple procedures (triangulation) when working with archival data to reduce possible sources of error" (Berg & Lune, 2012: 296). What is more, it has been claimed that archival research is not a proper method of empirical organizational research because historical data is "merely collected" instead of being created during the research (Rowlinson, 2004).

Kipping, Wadhwani, and Bucheli (2014) propose a methodology designed for the analysis of historical texts, including the critique of each text to determine its validity, triangulation of various sources to reduce bias, and iterative process, in order to situate the text in its historical context and in relation to other texts. The latter has also been called as a hermeneutic circle, meaning interpretation of the texts through their relationship to the contexts in which they are interpreted. Gill, Gill, & Roulet (2018) developed a broad set of techniques for ensuring the trustworthiness of the historical narrative that is generated in a piece of historical research. These techniques will be elaborated later in this chapter (Section 4.5).

A historical narrative is a common way of presenting findings in historical research (Witkowski & Jones, 2006). A historical narrative can provide a chronological account of the events that have occurred. In a historical study, the focus is on the past; historical narratives provide accounts of past events. In an organizational context, historical narratives help understand the sequence of events that connect causes to effects (Pentland, 1999) and make sense and construct meaningful wholes of the events that have occurred, as well as to uncover historical periods and their influences on a broader scale (Savitt, 1980). The goal of a historical narrative is to depict the processes through which a certain outcome occurred. Gaddis (2002) describes that, while historical narratives usually move forward, their preparation moves backwards. Writing a historical narrative usually starts from an outcome and then traces its antecedents. In my research, the understanding and interpretation of a certain period increased the curiosity

to find out what happened earlier, and the preparation of the narrative in my research indeed moved backwards, as Figure 4 illustrates.



Figure 4. Historical narrative development from outcome to its antecedents

In fact, my research started with the global strategy project that the case company launched in 2005, including implementation of a global process architecture. The results, measured by various metrics, show that the change was successful, compared with a similar process harmonization program the company had conducted earlier, starting from 1994.

This led to questions: what happened before, what was different this time, and, especially, what were the reasons for the harmonization programs that the company started in 2005 and the previous one started in 1994. As the time period 1994-2004 proved to be central in the global harmonization of the company, I decided to extend the research period to start from 1994.

By 1994, the company had developed into a loosely integrated mixture of local business units because of international acquisitions. The case company had started to grow through international acquisions in late 1960s. Therefore, I wanted to understand how it had developed to this point, and I looked more closely into the period of international expansion. Thus, I decided to include the international growth period 1968-1994 in the historical narrative in order to understand the history of the company. Finally, I also included the first decades of the case company history in the historical narrative in order to understand the early years of the company and its industry.

4.2 The Choice of Case Company

The case company, Kone, is an elevator and escalator company that operates in a traditional equipment manufacturing industry, in a technology- and knowledge-intensive field. The case company has recently gone through – and is increasingly doing so – business environment and business strategy change as a response to the impacts of globalization and accelerating technology development, and it also has remarkable activities ongoing in capability development. The present case study involves an extensive examination of a single case during a period of time. Various scholars have pointed out that one case is sufficient to produce an explanatory account on the research phenomenon and to enable analytical generalization (Tsoukas, 1989; Siggelkow, 2002).

Initially, the selection of the case study was done because Kone is a representative example of a multinational company that the research

questions of this study refer to. Also, I had sufficient access to be able to follow closely the global harmonization development in the case company from 2005 when I joined the company first as a consultant supporting a major change program. The focal project, the Kone Way program, was initiated in 2005 to implement the new strategy and global business process architecture at Kone. Later, I continued as an employee with various global information technology and process development and implementation responsibilities based in Europe and in China. The nature of the research phenomenon, the emphasis on context, and the research problem and questions justified the selection of a single-case study. The elevator and escalator industry has been defined as being moderately dynamic (based on Eisenhardt & Martin, 2000) with relatively stable industry structures and clear market boundaries, where changes are frequent yet typically predictable. However, towards the end of the research period, the accelerating technological development and digital disruption started to also impact traditional industries, and, what is more, to blur industry boundaries.

As I will describe later, the unit of analysis in my research is the change process to implement the "company way". The level of analysis is a multinational company in its entirety, as opposed to a certain business unit of such a company, a certain country subsidiary of such a company, or a company operating in a single country. The change process was first analyzed at the level of the "company way" in order to understand and describe what it was and why and how it was implemented. The "company way" was addressed as a process to develop and implement the capabilities, both operational and dynamic, needed for global operations. The analysis was subsequently narrowed to the dynamic capabilities with the target to find out if and how the harmonization has enabled stability and change.

The case company has received an extensive amount of public and press attention and many public documents were available for this research. Among others, the publicly available material included in-depth books on the company historical analysis (Alahuhta, 2015; Michelsen, 2013; Simon, 2009).

4.3 Data Collection

As mentioned earlier (in Section 4.2), the unit of analysis is the change process to implement the "company way". Hence, the unit of analysis is an event (Collis & Hussey, 2003). As also explicated earlier, the level of the analysis in my research is a multinational company. I have relied on the model of a qualitative research project defined by Myers (2013), as Table 5 elaborates.

Research project step (adapted from Myers, 2013)	Decision and choices made in my research
5 Written record	Research report
4 Data analysis approach	Analysis of historical documents, interpretive historical tradition (Vaara & Lamberg, 2016)
3 Data collection technique	Historical documents, observation
2 Research method	This study follows qualitative and historical research methodologies and methods, using a historical single-case study research as strategy of enquiry.
1 Philosophical assumption	Subjective/constructive (ontological assumption; Interpretive (epistemological assumption)

Table 5.	Qualitative	research	project	model.
----------	-------------	----------	---------	--------

The beginning of the case time, the period under analysis, was set at a major shift in firm strategy involving changes in its capabilities: 1994, when Kone introduced a change program to develop systems and processes to support its development to a global company. The end of the case time was 2016. The research time is the period during which the data are gathered, and it included a period of three and a half years from 2014 until May 2018. However, the research partly relies on the personal observations and experiences of the change process in question starting from May 2005. Overall, the research perspective is *ex post*, though, in mainly consisting of retrospective data.

The focal period of interest is 2005 to 2016. This is because Kone launched its latest global business process model and its new strategy in 2005, and this year has been described as a turning point in the history of the company. However, the case time starts earlier than that, in the mid-1990s, when the case company started to develop and implement its global processes and IT solutions. Moreover, the historical narrative also covers the earlier history of the company, to provide information about the historical context of the case company and the actual case study period.

My study starts with a 'bottom-up' approach: I started my research by collecting preliminary empirical data based on historical records about my research topic (business process architecture in a global company). Based on the data, I identified the relevant theoretical discussions and existing research literature (business processes, organizational capabilities, organizational ambidexterity, resource exploration and exploitation, dynamic capabilities, organizational paradoxes) that pertain to the topic and looked for a possible research gap. I confronted the existing theory with an empirical case. With this historical case study, I aimed to understand what role the global business process architecture has played in the efficiency and growth and renewal of the company, and what flexibility/efficiency tradeoffs there may have been.

The first step of my data gathering was to develop a collection of publicly accessible sources of evidence. Data collection was conducted over a period of three and a half years. Data collection was done in the following stages. The first part of data collection was carried out to understand the context and global business environment. This included investigating the history

of the evolution of the case company, especially its internationalization development.

This research also required investigating the industry in question and how it has developed and changed during the case time, as well as exploring the competition. It was also necessary to build an understanding of the megatrends that had a key role in the development of the company and its industry, especially the industrial revolutions and the technological development, urbanization, and the development of globalization in general.

The latter phases of the research were theory driven and focused on understanding the capability development that the company undertook in order to become a global company. Studies on multinational companies are resource demanding and complex, because they are said to require multiplelevel analysis across various units (Lervik, 2011). Therefore, I focused my research on observing the headquarters and China as the specific market context. China was chosen because of its phenomenal impact on the global market and the growth of the case company during the research period. Data collection for this part was based on articles in newspapers and magazines, company intranet and internet sites, employee magazines, annual reports, company presentations, such as presentations given to investors, strategy presentations, as well as books and research reports written on the company. I also utilized my own practical experience in the company directly, as well as using it to search and evaluate the data for my research. The stages of data collection in this research is described in Table 6.

Table 6. Data collection stages of the research.

Data collection stage	Motivation	Data sources
0 (prior to actual research) Observation/participation starting from May 2005	May 2005 - May 2006 as an external consultant supporting setting up the "company way" program March 2007 - June 2011 as a member of Global Development team building global IT solutions for the global service business and supply chain processes September 2011 - August 2014, international assignment in Shanghai, China in an active role in implementing the "company way" in the local business unit in China "Why global harmonization is needed*"	Strategy presentations to senior management and employees, company intranet and employee magazines, newspaper and magazine articles and interviews, press releases, own experience in working developing, implementing, and supporting business processes and related IT tools
1 Research planning January 2014 – December 2014	Formulate the research topic: understand the internationalization history of the case company "What was the internationalization process of the company? What did the evolving globalization require from the company?"	Books on the case company (Michelsen, 2013; Simon, 2009; Herlin, 1960); special history issues of company inhouse magazines

2 Data collection January 2015 – December 2015	Understand development and deployment process of the new "company way" (primary research period 2005-2014) "What does the "company way" consist of? How was the harmonization done? What challenges did management face during implementation?"	Strategy presentations and communication material, annual investor event presentations, employee magazines, research and case studies on the company
3 Historical narrative June 2017 – August 2018	Understand the global development programs during the company history (secondary research period 1994- 2004) "Why this harmonization program was more successful than the earlier programs?"	Strategy presentations and communication material, annual investor event presentations, employee magazines, research and case studies on the company
4 Data analysis September 2018 – March 2019	Understand the findings against the research framework "Are the drivers for global harmonization still valid? How does the harmonization support future success? What could be the next phase?"	Historical narrative, reference literature

The main research period covers the time from 1994 to 2016, as described above. Still, this research also addresses the time prior to the main research period, so as to understand the evolution of the company, and to describe the internationalization history of the company, together with the various earlier process harmonization efforts undertaken in order to build the capabilities necessary to operate in international markets. The data collection for this part was done solely based on historical data captured from the case company archives and public sources. These include for example business histories, employee magazines, annual reports and investor event presentations, as is detailed in Section 4.3.1.

4.3.1 Historical Documents

Historical research uses various historical documents that have been created to serve different purposes. Historical documents may have been intended to aid the memory of the persons involved, to create an impression, to share information with many people or to produce information (Myers, 2013:153). This needs to be considered when evaluating the trustworthiness of historical research and its data. The criteria and techniques to ensure this are addressed further in this methodology chapter.

In the following, I will describe the different types of documents that I have used in my research. Table 7 summarizes the types of historical documents that were used in this research. Document details are documented in Appendix 1. Most of the documents can be categorized as private or public. Private documents include the documents that are produced by private organizations for internal purposes, such as minutes of meetings, personnel records, budgets, and memos, whereas public documents include documents that are produced for public purposes, such as annual reports, media statements or articles in newspapers (Payne & Payne, 2004; Myers, 2013).

Based on categorization of documents as private or public, employee magazines are categorized as private as they are produced by private organizations for internal purposes. However, the case company usually sent the employee magazines to the home address of all employees, and the in-house magazines were thereby publicly available for the family members and other people to read.

Document category (public/private)	Types of historical documents used in this research	
private	Employee magazines	
public	Annual reports; Sustainability reports; Annual investor event presentations and recordings (webcasts)	
public	Articles in newspapers and magazines	
public	Books on the case company and its history	
public	Doctoral dissertations conducted on the case company Academic articles on the case company Case studies on the case company	
public	Customer magazines Company website	
public	Document films and radio programs on the case company	
public	Industry analysis reports	
private	Strategy presentations Meeting presentations and memos	

Table 7. Historical documents used in this research (see Appendix 1 for details).

This dissertation uses company publications that have been targeted for internal and external audience and therefore need to be used carefully, critically, and objectively. Historical documents that are used as source material data are detailed in Appendix 1 in this dissertation. They are referred to in footnotes. My aim is, according to the historical research paradigm, to provide details which are as accurate as possible about the historical documents I refer to. For example, in the case of footnoting a story published in an employee magazine, the footnote specifies the heading of the story, the name, and the year and issue of the magazine, as well as the page numbers of the story.

4.3.2 Historical Narrative as Starting Point

Historical narratives provide us accounts of past events, hence a narrative is also a common way of presenting findings in historical research (Witkowski & Jones, 2006). My intention is to produce a narration of events in a time sequence that can act as grounding for further analysis, especially the event structure analysis needed to answer the research questions of this dissertation (Heise, 1989). Understanding historical events, processes and their relations enables the researcher to decide which events are central in building an explanation and which are peripheral.

The historical narrative focuses on the key events defining the harmonization story of the company, and therefore is not a complete narration of the corporate history. I have used temporal bracketing strategy to structure the description of events and structure the process analysis and sensemaking (Langley, 1999). Process data collected in real organizational contexts may be difficult to analyse and researchers use different strategies to overcome the complexity observed in process data (Langley, 1999). Table 8 outlines the periodization of the historical narrative (1910-2016) as well as of the analytical chronology (actual research period 1994-2016) in this research.

Name	Periodization: Historical narrative	Periodization: Analytical chronology	Prior to research period	Research period of this study
Early decades	1910-1967		x	
International development	1968-1993		x	
Globalization	1994-2004	1994-2004		x
Global integration	2005-2016	2005-2007 2008-2010 2011-2013 2014-2016		x

Table 8. The periodization of the historical narrative.

The first part describes the first decades of the history of the case company starting from 1910, when the company was started, until late 1960s, during which time the company operated in the home country developing its capabilities in order to establish itself as a reliable elevator company. The second part describes the time period starting from late 1960s until early 1990s, during which time the company internationalized and became "an empire" of loosely integrated companies that was becoming difficult to manage. The third part of the historical narrative describes the time period from the early 1990s to 2004. This was the time when the company started to develop systems and processes needed in a global company.

The fourth and final part of the historical narrative describes the key events of the actual research period of my research. It starts from 2005, when the case company launched a new strategy and started a program to harmonize its global "company way" of working, and it summarizes the key events during the sequencing strategy periods until the end of 2016.

4.4 Data Analysis

A case study approach is often applied in longitudinal research design (Eisenhardt, 1989). Following Yin (2003), this study defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context. This is especially useful, "when the boundaries

between phenomenon and context are not clearly evident" (Yin, 2003: 13). In this study, a specific type of case study approach, the historical case study, was selected as a research method and the main analytical technique. An illustrative example of using a historical case study to research the development of organizational capabilities over time is Danneels' study on dynamic capabilities at Smith Corona (2011).

The present study employs a realist historical approach, and its aim is to represent past events and processes as accurately as possible (Vaara & Lamberg, 2016) following the realist ontological and epistemological foundations of this research. This depends on the methods used and the quality and richness of the data.

The main analytical technique in this study is the historical case study. The case study comprises of a single organization and its global harmonization program during a period of time. The case is analyzed on organizationlevel. The historical data constitutes the main evidence of the past events and processes and, what is more, data also consists of observations. Data consolidation is done by building an organization-level (level of analysis) historical narrative that illustrated central events in the case company. To support the data analysis, a more detailed analytical chronology is created, detailing and analyzing the key events and processes related to the global integration program (unit of analysis). The analytical chronology, together with the research framework developed for the purpose of this research (see Chapter 3) is then used to identify the key elements of global integration, in other words, what the global "company way" of working consists of, and what contradictions global integration implementation has encountered. Finally, the process model of managing contradictions in organizations (Hargrave & Van de Ven, 2017) is used to conduct an analysis of the contradictions and strategies that were used to manage the tensions as explicated earlier in the theoretical approach and research framework (Chapter 3).

The following figure (Figure 5) provides an example of how the research data collected from various sources was documented and analyzed in this research. After reading the historical documents, I recorded the key events that were related to the global integration development in a table (column: Data). I also added notes for the case study (column: Notes for case study) and notes related to the connection with relevant theories (column: Theory notes).

Data collection	Data collection sheet: News & Views, inhouse magazine, year 1997 issue 2			
Story headline	Data	Notes for case study	Theory notes	
Groundbreaking ceremony for Kunshan Factory, pp. 2-9	 "The Kunshan factory is expected to open by the summer of 1998". "Chinese officials attending the ceremony stressed how happy they are that Kone is bringing the elevator and escalator industry's latest technology to China." "Great accomplishments are expected (in China) because of Kone's technological leadership". "We will offer Best-in- Town field operations and service to all customers". 	 After a slow start in China, the case company proceeded fast in building the new factory. Kone entered China with the latest technology, enabled by new product innovations made in 1996. An interesting notion on the brand and slogan of the company. While developing international operations the slogan was still "best-in- town" referring to local excellence. 	IB theories (IR, OLI); Institutional theory (Powell & DiMaggio, 2012; Rosenzweig & Singh, 1991); Liability of foreignness (Zaheer, 1995; Johanson & Vahlne, 2009)	
Zeus Project Targets Harmonization, pp. 26-28	 "Kone faces an enormous challenge to harmonize the jumble of information technology, factories and field operations we inherited." Many of the systems are functionally incompatible. Global customers and vendors are driving us to harmonize our operations. Kone has thus embarked on the most ambitious project in our history to upgrade and standardize IT "Kone Model" is a harmonized way of doing things in Kone. Developing the customized SAP R/3 modules to accept data from old systems is proving to be expensive. 	 Aggressive acquisition strategy led to a situation, where the company was difficult to manage and operate. Information flow did not work due unharmonized systems, this impacted efficiency A major harmonization program was started, to translate strategy into business architecture. Harmonization effort and necessary investments were probably underestimated. 	 All in all, increased distance and complexity required companies to renew their business models and controls systems, and the development of information technology solutions enabled this development (See e.g. Davenport, 1998; Brynjolfsson & Hitt, 2004). 	

Figure 5. Example of data documentation and analysis.

Despite the growing interest in incorporating historical research in organization studies, little attention has been devoted to how this research should be conducted (Kipping, Wadhwani, & Bucheli, 2014). In fact, Kipping and colleagues (2014) argue that historians tend not to explicitly discuss their methods for others to follow. Historical sources are argued to be fragments or traces of evidence from the past rather than a set of systematic observations made by the researcher, as it may be unknown why that evidence was initially collected or why it was stored (Lipartito, 2014).

Kipping, Wadhwani and Bucheli (2014) propose a methodology designed for the analysis of historical texts, covering a wide range of written documents, drawing on both the historiographical tradition and qualitative methods in organization studies. The methodology includes the critique of each text to determine its external as well as internal validity, a triangulation of various sources, and hermeneutics, an iterative process that situates texts within their historical contexts (Kipping, Wadhwani, & Bucheli, 2014).

As described above, the empirical examination of the historical case begins from writing and analyzing a historical narrative. In fact, a historical narrative is not only necessary for the sense-making, but also a process to construct knowledge about past events and their impacts (Czarniawska, 2004).

4.5 The Trustworthiness of the Study

The criteria established to evaluate the trustworthiness of organization studies include credibility, confirmability, dependability and transferability (Guba, 1981; Lincoln & Guba, 1985; 2013). Trustworthiness equates to "an inquirer making their research practices visible, and therefore auditable, enabling others to gain a richer insight into how their findings were produced" (Gill, Gill, & Roulet, 2018: 194). Specific criteria and associated techniques have been developed to support organization history research based on guidance on how to generate more transparent historical narratives that allow other scholars to build trust and understanding (Gill, Gill, & Roulet, 2018). In the following, I will describe the underlying principles and techniques that I will use in my research to generate a more transparent historical narrative and thereby allow the readers to decide whether it is credible. Table 9 summarizes the techniques that I have used for enhancing the trustworthiness of the historical narrative in this research (based on the Gill, Gill, & Roulet, 2018:195).

Criteria	Proposed techniques (based on Gill et al., 2018: 195)	How applied in this research
Credibility	Engage with content and context of sources	Extensive reading of company history, internal memos and presentations, in- house magazines, external newspaper articles, and academic research on the case company
Confirmability	Active citation and footnoting	Citation and footnoting include internal sources, archiving historical documents
Dependability	Triangulation of sources and methods	Triangulation of historical data from case company archives with published documents; Own observations as an external consultant (5/2005-6/2006) and as an employee (since 9/2006-)
Transferability	Purposive and theoretical sampling; Data and source archiving	All research data is catalogued and archived and thereby made accessible after the research

Table 9. Techniques for enhancing trustworthiness.

The first criterion of trustworthiness is credibility. Gill, Gill, and Roulet (2018) suggest engaging with the content and context of sources. They build on the original idea of Lincoln and Guba (1985) of prolonged engagement and persistent observation, where a researcher engages with their study's participants or site of the study for extended periods that provides an opportunity to "identify debates, discontinuities or distortions that may not be apparent initially" (Gill, Gill, & Roulet, 2018: 196). Gill and colleagues (2018) suggest that by reading more about particular historical events and by engaging with the meanings and assumptions of a range of sources, it is possible to achieve a more nuanced and richer interpretation of historical evidence. This requires source criticism in producing credible interpretations of historical sources (Bucheli & Wadhwani, 2014). Gill and colleagues (2018) also suggest that the researcher use peer debriefing, to discuss interpretations with expert historians. In the current research, I have conducted extensive reading of company history, internal memos and presentations, in-house magazines, external newspaper articles, and existing research on the case company in order to engage deeply with both the content and context of sources. Additionally, I have reviewed the history and evolution of international business (IB) research.

The second criterion, confirmability, refers to revealing underlying assumptions (Gill, Gill, & Roulet, 2018). Four alternative research strategies can be identified for organizational history: corporate history, consisting of a holistic, objectivist narrative of a corporate entity; analytically structured history, narrating theoretically conceptualized structures and events; serial history, using replicable techniques to analyze repeatable facts; and ethnographic history, reading documentary sources "against the grain" to recover practices and meanings from organizations (Rowlinson, Hassard, & Decker, 2014). Also, the researcher is encouraged to ensure that interpretations are grounded in evidence, to be able to provide a trial of the materials used in constructing findings (Gill, Gill, & Roulet, 2018). Gill and colleagues (2018) suggest the technique of active citation and footnoting to help in providing the trail of evidence. The aim is to provide enough information to illuminate the process of interpretation. In my research, I have used thorough citation and footnoting, including internal sources.

Dependability is the third criterion, meaning that interpretations are dependable. Gill, Gill, & Roulet (2018) suggest that narrative historians could consider how they conduct their research by adopting different approaches to research and triangulate with different sources and methods (Lincoln & Guba, 1985) and allowing others to comment on the process of research. Triangulation in data collection and analysis means that findings generated with certain materials and methods are crosschecked with another. Triangulation means using more than one research method or more than one technique to gather data. Triangulation enables the researcher to look at the same topic from different angles and gain a fuller picture of the research subject (Myers, 2013). In the current case study, I triangulate the historical data from the case company archives with data from published

documents and with my observations first as a consultant and then as an employee in various job roles as explicated earlier.

Finally, transferability as a criterion of trustworthiness, refers to the generalization of research results. Gill, Gill, and Roulet (2018) suggest that the researcher should build a richly contextualized account of the case under study based on appropriate sampling. Also, archiving and making research data available for others facilitates the comparison of contexts and conclusions. As part of the data collection and analysis in this research. I have catalogued and archived all research data and thereby made it available for later use.

5. Case Study: Historical Narrative

One hundred years of in a firm's history holds a lot in it. During this time, Kone has renewed itself several times. Kone has evolved from a tiny metal workshop into one of the leading global firms in the elevator and escalator industry. It has built the high technological competence needed in its industry. It has grown geographically and scaled its operations globally. It has transferred from a product company to a service company. It has also converted a cluster of relatively independent companies in various countries into a global enterprise.

The purpose of this historical narrative is to give an overview of key events that are central in the internationalization and globalization journey of the company and relevant for understanding the global integration development of the company.

First, I will briefly summarize the first decades in the history of the company. This will cover the time from 1910 to the late 1960s, which is the period when the company operated nationally, having its business in Finland, with some export activities. Second, I will summarize the key events during the internationalization decades, from year 1968 to the mid-1990s, during which time the company grew internationally, first, mainly in Europe, and, later, shifting its focus to the Americas and Asia. Third, I will summarize the key events from the mid-1990s to 2004, paving the way for the new millennium and operations in an increasingly globalizing business environment. Fourth, I will summarize the period starting from 2005 until 2016, which is the focal period in my research.

Early History (1910 - late 1960s)

The success of elevator industry relies on innovations such as electricity and new technologies for designing and building tall buildings. The first safe passenger elevator was installed by OTIS in 1857 in a department store in Broadway in New York, and elevator history was made in 1889 when the 321-meter-high Eiffel Tower was built for the Universal Exposition in Paris, France. The modern elevator industry started in line with the urbanization in early 1900s.² In fact, elevators have been built throughout history, however, the evolution of the modern elevators is based on two major inventions. The first breakthrough was the invention of the safety gear by Elisha Otis in 1852, which prevented an elevator from falling. The second was Wilhelm Siemens' application of electric motors for powering elevators in 1880. These innovations made it possible to transport people safely and economically by elevator, and they also gave the Americans and Germans a good position in the emerging market.³

The elevator industry had started to bloom in the late 1800s when cities started to grow remarkably, and Finland's first electric elevator was installed in 1891 in Helsinki, the capital city of Finland. When Kone started to install elevators in early 1910, not many people in Finland had ever seen an elevator or used one.⁴

It was a common practice in countries with small domestic markets to produce elevators under license. Strömberg, a Finnish electric motor manufacture, was a licensee of Swedish firm Graham Brothers, which in turn was a licensee of Otis in the US. The history of Kone started when Strömberg transformed its motor repair workshop to a subsidiary called Kone in 1910, and transferred its elevator department and its Graham Brothers license to this subsidiary. In 1918, the licensing agreement was ended, and the first Kone elevator was installed.⁵ Competitors set high standards in the market, and, thereby, pushed Kone to improve its quality and drive up prices. Kone succeeded with building the technical competence needed for the industry, and a technological focus was a key part of Kone leadership during the first decades of its history.⁶

Year 1924 marked the start of the history of the family ownership of Kone. Harald Herlin bought Kone from Strömberg and, since then, the active role of the family has continued through four successive generations.⁷ A strong family ownership culture is characteristic for Kone. In fact, the most common type of company in the elevator industry has been the family-owned company. Family business values support elevator industry values such as reliability, dependability and security, as well as persistence, patience and precision, which are typical virtues in the working culture of elevator companies in general.⁸

² See Herlin, K., 1960; Siikonen, 1997.

³ Elevator industry history was reflected in News & Views, special history issue 2004/4, Kone archives.

⁴ News & Views, special history issue 2004/4, Kone archives.

⁵ Kone's history 1910-1960 was written by Kirsti Herlin, 1960.

⁶ Michelsen, 2013.

⁷ News & Views, special issue on Kone history, 2004/4, Kone archives. See also Tiedeykkönen radio program: Kone's 100-years history, YLE 2015.

⁸ The connection between family business and the elevator industry is described in Michelsen, 2013: 575.

In 1928, Kone established its reputation as an elevator company when it received two high-profile orders in Helsinki. It was chosen to deliver elevators for the Stockmann department store in Helsinki and the Finnish Parliament building, and, with this, it established a brand as an elevator provider for public buildings⁹. In the 1930s, new national elevator safety regulations were introduced, and this provided Kone with an opportunity to develop its service business and start benefiting from the business potential of preventive maintenance.¹⁰ Harald Herlin's son, Heikki Herlin, became Kone's managing director in 1932. In 1933, Kone started to manufacture electric motors and by making all key components in-house, the company could control the quality of the elevators it sold.¹¹. In the 1930s, the construction business, and consequently the elevator business, was low, and Kone diversified to other products such as cranes and electronic hoists.¹²

Kone's history was impacted by war when Finland fought in the Winter War (1939-1940) and in the Continuation War (1941-1945). Kone contributed to the war reparations program by delivering freight elevators, cranes and electric hoists to Soviet Union.¹³ Thereby Kone broke out of domestic markets already in the 1950s, when it started selling elevators and cranes to Soviet Union. Kone needed to develop its competences and capabilities in order to deliver more demanding products than it had produced earlier, and the know-how and productivity of its employees grew, as they needed to stretch to meet the volume and quality demands that were new to Kone. At the same time, the company also developed the capability needed for doing business with the Soviet Union and this was instrumental for the growth and development of Kone in 1950s.¹⁴ The rebuilding and modernization of Finland set the demand for improved vertical transportation and Kone could meet these requirements with innovations such as elevators.

International Development (late 1960s - early 1990s)

Kone started to grow internationally in the 1960s. The third generation took the lead of the company in 1964, when Pekka Herlin replaced his father as president of Kone. In 1967, Kone opened a new elevator factory in Hyvinkää in Finland and its factory capacity was three times the size of the entire Finnish elevator market. Kone's dominant position in the Finnish market made it an attractive target for takeover in the increasingly consolidating elevator industry, which was a threat to Kone.¹⁵ In 1968,

- 12 Herlin, K., 1960; Michelsen, 2013.
- 13 Herlin, K., 1960; Michelsen, 2013.
- 14 Michelsen, 2013.
- 15 Simon, 2009.

⁹ Michelsen, 2013.

¹⁰ Michelsen, 2013.

¹¹ Michelsen, 2013.

Kone acquired Sweden's Asea-Graham and its Norwegian and Danish subsidiaries. The acquired business was the market leader in Scandinavia and bigger than Kone itself.¹⁶ To finance the acquisition, Kone listed its stock on the Helsinki Stock Exchange in 1967.¹⁷ During the coming years, Kone continued to grow through international acquisitions. New foreign units set new requirements for transferring information between units and managing the increasingly complex organization.

In 1974, Kone acquired Westinghouse's European elevator business which, once more, was bigger than Kone's entire international operations at the time. This acquisition supported competence development in the company and, with this acquisition, Kone also gained the high-rise expertise it lacked.¹⁸ Kone had evolved into a major international player and become a competitor of leading companies in the industry: Otis, Schindler, and Thyssen.

International expansion continued, and Kone also expanded its operations to new industries. By the mid-1980s, it had developed into a diversified company, thus providing synergies between different industries, and helping to survive in the inherent fluctuations of construction business cycles.¹⁹ In 1986, Kone adopted a new matrix structure with geographical business area units. With the regional approach of the matrix structure, Kone's top management aimed at achieving the dual objective of 'thinking globally, acting locally' with the purpose of enhancing the dual focus of global standardization and local adaptation.²⁰

At the end of the 1980s, Kone was ill-prepared for the difficulties in the early 1990s when its key markets were facing depression. Growth potential existed in Asia and the Americas, but Kone was poorly represented in these growth markets. The gap between Kone and its main competitors was large. At the same time, globalization started to evolve. The European Union was moving towards a single, borderless marketplace, and Kone's complexity, due to its structure, product diversity, and various inherited business processes, made it poorly prepared for the change. There was a need to start integrating the company into a cohesive, multinational organization, and to improve its efficiency.²¹

In the early 1990s, Kone faced the challenge of managing the empire of highly independent daughter companies that it had developed into as a result of its acquisition-based growth strategy. Since 1992 the company had made remarkable investments in global harmonization programs including the implementation of company-wide ERP software. The target was to create

¹⁶ Simon, 2009.

¹⁷ Michelsen, 2013.

¹⁸ Michelsen, 2013.

¹⁹ News & Views, special history issue, 2004/4, Kone archives.

²⁰ Kone's strategy systems during this time are described in a case study by Marschan, 1996.

²¹ News & Views, special history issue, 1998/1, Kone archives.

'a harmonized way of doing things in Kone'. The new global business process model, Kone Model, defined the processes of new elevator business, service business, financial operations, and human resources management.²² The implementation of the model turned out to be a huge challenge and the harmonization efforts partially failed to meet expectations, as the progress of harmonization was slow and costs were higher than expected.²³ The implementation speed of the global operating model was also impacted by the lack of standardized products.²⁴ Prior to the global harmonization effort, process development activities at Kone had been mainly targeted to a specific function, such as financial controlling and planning in the 1970s,²⁵ or logistics process in Europe in the early 1990s.²⁶

Material handling products, such as cranes, had been an important addition to Kone during the recession in the construction industry, but in the early 1990s Kone started to shift its focus back to elevators and escalators, and divested all other businesses. Work to turn Kone into an efficient and harmonized organization started.²⁷ This included streamlining of production, simplification of product ranges, as well as development and implementation of service methods, best practices, and pre-engineered modernization packages. Local companies had had a lot of local autonomy, and this was to be replaced by corporate-level consistency. Kone introduced a process framework to support process harmonization, and a plan to standardize its information technology around an ERP integrated software solution. The purpose of this "Kone Model" was to define a new 'Kone Way of doing things' across the company worldwide.²⁸

Global Development Path (mid-1990s - 2004)

In the 1990s, globalization started to shape up and the hindrances of moving capital and products started to reduce. Markets that had been closed earlier started to open providing companies opportunities for global business operations, and the elevator industry was impacted by this change. The new economy provided opportunities but also set totally new requirements for companies operating in the global market place and wanting to survive in the changing business environment. Kone's management realized that the diversified company had become difficult to manage with a large variety of products and technology platforms. Subsidiaries used different languages

^{22 &}quot;Ready to roll", News & Views, 1997/3: 6-7, Kone archives.

²³ Michelsen, 2013; Kone's process harmonization challenges are described also by Perttula,1998.

²⁴ Michelsen, 2013.

²⁵ Simon, 2009; Kone's financial reporting process is also described in a case study by Stenberg, 1992.

 $^{26 \}quad {\rm Kone's}\ {\rm logistics}\ {\rm process}\ {\rm development}\ {\rm is}\ {\rm described}\ {\rm in}\ {\rm Hurskainen}, 1992\ {\rm and}\ {\rm Perttula}, 1998.$

²⁷ Michelsen, 2013; News & Views, special history issue, 2004/4, Kone archives.

^{28 &}quot;Harmonization", News & Views, 1998/1, Kone archives.

and different currencies, and the industry was regulated by diverse national laws and regulations.

In 1994, Kone acquired the Montgomery Elevator Company in the U.S.A. This broke its Europe-centric position and made Kone an important player in the North American market. In the mid-1990s, political reforms opened the Chinese and Indian markets to Western companies and growth expectations focused on Asia. Kone's installation and service company was already present in China, and the company also started to look for suitable partners to start production in China. However, according to the annual report, the company was not in a hurry to make decisions and evaluated China market to be 'strange and unfamiliar'.²⁹

In the 1994 annual report, Kone mentions that the corporation sought a completely new business model, including reducing the number of existing product families, concentrating manufacturing into fewer units, and improving installation productivity through the implementation of consistent installation methods.³⁰

These changes required different processes and tools than before, and in 1994 Kone started to harmonize its business processes and to integrate its worldwide information technology systems for the first time in a large scale. Kone started a concerted effort to turn the collection of acquired companies into an efficient global organization. It launched a large investment program aimed at creating a harmonized 'Kone Model for doing business' with the plan to roll-out a global enterprise resource planning (ERP) solution. Kone 'got into high gear with the implementation of SAP R/3 and Kone Model'.³¹

The core development projects included the quality improvement process, business process information technology, and the harmonization of business processes. The focus was on ISO 9000 certification, which was seen to provide a solid basis for process development.³² In 1995, Kone began a reorganization program of its production and supply systems, and the target was to produce pan-European products, to utilize economies of scale with increasing volumes, and to harmonize processes.

Harmonization progressed slowly, and by 1996, when Antti Herlin became the Chief Executive Officer (CEO) of Kone, Kone had developed into an international empire of decentralized, relatively independent local companies where 'local decision making was supported by global'.³³ In 1996, Kone started to work to get the company 'on the right track to profitability,

²⁹ Kone Annual Report, 1994.

³⁰ Kone Annual Report, 1994.

^{31 &}quot;Globalization and speed", News & Views, 1999/3: 4-6, Kone archives.

³² ISO 9000 is a set of international standards on quality management and quality assurance developed to help companies effectively document quality system elements to be implemented in order to maintain an efficient quality system. It lays out the fundamentals of quality management systems (QMS).

³³ Simon, 2009; "Local expertise, global support", News & Views, 1998/1: 21, Kone archives.

growth and continued technological leadership in 21st century.³⁴ Top management emphasized the criticality of these actions and expressed the urgency to improve profitability by a strong call to 'stop the bleeding'.³⁵

Year 1996 was remarkable when it comes to product innovation. Kone launched a new product, KONE MonoSpace[®], which created a foundation for more global products. This radical innovation changed the elevator industry for good. The new elevator type that did not require a machineroom introduced a new standard in the elevator industry and gave Kone a considerable lead over its competitors. This innovation also paved the way for global standard elevator products. This innovation strongly impacted the elevator industry and the way buildings were designed for elevators. Kone also became the leading escalator company worldwide after acquiring the outstanding shares of O&K Escalators in Germany in 1996.

The growth of new equipment business was increasingly shifting to emerging markets in Asia. In 1996, as much as half of the world's elevator and escalator business was in Asia, and Kone emphasized the importance of strengthening its presence "by all possible means in this important market".³⁶ A significant step in this direction was the investment in an elevator and escalator factory in China. At the same time Kone continued the reorganization of the production and supply systems in Europe.

The new factory in Kunshan, China was opened in 1998. Afterwards the in-house magazine stated that 'after a slow start in China, Kone needed to paddle hard to catch up the competitors'.³⁷ Within a decade, Kone had shifted from the diversity of product and business sectors to greater geographical coverage and critical mass in the elevator and escalator business.

In 1999, Kone was moving on with the 'rapid deployment of a recovery plan that will lead into a longer-range globalization plan'.³⁸ Kone continuously described itself as a "confederation of decentralized profit centers" that it had developed into because of growth through acquisitions, and the company set a target to become 'one Kone'. The process and IT harmonization work that had been started a few years earlier had not delivered the expected results. For Kone globalization would mean 'thinking, talking and acting like one fully-integrated company, one Kone'.³⁹ The harmonization of central business processes was the most significant development project and the company was implementing the standardization of systems, processes, tools and business practices throughout the organization.⁴⁰

^{34 &}quot;Harmonization", News & Views, 1998/1: 25, Kone archives.

^{35 &}quot;Ten key actions", News & Views 1997/4: 4-7, Kone archives.

³⁶ Kone Annual Report, 1996.

^{37 &}quot;Kunshan factory grand opening, time for celebration", News & Views, 1998/4: 4-9, Kone archives.

^{38 &}quot;Kone didn't wait for the millennium", News & Views, 1999/3: 2-3, Kone archives.

^{39 &}quot;Kone didn't wait for the millennium", News & Views, 1999/3: 2-3, Kone archives.

⁴⁰ Kone Annual Report, 1999.

In 1999, Kone introduced a notion of a global brand, while until that, many of the acquired companies had continued operating with their old names and the slogan 'Best in town'.⁴¹ Kone companies all over the world were to share a single name and a consistent identity. The new company slogan was 'The heart of your building'.⁴² In 1999, Kone introduced its first worldwide product, the Global Standard Escalator, which was developed by using the best practices gathered from O&K, Kone and Toshiba.⁴³ Kone carried out a fundamental reorganization of its new elevator and escalator production and delivery processes during 1996-1999, improving the result.⁴⁴

When moving towards the year 2000 and the new millennium, the pace of globalization had become evident. Kone recognized the situation in its annual report: "Companies throughout the world are experiencing a period of tremendous change. The pace of globalization of the world's economies is accelerating, with the result that competitive conditions are becoming increasingly open. This development is affecting not only us but our customer base. Through continuous renewal, we must find [ways] to respond innovatively to our customers' changing requirements".⁴⁵

In the early 2000s, the journey towards 'one global Kone' and creating 'a common Kone world' continued. The globalization of maintenance business and R&D proceeded. A Major Projects Unit was established to serve increasingly global customers. Spare parts supply was organized globally, and the distributor network was also reorganized.⁴⁶ In 2004, Kone brought its local IT departments together and created a global IT unit that was called Global Information Services.⁴⁷ The opportunities brought by new information technology solutions were actively utilized and, in addition to investing in ERP solution development and rollout, Kone developed IT solutions e.g. for maintenance operations used by field technicians and call center agents, and e-business solutions for its customers, and it started to publish result reviews for investors as webcasts. Working in an increasingly international organization created a need for virtual collaboration tools, such as web-meetings.

Kone continued to grow and, in the early 2000s, it both invested and divested. In 2001, Kone sold its South-American business to Otis. Soon after this, in 2002, Kone acquired the Finnish conglomerate Partek and, with this acquisition, once again became a diversified company operating in several businesses until 2005. The earlier harmonization work continued in the

^{41 &}quot;Our brand is our promise", News & Views, 1999/3: 8-9, Kone archives.

^{42 &}quot;Our brand is our promise", News & Views, 1999/3: 8-9, Kone archives.

^{43 &}quot;Kone becomes a global escalator company", News & Views, 2000/1: 4-9, Kone archives.

⁴⁴ Kone Annual Report, 1996; Kone annual report,1998; News & Views, 1999/3; News & Views, special history issue 2004/4. Kone archives.

⁴⁵ Kone Annual Report, 1998.

^{46~} "Heightened profile for major projects organization", News & Views, 2005/3:18-19. Kone archives.

^{47 &}quot;More efficiency in IS/IT", News & Views, 2004/3: 36-37. Kone archives.

elevator unit, whereas, with the newly acquired Partek, the harmonization benefits were expected merely from certain back-office functions. $^{\rm 48}$

In the 2003 annual report, Kone foresaw a continuation of investment in process improvements and predicted that 'year 2004 would see the most extensive roll-out of the Kone Model information system in the company's history and that the business activities of almost all of the largest front-line and supply-line units would be integrated around a single harmonized business process platform'.⁴⁹ This plan was soon to be changed, and, in 2004, Kone started to plan restructuring and a new strategy, and a new process harmonization program was started in 2005.

Global Harmonization (2005-2016)

2005 has been said to be a transitional year in Kone and it marked a turning point in the history of Kone and its development into a truly global company (Michelsen, 2013). As described above, Kone had grown through acquisitions, and it still possessed several different operating cultures despite the various harmonization efforts over the years. Objectives of the earlier harmonization initiatives had only been partially reached, and the harmonization that had been achieved was gradually eroding. By 2005, the operational mode of Kone continued to be like a 'federation of local companies', where overlapping operations reduced profitability.⁵⁰

All in all, Kone had been on a global development path already in the 1990s, but this development had slowed down also because of the large Partek acquisition in Finland, as well as family succession-related events in the ownership structure of the company.⁵¹ The consolidation of the elevator industry had continued further and, in 2005, Kone occupied the fourth position in its industry.⁵² By this time, competition in the industry had intensified, and the pivot of the global elevator and escalator market was increasingly shifting to Asia.

Kone's profitability had been eroded by overlapping operations and poor communication between its national companies and global operations. Kone's organization suffered from the silo effect of parallel functions that operated without sufficient interaction with one another".⁵³

In 2005, Kone refocused back on the elevator and escalator business and announced a sizable development and restructuring program aiming to ensure the long-term competitiveness and profitability of its elevator and escalator business. The program aimed to improve the cost-effectiveness of manufacturing and the competitiveness of the company's products. In

⁴⁸ Michelsen, 2013

⁴⁹ Kone Annual Report, 2003.

⁵⁰ Alahuhta, 2015; Michelsen, 2013.

⁵¹ Michelsen, 2013.

⁵² "Miksi niin paljon muutoksia", Hissilehti, 2005/2, Kone archives.

^{53 &}quot;Clear strategy and initiatives", Kone Post, 2005/1, Kone archives.

a large demerger, the elevator and escalator division was separated from the material handling division into the Kone Corporation on one hand, and the Cargotec Corporation on the other, which continued as separate companies.⁵⁴

Kone got its first president to join from outside the company, when Matti Alahuhta started at Kone in 2005. The expectations of the board of directors are described in the meeting minutes from November 22, 2004: "We believe that Alahuhta brings to the company multifaceted global expertise which, when joined to Kone's strengths, will support the company's competitiveness and market position" (Michelsen, 2013: 555). The new president of Kone joined the company "at [a] very challenging time, when pressure for change was created by both the global competitive environment and certain internal forces that had weakened our growth and profit development".⁵⁵ A new executive board was assembled, and it was led from Espoo, Finland.

In fact, Kone had, at the same time, both global operating models and strong regional organizations in place.⁵⁶ Kone sharpened its matrix organization by having both global business units and regional business units reporting directly to the CEO. Geographical area heads were invited to the executive board with the global business unit heads 'to bring global and local value to continuous interaction'.⁵⁷

In 2005, company strategy was defined, "Kone gives a performance edge to its customers with innovative services and solutions. Simultaneously, Kone's products and services are cost-competitive and its processes characterized by globally aligned operational excellence".⁵⁸ Customer focus was set at the forefront of the company's operational and business strategy. The basis for competitiveness was to be strengthened by harmonizing business processes and improving cost efficiency. Five strategic initiatives were decided upon for the coming three-year (strategy) period. Kone set three targets: faster-than-market growth, EBIT from 8% to 12%, and stronger cash flow.⁵⁹

Global markets required global products, and Kone expanded its product range to be able to compete in all markets (esp. in USA, and in Asia). Kone's products had been developed more from a European viewpoint, Asian markets were growing, and the United States was also an important growth market.⁶⁰ Kone worked on broadening and improving its product and service portfolio to meet local customer requirements in Asia and North America, in both volume and high-rise segments.

58 Kone Annual Report. 2006.

60 Alahuhta, 2015.

⁵⁴ Kone Annual Report, 2004; Kone Annual Report, 2005; "An exciting journey", News & Views magazine, 2005/2, Kone archives.

⁵⁵ Kone Annual Report, 2005.

⁵⁶ Alahuhta, 2015; Michelsen, 2013.

⁵⁷ Investor day event in Helsinki, February 2, 2007, Kone archives.

⁵⁹ Kone strategy presentation, May 17, 2015, Kone archives.

The industrialization of Asia picked up speed during the first decade of the 21st century. China and India were developing fast, and growing cities required infrastructure investments. The industry focus was shifting to Asia's emerging markets. In 2005, two thirds of Kone's sales were coming from Europe and Kone's market share in China was as low as 3%. Henceforth, Kone decided to focus strongly on Asia. It was clear that increasing urbanization would change the markets globally and that competition in the Chinese market would be fierce. In 2005, Kone established a joint venture with a local elevator manufacturer, Giant Elevator, in Nanxun China. The purpose was to learn how the local companies operate.⁶¹ In March 2005, Kone China opened its headquarters in Shanghai. Since the opening of the Kunshan factory, Kone China headquarters had been located on the factory grounds. Now Shanghai with its prominent reputation and booming economy was considered a great city for Kone to showcase the company.⁶²

The restructuring and development program led to big changes in escalator operations. In 2005, Kone closed the escalator factory in Hattingen in Germany. The escalator factory in Kunshan in China was expanded and the partnership with Japanese Toshiba brought the first Kone-Toshiba escalators to Chinese markets.⁶³

Kone entitled its 2006 annual report Change. Sales volumes grew in all geographical areas and Kone's market value doubled in comparison with what it was at the time of the demerger.⁶⁴

Urbanization was identified as the most important megatrend in the elevator and escalator industry. In 2007, three billion people lived in urban areas worldwide and this number was expected to reach five billion by 2030.⁶⁵ Growth was taking place especially in China, where the number of urban populations was foreseen to reach one billion by 2030, as well as in India and in the Middle East. By 2008 the Asia-Pacific contributed over fifty per cent of the global market for new equipment, and China alone represented over fifty percent of the Asia-Pacific market. Thus, in 2008, Kone decided that the global business and functional leaders would support the Chinese operations even more strongly than before.⁶⁶

Kone defined a vision and redefined its strategy at the end of 2007 to better respond to ongoing changes in the business environment, and adopted a concept it called People Flow[®]. Kone's vision was defined to deliver the best people flow experience. The new vision specifically emphasized enduser experience, thereby extending the company's strategic objective of

64 Kone Annual Report, 2006.

⁶¹ Alahuhta, 2015; "Kone forms joint venture with Giant", News & Views, 2005/2: 18-20, Kone archives.

^{62 &}quot;Rapid growth continues, Kone China opens main office in Shanghai", News & Views 2005/2: 21, Kone archives.

^{63 &}quot;Edistymisen merkkejä", Hissilehti, 2005/2: 4, Kone archives.

⁶⁵ U.N. world urbanization prospects 2007, in Kone Annual Report, 2007.

⁶⁶ Alahuhta, 2015: 86.

expanding beyond its traditional products and services. Kone's strategy was defined to deliver a performance edge to its customers by creating the best user experience with innovative people flow[®] solutions.⁶⁷

In 2008 the financial recession started to spread, and the global construction market started to slow down. The new equipment market also weakened in China, especially in the coastal areas, but swift government action reduced the impact. China introduced significant stimulus packages, the majority of which was expected to impact the construction sector. This included infrastructure development such as metros, railways, airports, affordable housing, hospitals and medical facilities in rural areas.⁶⁸

Kone focused on growing its business in growth markets, accelerating the key development programs, and increasing efforts in personnel development. Kone's goal was to continue making good progress even in hard times. Positive spirit was emphasized, and Kone declared its objective to be to use also this market phase as an opportunity.⁶⁹ Kone took an intensive approach to developing competitiveness in the challenging business and economic environment, and it worked to make the company more agile.⁷⁰ The objectives of organizational agility were to have a flatter structure, wider span of control, more uniform structures for better internal collaboration, and, all in all, to improve efficiency, effectiveness, and speed.

Design was placed high on the agenda, and in 2008, Kone was awarded a Good Design Award for its innovative design collection, being the first elevator and escalator company to receive the award. Founded in 1950, the Good Design Award is one of the most recognized design award programs in the world.⁷¹

Kone celebrated its 100th year anniversary in October 2010. By now, the company employed around 34,000 people globally, and delivered around 60,000 elevators and escalators per year. In 2010, Kone also featured prominently at the Shanghai World Exposition, the biggest in Expo history, supplying elevators and escalators to twenty-one pavilions.⁷²

Kone's focus on innovations was also noted internationally. In 2011, Kone was, for the first time, listed among the Top 100 innovative companies in the world by the U.S. based business magazine Forbes, being the only elevator and escalator company on that list.⁷³ The Forbes ranking is based on a metric called the "Innovation Premium". This is a grade given to a company by Forbes based on the premium the stock market has placed on the value of the company. This premium is based on expectations for future innovative

⁶⁷ Alahuhta, 2015; Michelsen, 2013.

⁶⁸ Investor day event in London, May 8, 2008, Kone archives.

⁶⁹ Alahuhta, 2015.

⁷⁰ Investor day event in Helsinki, May 5, 2009, Kone archives.

⁷¹ Kone Annual Report, 2008.

^{72 &}quot;Kone at the 2010 World Expo", People Flow Magazine 2010/2, Kone archives.

⁷³ Kone Annual Report, 2011.

products, services, and new markets that will generate even larger income streams. 74

In 2012, the importance of China business grew further. Greater China became an area business unit organization of its own, whereas earlier it had been part of Asia Pacific area. This brought the voice of China business and the needs of local customers directly to the executive board. China market represented as much as two thirds of the world market, and in 2012 Kone became the market leader in the Chinese new elevator and escalator business. In 2013, Kone's market share increased to 18%, whereas it had been only 3% in 2005 (Alahuhta, 2015). The urbanization rate in China was over 50 percent in 2013.

In 2013, Kone launched a new revolutionary technology for the high-rise segment. This innovation, KONE UltraRope[®], a light-weight rope made of carbon fiber that allows for lighter elevator elements, thus making it possible to install elevators traveling up to one kilometer high, providing unparalleled elevator eco-efficiency, reliability, and durability. This innovation created a lot of excitement in the industry as well as in the company. A senior leader commented on the innovation in an employee magazine as follows: "We are on the brink of something really big, we have reinvented the high-rise elevator".⁷⁵ Kone also moved decisively into smart building technology, introducing the Kone People Flow Intelligence family of equipment and software aimed at enabling people to move around buildings as smoothly as possible.⁷⁶

In April 2013, the Kone Park, the company's largest manufacturing unit, was opened in Kunshan. The site includes an engineering facility, an R&D center, three elevator factories, and an escalator factory. The 36-floor test tower with twelve elevator testing shafts was opened two years later.⁷⁷

Henrik Ehrnrooth was appointed President and CEO in April 2014. Service business was seen to contain growth potential for coming years.⁷⁸ Kone's global maintenance base exceeded one million units in service in 2015 and the company increased its focus on service businesses to accelerate growth in maintenance and modernization. New customer expectations were arising, creating demand for improved user experience and people flow. With a need for more sustainable urban environments in the future, Kone foresaw a rise of systems enabling centralized building and people flow management, optimization of building support and maintenance operations. Smarter buildings were seen to be part of the future development of the elevator and escalator industry.

^{74 &}quot;The Innovation Premium: Our methodology", Forbes 20.10.2011, https://www. forbes.com/sites/innovatorsdna/2011/10/20/the-innovation-premium-ourmethodology/#72a2a4ce5c48, retrieved July 30, 2018.

^{75 &}quot;Kone shows the ropes", Kone Move magazine, 2013/2: 6-8, Kone archives.

^{76 &}quot;The new IQ of People Flow", Move magazine, 2013/3: 6-9, Kone archives.

⁷⁷ Kone Annual Report, 2013; Kone Annual Report, 2015.

^{78 &}quot;Yhä ylemmäs", Talouselämä, 2014/42: 40-43.

The importance of strengthening technology and especially digital competence was foreseen, and in 2015 Kone announced that it will establish a new global function, Technology & Innovation unit, consisting of both R&D and IT capabilities. The focus of this new unit was directed towards both incremental and radical innovation, driving new ways of working and new business models, enabled by technology.

In February 2016, Kone pioneered in predictive maintenance when it announced an agreement with IBM to use their IoT (Internet of Things) platform to collect and store equipment data, build applications, and develop new solutions for customers. Kone announced plans to connect its global maintenance base of elevators, escalators and building doors to cloudbased services to enhance predictive maintenance services and minimize equipment downtime and carry out repairs more quickly.

In 2016, Kone defined its mission to be to improve the flow of urban life. The new corporate vision builds on the understanding of people flow in and between buildings to make people's journeys safe, convenient and reliable, thereby making cities better places to live. The increasingly urbanizing world continues to provide attractive growth opportunities in the elevator and escalator industry. New technologies and connectivity provide an opportunity to add value for customers in new ways that meet better their specific needs, while, at the same time, technological development is changing customer expectations on speed, transparency and predictability. To respond to the changing expectations of customers and end-users, Kone needed to speed up bringing its services and solutions to the market though a closer collaboration with customers and collaborative partners.⁷⁹

This research follows Kone until 2016. In January 2017, Kone launched a new strategy, and instead of the must-win battles that had been guiding Kone's development programs for twelve years, Kone now defined its strategy streams as "Ways to Win", to guide the business development initiatives, as well as to guide the solution and service development efforts in the company.⁸⁰ The benefits of global harmonization were well recognized and seen as necessary for speed and efficiency. Currently, Kone Way process development and implementation continues intensively towards a more comprehensive global operating model.⁸¹

Today's Kone

Today's Kone is one of the leading companies in the elevator and escalator industry globally. Kone defines its mission to be to "improve the flow of urban life". Kone provides its customers with elevators, escalators, and building doors, as well as service solutions for maintenance and modernization. In 2017, Kone defined its purpose as "[to] make the best of the world's cities,

⁷⁹ Kone Annual Report, 2016.

⁸⁰ Kone Annual Report, 2017.

⁸¹ Kone Annual Report, 2017.

buildings and public spaces", believing that "smarter and more sustainable cities are part of the solution for better living".⁸² Kone and the elevator and escalator industry have benefited from urbanization development, the process by which the world's population is increasingly moving to urban areas, especially in emerging markets like China.

The head office of the company is in Helsinki, Finland, and the company operates in over sixty countries.⁸³ In addition, it has a network of authorized distributors in close to eighty countries. Kone has global production sites in Finland, Italy, India, China, Czech, USA and Mexico. Kone's research and development (R&D) centers are in Finland, Italy, Netherlands, India, China, Germany, USA and Mexico. During its history, Kone has both diversified to different industries and again refocused to its core know-how, namely, the transportation of people and goods in buildings.

Kone started in 1910 as a small machine workshop. During its more than one hundred-year history, it has grown into a global player in the elevator and escalator industry. In 2017, Kone had over 55,000 employees, half of them working in field operations, and more than 450,000 customers worldwide. The company has been listed on the NASDAQ Helsinki stock exchange since 1967. Kone's net sales in 2017 were 8,942 million euros and its business consists of new equipment business and service business, including maintenance and modernization. The share of service business has been increasing and is close to half of sales. Kone's customer base consists of developers, builders, architects, building owners, facility managers and housing corporations. Kone has over 1.2 million pieces of equipment in its maintenance base. It holds more than 3000 patents, and its research and development (R&D) spend is 1.8 % of sales. In 2017, Kone's new equipment orders received in elevator and escalator units amounted to approximately 158,000 units, and it delivered approximately 141,000 new elevator and escalator units.⁸⁴ Key performance figures of the corporation between 2005 and 2017 are summarized in Appendix 2.

In 2016, when the research period of this study ends, the size of the global elevators and escalators (E&E) market was estimated to be 825 000 new pieces of equipment globally, out of which 62% in the Chinese market.⁸⁵ In 2016, Kone's share of the global market was 19%. The total equipment base was estimated to be 14 million units globally and in 2016, the number of units of equipment in Kone's maintenance base is 1.1 million units, and Kone estimates that its equipment move as many as one billion people a day.⁸⁶ Several developments explain the growth of the elevator and escalator market. Urbanization and changing demographics require new elevators and

⁸² Kone Annual Report, 2017.

⁸³ Kone Annual Report, 2018.

⁸⁴ Kone Annual Report, 2017.

⁸⁵ See for example Credit Suisse, Global elevators & escalators industry report, 2016; and Kone Annual Report, 2017.

⁸⁶ Kone Annual Report, 2017.

escalators, and the ageing installed base creates demand for modernization and replacement of old equipment. Also, the increasing safety concerns and the new laws and regulations for elevators and escalators increase the need for maintenance services.⁸⁷

Recent growth in the elevator and escalator business has been driven by the urbanization in China, and large international players have the biggest share of the new equipment market. They have established wide local presence in China, and local presence is an important factor in gaining market share in China. Kone has been leading this development with over 500 different service and sales points in different locations in China.⁸⁸

Key constraints that affect the growth of the elevators and escalators industry are the high initial cost of installation, the lack of skilled labor for the installation and maintenance work, and also the increasing amount of energy that elevators and escalators are consuming.⁸⁹ Especially in high-growth markets, the availability of skilled personnel is crucial, requiring proactive project and resource planning.⁹⁰

⁸⁷ See for example Credit Suisse, Global Elevators & Escalators Industry Report, 2016.

⁸⁸ Credit Suisse, Global elevators & escalators industry report, 2016.

⁸⁹ Credit Suisse, Global elevators & escalators industry report, 2016.

⁹⁰ Kone Annual Report, 2014.

6. Analysis and Findings

6.1 Structure of the Findings

The historical narrative in Chapter 5 provided a description of the case study, summarizing the key events in the history of the case company relevant to this research. The historical narrative presented the background and the context for the case study, and it also described the case company as it is today. It outlined the history and key events from 1910, when the company started, until 2016, which is the end of the research period of the present study.⁹¹ The historical narrative was divided into four sections: The first section described the early years of the company (1910 - 1967) during which time Kone established its position as an elevator and escalator company; the second section described the decades (1968 - 1993) when Kone internationalized rapidly; the third section the time (1994 – 2004) when Kone started its first global integration program in order to transform from a loosely integrated company to an integrated company; and finally, the fourth section described the time period (2005-2016) of the second global harmonization program, i.e. the development and implementation of a common "company way" of working.

The current chapter (Chapter 6) consists of the analysis and findings of this research. Firstly, I provide an analytical chronology of the research period, focusing on the key harmonization events in the case company during the research period. Based on the analytical chronology, I will answer the research questions laid out in Section 1.3.

The analytical chronology of the research period is used to answer the first main research question RQ1: How was the "company way" construed in the case company? The research framework of this study is outlined in Chapter 3. The research framework is mainly used to answer the second main research question RQ2: How has the "company way" dealt with the tensions

⁹¹ It is worth noticing that the "company way" harmonization work continues at Kone, and that in the latest corporate strategy that was launched in 2017, the "company way" operating model is pictured as an execution vehicle of the strategy. "Winning with Customers", Kone strategy presentation 2017. Kone archives.

arising from contradictory demands? However, the research framework, and especially the horizontal dimensions of it, are useful for building an understanding of, and mapping the various aspects of, global integration, i.e. structures and processes, technologies and products, as well as short-term and long-term view. The structure of the findings is presented in Table 10.

ltem	Key points	Chapter
Case study: Historical narrative	Case company today, background, context, and drivers for harmonization Early history from 1910 to the 1960s Internationalization from the late 1960s to the mid-1990s Globalization from the mid-1990s to 2004 Global harmonization from 2005 to 2016	Chapter 5
Analysis and Findings	 Analytical chronology of the case period 1994-2016 Answers to research questions: How was the "company way" construed in the light of adaptation, innovation and renewal requirements? How has the "company way" dealt with the tensions between Global integration and local flexibility, Productivity and exploitation, Internal and external focus? 	
Conclusions	Discuss findings Contribution to theory and practice (managerial implications) Limitations of the research Avenues for future research	Chapter 7

Table 10. The structure of the findings.

In the discussion chapter (Chapter 7), I will then discuss the findings in the light of the key background literature highlighted in Chapter 2. I will also describe the contribution of my research to theory and practice, the limitations of the study, and possible avenues for future research.

6.2 An Analytical Chronology

Whereas the historical narrative described the overall history of the case company, this section takes a deeper look at the research period of this study. The research period starts in 1994, when the company started to harmonize its operations worldwide, and started a harmonization program called the Kone Model. Global harmonization continued in 2005, when the company started its next harmonization program which was this time called the Kone Way. This program was executed in three-year strategy periods, and each of them had specific focus areas. The research period of this case study ends in 2016. I have split the analytical chronology into five parts.

The first part covers the time period from 1994 to 2004, when the company carried out its first global harmonization program. The second part covers the time period from 2005 to 2007. This three-year period is the first three-year strategy period with the new strategy that the case company introduced in 2005 together with a global process architecture, the Kone Way. This period is characterized by strong process alignment globally. The third part covers the time period from 2008 to 2010, which is characterized the by the

new common vision and urbanization megatrend. The fourth part covers the time period from 2011 to 2013, when the company focused on differentiation in its market and when the China business grew rapidly. Finally, the fifth part covers the strategy period from 2014 to 2016, characterized by capturing the opportunities in service business and accelerating technology development that set new requirements for innovation and agility both in the company and with its external partners and customers. Table 11 summarizes the case periods and their names, as will be used in the following.

Case period	Name	Characteristics
1994 – 2004	Global development	Until this time, the subsidiaries had been merely loosely integrated.
		As of 1994, Kone carried out its first global harmonization program, including the development of Kone model and implementation of an enterprise resource planning (ERP) solution. Towards the end of this time period, the
		harmonization started to erode.
2005-2007	Process alignment	Strong process alignment globally
2008-2010	Common vision	New common vision and urbanization megatrend
2011-2013	Differentiation	Focus on differentiation and growing operations in China
2014-2016	Services and digitalization	Capturing the opportunities in service business
		Accelerating technology development set new requirements for innovation and agility in the company and with external partners and customers.

Table 11. Summary of the case periods.

6.2.1 Global Development 1994-2004

Global harmonization in the case company started in the mid-1990s. As described earlier, until the mid-1990s the acquired companies were loosely integrated. The editorial in an in-house magazine describes Kone's philosophy during the international expansion period as follows, "Hands off subsidiaries so long as they meet their approved budgets".⁹² This approach may have been chosen because of the strong willpower of the subsidiaries to maintain their independence as well as because of the lack of resources in the central management.⁹³ In fact, this practice followed the traditional mother-daughter structure found in many international companies, in which the highly autonomous foreign subsidiaries report directly to corporate headquarters (Hedlund, 1984; Marschan, 1996).

By the late 1960s, Kone had become a multidivisional corporation and deeply connected to the Soviet-Finnish trade. Both elevator business and crane business were important parts of Kone strategy. Kone was accustomed

^{92 &}quot;New year, new Kone", News & Views, 1997/4: 2-3, Kone archives.

^{93 &}quot;New year, new Kone", News & Views, 1997/4: 2-3, Kone archives.

to operating several different kinds of business fields, without strategies to push the company into international markets (Michelsen, 2013).

Since late 1960s, Kone quickly expanded its operations geographically and, because of this development, Kone's mode of operation was soon characterized by a wide range of non-harmonized production facilities, suppliers, stand-alone IT systems, and deeply embedded local ways of working. For a long time, the next twenty-five years, the strategy was to interfere as little as possible with these companies. An in-house magazine described this as a 'soft' approach and mentioned several reasons for it. The owner family of Kone had established a reputation for treating acquired assets and employees with respect, making the negotiations easier. This approach probably also minimized labour unrest and helped to retain customers. Moreover, Kone's management resources were not sufficient to carry out restructuring and harmonization. As a result, the company structure was unable to respond to changing market conditions, and there was no global, unified company brand.⁹⁴

There had, however, been some individual harmonization projects already before the global harmonization started in mid-1990s. For example, in 1975 Kone introduced a comprehensive planning, budgeting, and control system. The planning, budgeting and control system was adopted in every new acquisition, and this supported the integration of the acquired companies to Kone (Stenberg, 1992). The system became Kone's trademark, and it was well-known in the elevator business all over the world (Stenberg, 1992). The planning, budgeting and control system was one of the first integrated systems that Kone introduced globally and which was in use in every unit.

Competition in the elevator and escalator industry was globalizing, and this required the elimination of inefficiencies in operations. The expansion of the European Union paved the way to borderless competition. The Iron Curtain that had divided Europe was crumbling, and free-trade blocs were created in the Americas. Asian economies were opening, and, at the same time, information technology was enabling real-time transactions in global markets. This development set completely new requirements for the systems and structures in multinational corporations like Kone.⁹⁵ As a result, Kone was poorly prepared for the globalization in the early 1990s. In fact, the company was almost sold to the German giant Thyssen in 1994 (Simon, 2009). When this offer was declined, the company rationalized its structure and went into ten years of dysfunction, falling far behind of its competitors Otis, Thyssen and Schindler (Michelsen, 2013).

Hence, in 1994, Kone started to harmonize its business processes and to integrate its worldwide information technology systems for the first time on a large scale. In this, Kone followed the other large corporations that started to implement global enterprise solutions (Davenport, 1993; 1998).

^{94 &}quot;From internationalization to globalization", News & Views 1998/3: 2-3, Kone archives.

^{95 &}quot;From internationalization to globalization", News & Views 1998/3: 2-3, Kone archives.

Kone aimed to expand its presence in China; it operated in eighteen cities in China and investigated opportunities to start production in China.⁹⁶ Since the liberalization of China's economy had started a few years back, Kone's competitors (Otis, Schindler, Mitsubishi) had launched joint ventures and opened factories in China. Kone had preferred to focus on import activities. As the regulations for forming joint ventures became more flexible, Kone also saw direct entry into the Chinese domestic market as more attractive.⁹⁷ Local customers were used to Japanese standards, and Kone decided to aim for obtaining ISO 9001 for its Chinese operations.⁹⁸ Kone also planned to have all its elevator companies ready for ISO 9000 certification by the end of 1995.⁹⁹

Kone recognized the need to improve productivity in maintenance, modernization, logistics, and installation, and it continued its efforts in the total quality management processes.¹⁰⁰ Kone progressed with standardizing both processes and information technology.¹⁰¹ The focus of quality improvement was on ISO 9000 certification, which provided a foundation for continued development of work processes. Kone worked on upgrading its information technology systems with the target to standardize the organization's world wide data handling and communication processes.¹⁰² Worldwide data systems for operations control were developed.¹⁰³ In 1994 the company chose SAP to supply the software support for the harmonization program.¹⁰⁴ Kone reorganized its production and supply systems in order to produce 'pan-European products', achieve greater economies of scale, and harmonize its business processes.¹⁰⁵ This was enabled by a product innovation, an elevator that did not require a machine room, KONE MonoSpace[®], in 1996. This innovation led to changes in the elevator industry.¹⁰⁶

In 1995, Kone had developed its "Vision 2000", which defined what its service business should look like by the turn of the century. It described an ambitious plan to utilize information technology to improve service operations. Modern IT tools were to be used to streamline operations for consistency and efficiency. The combination of communication technology withtraditional service business was novel at that time. Hand-held computers for service personnel and remote monitoring for installations were planned

⁹⁶ Kone Kunshan story, visitor tour scrip, 2012, Kone archives; Kone Annual Report, 2014.

⁹⁷ $\,$ "Kone in China, a different approach", News & Views 1994/2: 12-13, Kone archives.

^{98 &}quot;Kone in China, a different approach", News & Views 1994/2: 12-13, Kone archives.

^{99 &}quot;A new perspective on quality", News & Views, 1994/2: 20-23, Kone archives.

¹⁰⁰ Kone Annual Report, 1994.

¹⁰¹ Kone Annual Report, 1995.

¹⁰² Kone Annual Report, 1995.

¹⁰³ Kone Annual Report, 1996.

^{104 &}quot;Infosystems support", News & Views 1994/3: 13, Kone archives.

¹⁰⁵ Kone Annual Report, 1996.

¹⁰⁶ Kone Annual Report, 1996.

in order to reduce unnecessary travel. The need for local variations was noticed, and the vision was seen to be more applicable and beneficial to larger units. In fact, Vision 2000 painted a picture of decentralized operations, emphasizing country unit empowerment. It also introduced self-managed teams, small clusters of service people who would plan their own work and carry out preventive maintenance, identify business opportunities, and maintain customer relations.¹⁰⁷ The main thrust of Vision 2000 was to shift from the concept of visiting elevators' to the concept of servicing customers by keeping their equipment reliable and available.¹⁰⁸

Kone had introduced a program to implement an enterprise resource planning system (ERP) with the purpose of supporting the "increasing homogenization of products, processes and policies". Common IT hardware and applications systems were planned to replace the dozens of incompatible systems with common data structures and definitions, thus enabling the implementation of common policies and business practices. This was seen as revolutionary in a company which had grown through acquisitions and allowed national companies to continue 'doing their own thing'. Major investments in both personnel and hardware were expected to be largely covered by phasing out old and increasingly non-productive technology.¹⁰⁹

The global harmonization project was named Zeus. Its scope was global, and it involved the development of the Kone processes ("Kone Model"), and the company-wide implementation of SAP R/3 that the company had selected as their ERP solution. Project Zeus was described as consisting of six elements. First three elements included common processes, applications and software, and shared data definitions and structures. The other three elements were about the common ways of working, namely, identical ways of handling data, the use of best business practices, and an increased focus on external customers.¹¹⁰

The harmonization of processes was one of the key actions in the company. In fact, Kone foresaw that the world was moving towards integrated IT systems. In 1997, Kone employee magazine reasoned the choice of the ERP solutions as follows "80% of the world's newest corporations are installing global IT harmonization software, and 60% of those companies have chosen SAP".¹¹¹ In the same issue the President of Kone stated that the program is "the biggest project Kone has ever done. The upside is big, but the downside is horrible. We must succeed!"."¹¹² Also, the company was aware of the issues driving IT at time, namely the "year 2000 problem" with the computer systems, the possible impacts of the European Monetary Union (EMU)

^{107 &}quot;A vision emerges", News & Views 1995/2: 3-10, Kone archives.

^{108 &}quot;Focusing the vision", News & Views, 1996/24-29, Kone archives.

^{109 &}quot;Systems improvement", News & Views, 1996/2: 29, Kone archives.

^{110 &}quot;Zeus gathering in London", News & Views, 1997/4: 38-39, Kone archives.

^{111 &}quot;Zeus gathering in London", News & Views, 1997/4: 38-39, Kone archives.

^{112 &}quot;President's message", News & Views, 1997/4: 40-41, Kone archives.

in 1999, and the overall globalization of competition forcing companies to become global. $^{\rm 113}$

The Kone Model was defined as a harmonized way of doing things in Kone throughout its worldwide organization. The Kone model was defined, and configured in SAP, for selected functions: new elevator business, service business, financial operations and human resources management. Kone Model was defined to be the translation of the company's strategy into its business architecture, covering processes, organization, people and tools.¹¹⁴

The Kone Model was planned to be ready by the end of 1997. Data centers were set up on each continent to support local SAP R/3 implementation. The Kone Model was developed by an international team, consisting of members from fifteen countries, to ensure a global view in developing the model. The Senior Vice President, Process Development was quoted in an in-house magazine as follows: "The Kone Model will help spread business practices and improve integration through Kone organization, but it takes time and involves certain costs." The first rollout started in Sweden in autumn 1997.¹¹⁵

The harmonization of European elevator markets developed further, and norms and standards were being set on European Union-wide basis replacing country-specific standards. This made it possible to sell European-wide standard elevators. Kone's machine-room-less elevator innovation, KONE MonoSpace®, contributed to harmonization by enabling global solutions.

In 1996, Kone changed its organization structure to a matrix with global business units and geographical business areas, as illustrated in Figure 6.¹¹⁶

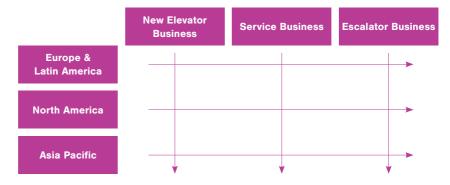


Figure 6. Matrix organization structure. (Based on Kone organization chart in 1996)

In 1997, Kone invested in developing its operations on different fronts. Change programs included offering new products to customers, production and supply process streamlining, as well as harmonization and

^{113 &}quot;Summary of a lecture by the Gartner Group" in an annual IT meeting in London in 1996, News & Views, 1997/4: 39, Kone archives.

^{114~} "Zeus project targets harmonization", News & Views, 1997/2: 26-27, Kone archives.

^{115~} "Ready to roll", News & Views, 1997/3: 6-7, Kone archives

^{116 &}quot;Back to the matrix", News & Views 1996/2: 14-21, Kone archives.

globalization of operative functions. This included new supply chain for volume elevators as well as development of a tailored SAP R/3 information system that targeted to unify business solutions.¹¹⁷All in all, Kone, like other similar large companies throughout the world, was experiencing change because of the accelerating pace of globalization that set new requirements for systems and processes to operate in the global business environment with increasingly global competitors, suppliers and customers.¹¹⁸

For example, Kone streamlined delivery processes and developed a maintenance concept. It introduced performance-based maintenance contracts. A remote-monitoring solution made it possible to monitor individual elevator performance in real time and respond to service needs with focused maintenance measures.¹¹⁹ The importance of harmonization was explicated in Kone's annual report in 1998 as follows: "Our most significant development program in progress is the harmonization of central business processes. We are implementing the standardization of systems, processes, tools and business practices throughout our organization."¹²⁰

In 1998, China had become an important market and close to half of total escalator orders worldwide were from China. Kone opened a factory in Kunshan in China. Kone's start in China was seen as late, but it also enabled entering with the latest technology and standardized product lines.¹²¹

By 1999, Kone had progressed with SAP implementations, however, the level of harmonization varied. Kone had gone live with SAP in seven different countries, and the Kone employee magazine from the same year describes the result as "seven different applications".¹²²

In 1999, the case company changed its organizational structure. The matrix organization that was introduced in 1996 had become ineffective and lacked a sense of collective responsibility. The matrix organization consisting of global business units and regional business areas was dismantled. Now the new organization had a smaller executive committee, based in Europe.¹²³ Kone introduced the Kone brand universally, and launched its first global product (the global standard escalator), which was developed and launched in 2000.¹²⁴

In 2000, the president of Kone summarized the needs for Kone to accelerate in three fronts, in globalization, in growth, and in profitability, and called for acting as 'one global Kone'. The aim was to "standardize a Kone Way of doing business" and implement it in those countries that represented 90% of the

¹¹⁷ Kone Annual Report, 1997.

¹¹⁸ Kone Annual Report, 1998; Michelsen, 2013.

¹¹⁹ Kone Annual Report, 1998.

¹²⁰ Kone Annual Report, 1998.

^{121 &}quot;On China and our position in Asia", News & Views, 1998/4: 10-12, Kone archives.

^{122 &}quot;Same direction, more speed", News & Views, 1991/1: 2-6, Kone archives.

^{123 &}quot;New Organization", News & Views, 1999/1: 6-7, Kone archives.

¹²⁴ Kone Annual Report, 1999.

company's business.¹²⁵ Globalization was also the core issue on the Employee Forum agenda in 2000 (the annual employee forum is a meeting to exchange information between management and employee representatives). In this meeting, "globalization" was defined as a term to describe the "process by which Kone is transforming itself from a federation of acquired companies into a strong competitor in the $21^{\rm st}$ century". Globalization in Kone was defined as the harmonization of processes and products to create "one global company, one Kone".¹²⁶

Kone made a major transformation in elevator and escalator maintenance culture. In 2001, as urbanization and the aging of the population was seen to create new needs for transportation systems in cities, Kone introduced expert systems to determine optimal solutions for the flow of traffic.¹²⁷ Also, at the beginning of 2002, Kone launched a new internet service in nine countries, thereby opening a new communication channel between customers and Kone's sales and service organizations.¹²⁸

Research and development (R&D) was globalized. Kone had R&D centers in Finland, USA, and Italy as part of global R&D. In 2001, Kone supplemented the global R&D organization with a software development center in Chennai, India in order to develop and test the software needed for drives, controllers, signalization, monitoring, and remote maintenance systems.¹²⁹

Investments were increasingly focusing on information systems that support business processes. Kone Model was upgraded to the latest SAP software version. "[The] Information system model collects Kone practices, processes and systems, that all elevator and escalator units use worldwide.¹³⁰

The development of a global product range, and global installation and maintenance methods had a harmonizing influence on the operations of units in different countries. The creation of a single strong Kone brand was also seen to have contributed to the speed of the harmonization process. The implementation of the global harmonization was planned to continue with " the most extensive roll-out of the Kone Model information system in the company's history, after which the business activities of almost all of the largest country units and supply line units will be integrated around a single harmonized business process platform."¹³¹

However, the harmonization that was achieved started gradually eroding, and when Kone introduced its new strategy in 2005, a new change program was started in order to develop a new, global common way of working: the Kone Way.

^{125 &}quot;Full throttle acceleration", News & Views 2000/2: 2-3, Kone archives.

^{126 &}quot;Seventh employee forum", News & Views 2000/2: 8-10, Kone archives.

¹²⁷ Kone Annual Report, 2001.

¹²⁸ Kone Annual Report, 2001.

^{129 &}quot;The globalization of Kone elevator R&D", News & Views, 2001/3: 18-21, Kone archives.

¹³⁰ Kone Annual Report, 2002.

¹³¹ Kone Annual Report, 2003.

6.2.2 Process Alignment 2005-2007

Kone described 2005 as a transitional year.¹³² In fact, 2005 has been claimed to be a turning point in Kone's development into a global company.¹³³ The pressure to have the processes and structures in place for a global company had intensified in most industries.

The company saw the need for change on different fronts. This included a shifting focus from technology to customers and an expanding focus from Europe to North America and Asia-Pacific. Opportunities with the emerging Chinese market were foreseen, yet the share of the Chinese market was as low as 3% in 2005.¹³⁴ The need for more cross-functional collaboration was identified as a central challenge, which was also reflected in the name of the new strategy, Collaboration for Growth. The company also recognized that it was 'relatively slow' and wanted to be become faster. The drivers for change identified in 2005 are summarized in an overview illustrated in Figure 7.¹³⁵

From	То
Technology	Customers & technology
Europe mindset	Europe, North America & Asia Pacific mindset
Profit	Profitable growth
Differentiation	Differentiation & cost competitiveness
High fixed cost level	Streamline and use fixed cost Base for competitive advantage
Functional	Cross-functional collaboration
Relatively slow	Fast

Figure 7. The needs for change.

The definition and implementation of a global process architecture was a central part of the implementation of this strategy. This process architecture was called the Kone Way, similar to the "company way" concept in other organizations (see for example Lessard, Teece, & Leih, 2016). As described in the historical narrative in Chapter 5, strategy implementation

¹³² Kone Annual Report, 2004; Kone Annual Report, 2005.

¹³³ Michelsen, 2013.

¹³⁴ Alahuhta, 2015.

¹³⁵ Investor day event in Helsinki, June 11, 2010. Kone archives.

was scheduled in four three-year strategy periods (2005-2007, 2008-2010, 2011-2013, 2014-2016), and the process architecture work during this time was planned and prioritized according to these strategy periods and their focus areas. The company has summarized the main changes and the timelines of these changes as described in Figure 8.¹³⁶ The harmonized process architecture created a foundation for the other significant changes: the development of the company culture, redefining the company vision, increasing speed and agility, and increasing differentiation, service transformation and a renewed approach for innovation.¹³⁷

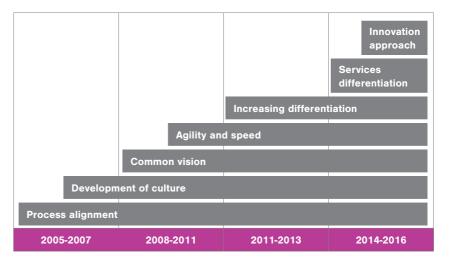


Figure 8. Renewal stages of the case company.¹³⁸

During the first strategy period, the Process Alignment period in 2005-2007, Kone started process alignment and developed of its company culture. During the second strategy period, the Common Vision period in 2008-2010, Kone redefined its vision and redefined itself as a People Flow[®] company, extending the definition of its business beyond elevators and escalators. The strategy period in 2011-2013, the Differentiation period, was the period for increasing differentiation. The strategy period in 2014-2016, the Services and Digitalization period, was about service differentiation and growth, and during this time Kone also renewed its innovation approach.¹³⁹

Five key development programs were defined for each strategy period. Development programs supported improving the competitive advantage

¹³⁶ Investor day event in London, September 24, 2014 and September 29, 2017, Kone archives.

¹³⁷ Investor day events in Helsinki, September 28, 2016 and in London, September 29, 2017, Kone archives.

¹³⁸ Modified based on investor day event presentation, September 28, 2016 and September 29, 2017, and Kone strategy presentation, 2017. Kone archives.

¹³⁹ Same as above.

as defined in the corporate strategy. These key development programs were internally called must-win battles, based on a concept by Killing and Malnight (2005). The must-win battles concept is defined to consist of "three to five key battles that ... [an] organization absolutely must win to achieve its key objectives" (Killing, Malnight, & Keys, 2005: 3).¹⁴⁰ The purpose of the key development programs was to concretize the changes and help create and maintain focus for each three-year strategy period at a time. In other words, they were means to "bring the strategy to life".¹⁴¹

In fact, Kone included the must-win battles in its annual planning process. The whole company set clear annual targets for how these development programs would be visible in growth and profitability (Alahuhta, 2015). These key development programs also served as an umbrella for more detailed product, process and IT development projects, and they thus guided prioritization of the development work and the allocation of company resources to it.¹⁴² Table 12 summarizes the development programs, also known as must-win battles, from 2005 to 2016.¹⁴³

2005-2007 Collaboration for growth	2008-2010 People flow experience	2011-2013 Challenging industry leadership	2014-2016 Differentiation and profitable growth in a changing environment
Customer focus	Customer focus	Customer experience	First in customer loyalty
Product and service excellence	People Flow® solutions	Employee engagement	A winning team of true professionals
Operational excellence	Operational excellence	Innovative solutions for People Flow®	The most competitive People Flow® solutions
Sourcing	Environmental excellence	Service leadership	Preferred maintenance partner
Focus on Asia	People leadership	Delivery chain excellence	Top modernization provider

Table 12: Development programs during strategy periods 2005-2016.144

Global process architecture was a central element in all of the key development programs. A great deal of process and IT tool development was conducted, especially in the *customer focus* and *operational excellence* development programs. In all of these initiatives, process architecture served as an enabler. In the beginning, process development work started with certain core business processes, namely, *customer* and *delivery* processes, including supply chain and service business, as I will elaborate later in more detail. *Customer focus* was continued as a key development

¹⁴⁰ The history of the must-win battles concept as a strategy tool at KONE is described in Alahuhta, 2015. See also Killing, Malnight, & Keys, 2005.

¹⁴¹ Kone strategy presentation 2014-2016, Kone archives.

¹⁴² Kone presentation, "Case KONE: Developing global process capability". A alto University, 30 March 2012

¹⁴³ Kone strategy presentations 2005; 2008; 2011; 2014; Investor day events 2005; 2008; 2011; 2014, Kone archives.

¹⁴⁴ Based on Kone strategy presentation, 2017, Kone archives.

program during the entire research period, and it was supported by process and tools development. During the first two strategy periods, *operational excellence* was defined as a key development program, focusing on improving supply chain and maintenance business processes and their productivity and to a large extent the process development practices were defined and managed under them.

The purpose of what follows is to describe the global harmonization events, and, thereby, to describe what elements and processes of the case company's organization with subject to global integration and what type of meta-processes took place in this integration process. The research framework presented in Chapter 3 will then be used to analyze the "company way" i.e. the harmonization initiatives, the contradictions arising from the integration efforts, as well as the choices the case company made in managing these contradictions.

The first strategy period with the new strategy, 2005-2007, focused strongly on process alignment across the company, with the purpose of speeding up strategy implementation and harmonizing the ways of working.¹⁴⁵ New process architecture built on earlier process development work that had started under a global harmonization program, Kone Model, a decade earlier. The previous process model had evolved into a highly scattered process framework, providing unequal support for different processes and different business units and functions, and the company was even lacking a default company level ERP configuration.¹⁴⁶ Frustration existed because of earlier issues with the IT solution implementations that in some cases may have had a negative impact on local businesses. In fact, Kone acknowledged that it had invested a lot in developing manufacturing, support functions and systems to meet global business requirements, and that, while doing this, certain local problems had gained too little attention.¹⁴⁷ For example, the earlier implementation of global processes and products had led to issues in delivering products to customers in the local business unit in United States.¹⁴⁸ As part of the new strategy planning in 2005, it was emphasized that the new Kone Way would be an operating model, and not a strict IT system initiative.¹⁴⁹ In the end, IT development ended up having a key role, both as an enabler, and as a hindrance in the harmonization journey. Moreover, in 2006, Kone signed a contract to outsource IT infrastructure, and unfortunately this led to several issues (Alahuhta, 2015) impacting the operating model development as well.

The Kone Way was also about finding a balance between global and local needs. In a global process workshop, the target for the Kone Way

^{145 &}quot;Miten omaksumme uuden strategian", Hissilehti, 2005/2: 1-3, Kone archives.

¹⁴⁶ Kone strategy presentation, 17.5.2005, Kone archives.

^{147 &}quot;Katsaus vuoteen 2004", Kone Hissilehti 2004/2, Kone archives.

^{148 &}quot;Katsaus vuoteen 2004", Kone Hissilehti 2004/2, Kone archives.

^{149 &}quot;Miten omaksumme uuden strategian?", Hissilehti 2005/2, Kone archives.

was described as having "global processes, information systems and IT architecture that allow consistent global information sharing and communications, and improved speed of changes when things are done once; lower cost of operations, and aligned people, processes and structures globally".¹⁵⁰ Implementation discipline was emphasized, but, in practice, global harmonization was not forced. Indeed, in 2006, the company wrote in its annual report that they "applied common global processes, whenever this offered economies of scale or better promoted the achievement of quality in operations". Similarly, in the global process workshop in 2006, the target was defined to be 'focused flexibility', which means deciding which processes should be fixed across locations, and which ones should be allowed to vary depending on local needs.¹⁵¹ The same demand was illustrated in a quote by a country unit managing director in a leadership training program in 2014: "I think that we are good and ahead of many competitors in terms of standardization and also harmonization of our products. Now when we go forward, and when we continue to harmonize our processes, I think we should do it in such a way that allows country units to react more to market changes."152

Structures and Processes

The way Kone had operated was that of a hybrid organization, with a mixture of global and multinational management and, as mentioned, the company had, at the same time, both global operating models and strong regional organizations.¹⁵³ Kone changed its operational mode drastically in 2005, assigning responsibility for business development activities to global business units while focusing area and country unit organizations on dealing with customers.¹⁵⁴ Accountability for customer relations was defined to lay with the areas (Asia-Pacific, Southern Europe, Central & North Europe, and North America) and local country units. Global business units were given responsibility for the competitiveness of products, services, processes, and common resources.¹⁵⁵ Primary profit and loss responsibility was assigned to regional business units, whereas global business units were responsible for global company resources, such as global product development, manufacturing, sourcing, as well as the development of business processes and information systems. However, the regional business unit leaders were involved in decision making over the prioritization of global process and IT development projects and resource allocation. The renewal of leadership

¹⁵⁰ Kone process workshop May, 2006 in Helsinki, Kone archives

¹⁵¹ Kone process workshop May, 2006 in Helsinki, Kone archives

¹⁵² Leadership training program, May 2015, Kone archives.

¹⁵³ Michelsen, 2013; Alahuhta, 2015

¹⁵⁴ Alahuhta, 2015; Kone Capital Markets Day in Helsinki, February 2, 2007 and June 11, 2010; News & Views, 2005/2

^{155 &}quot;Battles we must win", News & Views, 2005/2: 3, Kone archives.

structure was intended to improve interaction between countries, areas and global functions.

In practice, one of the key changes was to change the matrix organization to having both global business units and regional business units reporting to the CEO, and, in practice, the regional area heads were invited to the executive board with the global business unit heads. The purpose of this change was to give more weight to regional customer requirements in the global decision-making process. The CEO of the company explained the reasoning behind the choice of matrix structure in a magazine interview: "The matrix provides more information and views from different directions. This creates sensitivity for change".¹⁵⁶ Indeed, the purpose of the new operational mode and matrix leadership was to increase integration and harmonization between business units.

The new strategy statement described how Kone would give a performance edge to its customers with innovative solutions and services, and, simultaneously, its processes would be characterized by 'globally aligned operational excellence'. The process architecture was seen to play a key role in building this operational excellence.¹⁵⁷

Kone had suffered from a 'silo effect', with insufficient interaction between different functions, resulting in sub-optimization.¹⁵⁸ Processes were defined for specific business functions, lacking the end-to-end business process view across different organization units.¹⁵⁹

Kone started to develop a global process architecture, the Kone Way, to set a "holistic, solid base for the development work".¹⁶⁰ The development of the new process architecture was based on earlier process model work. The plan was to "incorporate the best features of the existing process model, and to add practical ways to optimize business benefits and spread business practices".¹⁶¹ The work would start with collecting the best practices from the organization. What is more, Kone decided to use the existing ERP solution, SAP, and modify the configuration of it to support the new process architecture.

Compared to the earlier harmonization programs, the main differences were that the harmonization was seen to be about an operating model rather than an IT system, and that it would focus on integration and harmonization between business units.¹⁶² As described earlier, Kone had been a forerunner in process management and had carried out major process management programs in the past. Even though the company had many virtuous processes

^{156 &}quot;Alahuhta notkistaa Koneen", Talouselämä, 2006/2.

¹⁵⁷ Kone strategy presentation, 17.5.2005, Kone archives.

¹⁵⁸ Alahuhta, 2015

¹⁵⁹ Kone strategy presentation, May 17, 2005, Kone archives.

¹⁶⁰ Investor day event in Helsinki, June 11, 2010, Kone archives.

^{161 &}quot;Customer focus is central in Kone's new processes", News & Views, 2005/2: 6-7, Kone archives.

¹⁶² Kone strategy presentation, May 17, 2005, Kone archives.

and practices in place, they were not bringing the full competitive benefit because the working environment consisted of too many functional silos not communicating well with each other. Now the plan was to move from these silos towards seamless full-chain processes.

The new process framework covered all key business processes for customer relationship management, supply chain management and product development. The company called these processes *customer*, *delivery* and *solution creation* processes. The *delivery* process also included the processes needed for service business. In addition, *management & support* processes included, for example, financial management, human resources management, and legal processes. Later on, service business processes were defined as a separate *maintenance* process in the process architecture. Figure 9 illustrates the high-level process architecture.¹⁶³

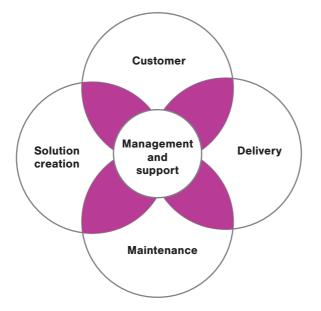


Figure 9. Illustration of the "company way" process architecture of the case company. (Copyright KONE corporation)

The new process architecture was targeted to be more holistic than its predecessors, and it focused on integration between core business processes and improving end-to-end information flow.¹⁶⁴ The earlier process development work had been specific to functions and units, and even if a lot of process development work had already been done, it had not been on an integrated level from the corporate viewpoint. The new process architecture was said to be about "integrating processes to support each other, taking a full chain view from tendering through product design and

¹⁶³ Investor day event in Helsinki, June 11, 2010, Kone archives.

^{164 &}quot;Upward trend", News & Views 2006/1: 3, Kone archives.

R&D, packaging, labelling, and storage to installation and maintenance, working in one direction in all these processes – towards the customer, working together to delight the customer".¹⁶⁵ The new "company way" was said to be about "improving successful performance in productivity, operational excellence and quality across the organization".¹⁶⁶

Thus, the Kone Way processes aimed to change the "company way" of working from a functional approach to a customer centric approach¹⁶⁷ in order to move from silo thinking towards seamless full-chain processes, and to shift attention from profit centers to customers. The potential tensions between exploration and exploitation were identified, and it was stated that "Harmonization of the operating model creates a common ground for businesses, but it does not help our innovativeness".¹⁶⁸

Two core business processes were selected as a starting point for the process development work, covering *customer* (customer relationship management) and *delivery* (supply chain and service business) processes. The customer focus also meant a change from a company internal to an external view. The implementation of the Kone Way aimed to create a foundation for a higher-performing company through systematic process improvement. However, a risk was recognized that the development of business activities would cause the company to become too inward-looking.¹⁶⁹ One concrete indication of this was the decision to stop talking about internal customers. Instead "research, product development, manufacturing, sales marketing, service, maintenance, human resources, and all our other functions are, to a growing extent, falling in line with our core value: they each aim at delighting the customer in their own way".¹⁷⁰

The company had earlier been strongly focused on technology, and, now, focus was shifted to both technology and customer.¹⁷¹ The customer focus was set as a starting point, and it was seen to require not only the right mindset, but the systematic analysis and application of processes that create customer value. The Kone Way process work started with the global *customer* processes (in general, these business process frameworks are typically referred to as customer relationship management processes). The company started to measure customer satisfaction, and a unified customer loyalty survey was taken in use. This was intended to build up customer capabilities and related marketing and sales activities. What is more, new *customer* processes were defined, and a novel customer segmentation was defined. Investments were also made in ambitious sales

^{165 &}quot;Building a better way", Kone Move 2007/1: 8-11, Kone archives.

^{166 &}quot;Kone is on the right track", Kone Move magazine, 2009/3: 4-5, Kone archives.

^{167 &}quot;Battles we must win", News & Views, 2005/2: 3, Kone archives.

^{168 &}quot;Katse tulevaan", Hissilehti, 2004/2: 2, Kone archives.

^{169 &}quot;Battles we must win", News & Views, 2005/2: 3, Kone archives.

^{170 &}quot;Building a Better Way", Move Magazine, 2007/1, Kone archives.

¹⁷¹ Investor day event in Helsinki, June 11, 2010, Kone archives.

management training programs for developing sales competence. This was done by personnel training and, for example, sales competitions that were new to Kone (Alahuhta, 2015). A new IT tool was selected for the customer relationship management to enable a more customer-oriented approach and more efficient management of customer information.¹⁷² Also, e-business solutions were introduced to customers, for example, a web-based (design) solution for architects, including a 3D-modeling solution.¹⁷³

The work to improve operational excellence culminated in the *delivery* process, consisting of supply chain and service business processes. These processes impacted most of the company employees and their ways of working. Process improvements consisted of, for example, optimizing the logistics network, reducing delivery times, and improving installation productivity.¹⁷⁴ Kone developed installation methods with tools and procedures for training and safety to make sure that quality is high everywhere.¹⁷⁵

Kone started to streamline the ways of working in the service business and introduced a new harmonized maintenance practice to improve its productivity in field activities.¹⁷⁶ The new maintenance practice was implemented in thirty countries, and it included module-based maintenance methods that were developed by reviewing and evaluating the best practices that existed in Kone's maintenance operations.¹⁷⁷ Kone also developed a realtime customer service concept that included remote equipment monitoring services, field terminals for field personnel, web-based customer services and a call center concept for service customers and end-users.¹⁷⁸ Kone had earlier cooperated with Nokia in technology development projects to use wireless technologies to develop Kone's remote monitoring systems.¹⁷⁹ Soon, process development supporting the maintenance process was moved from being under the *delivery* core process to a core process of its own, reflecting the importance of the growing service business.

During the harmonization work, Kone, like many other companies, faced the challenge of balancing business flexibility and standardization, and it needed to manage the conflicting demands arising from the needs for balancing business flexibility and standardization. How to gain the benefits of being local, regional and global at the same time while achieving efficient business processes and operations? This was also the theme in a major process workshop with the global change managers in 2006. The role

¹⁷² Kone Annual Report, 2006.

¹⁷³ Kone Annual Report, 2006; Kone Annual Report, 2007.

¹⁷⁴ Investor day event in Helsinki, February 2, 2007, Kone archives

^{175 &}quot;Building a better way", Move magazine, 2007/1, 8-11, Kone archives.

¹⁷⁶ Kone Annual Report, 2006.

¹⁷⁷ Kone Annual Report, 2006.

¹⁷⁸ Kone Annual Report, 2005.

¹⁷⁹ Kone Hissilehti, 2004/4: 1, Kone archives.

of the change managers was introduced to support the implementation of the Kone Way in their local units, and they faced the challenges between global and local needs. The organizational approach of global companies was understood to have a high degree of business standardization and a lower degree of business flexibility, whereas Kone had been pursuing flexibility and standardization country by country and business unit by business unit. The disadvantages of this were identified as: high costs of doing business locally; incompatible information systems and IT infrastructure; and poor information sharing across business units. A target was set to leverage a global approach to business standardization with 'focused flexibility'. However, it seems that the space for focused flexibility was difficult to define.¹⁸⁰ The targeted benefits were to have global processes, information systems, and IT architecture that allow consistent global information sharing and communications, and improved speed of changes when things are done once; lower costs of operations, and aligned people processes and structures globally. Business strategy, processes, culture and organization would need to be consistent globally, which would take a long time to implement.

The development of the global harmonization was supported by the opportunities that the information technology evolution brought with it. In addition to business processes, the new "company way" included unified tools and better IT support. Local IT teams had been centralized and brought under a global information systems unit in 2004, and global business process implementation also required harmonizing of the IT solutions. The harmonization was also seen to improve information security and the reliability of IT systems.¹⁸¹ Project management methods were also harmonized. The project management methodology for Kone Way process and IT development projects were developed and introduced, complementing the project management methods that were defined earlier for the R&D projects.¹⁸² However, the contradictory demands for global information technology and local flexibility continued to exist. In 2006, Kone signed a global IT infrastructure outsourcing agreement with Hewlett-Packard to consolidate and maintain Kone's servers, local area networks and help-desks for the end-users and to harmonize desk-top computing environments in Kone's global network.¹⁸³

Kone had been an early adopter of ERP solutions and had started its first ERP projects in early 1990s.¹⁸⁴ In fact, modern commercial enterprise systems are relatively recent—SAP's ERP platform, for example, was introduced in 1992 (McAfee & Brynjolfsson, 2008). The development and implementation of the enterprise solutions by that time suffered from

¹⁸⁰ Kone process workshop May, 2006 in Helsinki, Kone archives.

¹⁸¹ Kone Annual Report, 2006.

^{182 &}quot;Operational excellence, beating the competition", Move magazine, 2008/2: 11, Kone archives.

¹⁸³ Kone Annual Report, 2006.

^{184 &}quot;Zeus project targets harmonization", News & Views, 1997/2: 26-28, Kone archives.

the lack of a holistic view and often turned out to be mere information technology projects. The enterprise solutions by that time were not yet mature, and often required company-specific customization work to support the business processes (Michelsen, 2013). Similarly, at Kone, these projects had required huge investments of both money and resources and had not reached the expectations that had been set for roll-out projects (Michelsen, 2013). Enterprise solutions in those days required a lot of customizing and programming to migrate the data from legacy systems, leading to additional costs and delays in the implementation projects.¹⁸⁵ The country roll-out projects in the case company had turned out to be expensive and time-consuming. What is more, they often impacted the unit's business performance negatively for a period of time after the go-live.¹⁸⁶ In 2005, the ongoing ERP implementation program was discontinued, and work was started to modify the ERP template before continuing the roll-outs.

In general, information technology was a key enabler for implementing globally unified processes, and they were seen especially important in logistics and field operations.¹⁸⁷ Information technology development provided new opportunities with, for example, mobile technology, location services, and various e-business solutions for customers.¹⁸⁸ The first field mobility solutions to support the service technicians working in the field were piloted in 2005. At the same time, Kone made the decision for a new CRM solution to support the *customer* process development and implementation and support the customer focus strategy.¹⁸⁹

All in all, the harmonized "company way" of working included a lot of investment in information technology. A concerted effort was made to rollout common tools within each core process, including CRM tools, SAP, internet and intranet tools, shared service center services, and mobile tools for technicians working in field operations. Common tools were needed in order to improve productivity, quality, operational excellence, and customer focus. Common tools and processes throughout the global organization were necessary for Kone to deal with the increasing volumes. The work to harmonize the existing ERP solution continued in order to support the harmonized processes and benefit from the shared service centers.

Company Culture

A cornerstone for developing a common company culture for the increasingly global Kone was to introduce the company values. Kone finalized the definition of its company values in 2006, combining both existing cultural strengths and new features representing change. The

^{185 &}quot;Systems improvement", News & Views, 1996/2: 20, Kone archives.

^{186 &}quot;Katse tulevaan", Hissilehti, 2004/2: 2, Kone archives.

^{187 &}quot;Tieto tuli Koneeseen", Tivi magazine, 2006.

^{188 &}quot;Tieto tuli Koneeseen", Tivi magazine, 2006.

¹⁸⁹ Alahuhta, 2015.

purpose of the values was described as "[supporting] Kone's traditional good working culture, while at the same time guiding operations in the direction indicated by the strategy".¹⁹⁰ Kone values were defined in order to guide behavior toward achieving the vision, whereas the Kone Way defined how people work and ensured consistency in operations.¹⁹¹ In accordance to the new values the company wanted to delight its customers, have energy for renewal and passion for performance, and be willing to win together.

In 2006, Kone also started to conduct global employee surveys regularly on an annual basis. Kone had conducted a global employee survey for the first time in the beginning of 2004. In 2006, Kone added new questions in the global employee survey regarding the new strategy and the results were used to support the change process and gain information on employees' understanding of the new strategy.¹⁹² The interim survey also highlighted areas in need of improvement. For example, employees would have liked to be able to participate in, and give more ideas about, the company's development and future success.¹⁹³

The new strategy was cascaded through the organization. A lot of effort was put on cascading and continuous communication of the strategy. The aim was to achieve a more unified performance with an improved understanding of the strategy, vision and business targets. This was achieved with the strategy communication process based on dialogue and interaction, and continuous updates through multiple channels (see also Logemann, 2013).

Leadership training programs were organized to support the change. Kone collaborated with an international business school, and the new program focused on change management. In fact, Kone has a long history in leadership development, as mentioned earlier. The need to build international management competence was identified early, and the very first international training management program was held as early as 1972, with the famous Igor Ansoff as one of the lecturers (Simon, 2009; Michelsen, 2013).

From early on, Kone also developed tools for virtual collaboration, including virtual meetings, instant messaging tools, and solutions for managing and sharing documentation.

On the other hand, daily life in a global, often virtual, work environment is not always easy for the leaders. Saarinen (2016) studied the management of global virtual teams at Kone, and research findings suggest that "a virtual working environment coupled with cultural differences, the pressure of time, and virtual work overload impoverished interaction between the Finnish managers and their Chinese team members and forced ... to be economical and efficient in their communication" (Saarinen, 2016: 72). What is more,

¹⁹⁰ Kone Annual Report, 2006.

¹⁹¹ Kone strategy presentation 2014, Kone archives

¹⁹² Interim employee survey shows strategy is on right track, Move 2007/2, Kone archives.

¹⁹³ Interim employee survey shows strategy is on right track, Move 2007/2, Kone archives.

Saarinen (2016) argues that virtuality alters the nature of cross-cultural managerial work as a virtual context narrows the scope of managers in global virtual teams and that the conflicting expectations create pressure on managers and lead to feelings of inadequacy (Saarinen, 2016: 74).

6.2.3 Common Vision 2008-2010

The next strategy period (2008-2010) started with a newly redefined vision of Kone being a people flow solutions company. The work on process harmonization continued and, at the same time, in 2008, Kone redefined itself as be in people flow business, which meant redefining its business model to be both contextually grounded and conceptually abstract (Doz & Kosonen, 2010). With this, Kone took on a functional, rather than a product-based, definition. As noticed in agile strategy literature, top management's central idea was that "rapid and continuing high-density urbanization will call for more innovative, short-distance, people-mobility solutions, beyond (but including) elevators and escalators" (Doz & Kosonen, 2010: 375), and this allowed for reframing the generation of new perspectives and new alternatives, by considering the possibility of applying different business models to the same business.

Kone was benefiting from several important megatrends that were driving its long-term market growth. Changing demographics, increasing demand for safety, performance and sustainability, and urbanization provided the elevator and escalator business with new opportunities.¹⁹⁴ Business development focused on customer and end-user focus, people flow understanding, operational excellence, and environmental excellence.¹⁹⁵ The new vision emphasized the end-user experience, thereby extending the company purpose beyond its traditional products and services.

The common "company way" of working, the Kone Way, had established its position as a foundation for the development of the company, together with the company values. Kone's strategy, targets, vision, development programs, focus areas, and values were consolidated into one picture, to support the communication of the redefined development programs and their connection to the vision and strategic targets of the company. The purpose of this summary was to illustrate how these elements come together, so that each employee would understand what all this means in their work.¹⁹⁶

The progress with the Kone Way during the first three years has been said to have helped Kone with the challenges that were brought by the 2008 world-wide financial crisis.¹⁹⁷ The development work had improved

197 Michelsen, 2013.

¹⁹⁴ Investor day event in London, May 7, 2008, Kone archives.

¹⁹⁵ Investor day event in London, May 7, 2008, Kone archives.

¹⁹⁶ Alahuhta, 2015; Kone investor day event in Helsinki, June 11, 2010. Kone archives.

the company's competitiveness and productivity. Kone continued the implementation of the Kone Way, for example to provide necessary tools for sales personnel.¹⁹⁸ In addition, Kone started to develop the agility of its various national organizations, and started a program to ensure uniform structures globally, and to flatten the organizational structures and broaden the span of control, thereby bringing "management closer to customers" and ensuring better "hands-on management". The objectives were thus to have flatter structure, wider span of control, more uniform structures for better internal collaboration, and to improve efficiency and speed.¹⁹⁹ On the other hand, despite the financially challenging times, Kone continued leadership training programs for the middle and senior management.²⁰⁰

Kone had become more globally balanced, and strong economic growth continued in China, ensuring a high enough number of orders for Kone.²⁰¹ The role of China increased during this time and Kone continued to grow in China faster than the market. The geographical coverage in China was also becoming more important than before. Kone was actively developing its operations in China and extending its product offering portfolio to also address the lower-end segments of the market. Kone strengthened its competences in China including leadership and management and competencies for sales and management of large projects and R&D.²⁰² What is more, the need for strengthening IT expertise and support in China was recognized, and a local IT competence center was created to allow sufficient IT resource allocation to China needs.²⁰³ The strong local presence in China contributed to the positive development in China. The urbanization in China was moving from coastal cities to cities in central and western parts of the country and the government was investing there as well. Growth in new equipment market in China focused particularly on the 2nd and 3rd tier cities that were being built with speed, with fastest growth rates driven by strong urbanization development and plenty of infrastructure projects, such as airports and metros. Major 1st tier cities (Shanghai, Beijing, Guangzhou, and Shenzhen) continued to have significant volumes, but with lower growth rates. 204

In China, the volume of business transactions increased rapidly, as the business needed to manage the growing number of tenders and orders, and this gap was partly filled by recruiting more people. A decision was made to ensure sufficient IT support for China to help managing the increasing volumes and rapidly growing number of business transactions. In 2010,

¹⁹⁸ Alahuhta, 2015.

¹⁹⁹ Kone Annual report, 2009; Investor day event in Helsinki, May 5, 2009, Kone archives.

²⁰⁰ Alahuhta, 2015.

²⁰¹ Michelsen, 2013.

²⁰² Kone investor day event in London, May 7, 2008, Kone archives.

²⁰³ Kone investor day event in London, May 7, 2008, Kone archives.

²⁰⁴ Kone investor day event in London, May 7, 2008, Kone archives.

a plan was prepared to start harmonizing the China-specific processes, local ERP configuration and local IT tools to Kone's global model. A gap analysis revealed major differences in the organizing and processes, e.g. in the tendering process. Business and transaction volumes in China business were higher than what the global IT solutions were designed for.²⁰⁵ For example, the tendering solution that served the European business well was found to be too slow to use in a China team, where keying in tendering data was a full-time job for a back-office team.

During this time, the development of global human resource management processes was a focus area. In fact, in 2008, people leadership was chosen as one of Kone's development programs. The work to harmonize key people processes continued, and common tools for recruitment and performance management were started. Kone introduced a global employee master data system, and harmonized role descriptions and a global grading system were launched and implemented across the company. Global guidelines on coaching and mentoring were published and deployed, and a common online tool for documenting performance discussions was rolled out.

The definition and harmonization of roles was part of the global process architecture. Alignment of all company employees with applicable role descriptions was important to all core processes. Uniform role descriptions created a common framework for how the company sells, installs, maintains and modernizes its product all over the world.

6.2.4 Differentiation 2011-2013

Alongside urbanization development, new customer expectations emerged, creating demand for better user experience and people flow. With the need for more sustainable urban environments in the future, the rise of systems enabling centralized building and people flow management, optimization of building support and maintenance operations were foreseen. Smarter buildings were seen to be part of the future development of the elevator and escalator industry.

Elevators and escalators were getting smarter, and Kone introduced its People Flow Intelligence solutions for various customer segments. This solution is designed to guide building visitors and tenants to their desired destination, while at the same time improving building security. These solutions are also third-party compatible, which means that building owners can connect them to the existing systems in their buildings. The solution recognizes the user and enables them to enter the building and arrive at their home door without opening any doors manually or pressing any buttons. This approach differed from the company's earlier product-centered culture where product technologies and product features were seen as key (Salonen,

²⁰⁵ China update in a Global Development meeting, 2012, Kone archives.

2011). Kone grew its ability to integrate into building access and control systems whereby it can deliver more complete solutions in collaboration with partners (Salonen, 2011). Kone also acknowledged the need to extend beyond the firm boundaries and rely more on partners for innovation and started looking for new technologies that would enhance the user interface and enable developing customer-driven solutions.

In fact, IT system development got an outstanding role in the "company way" implementation. This is also summarized in a joint interview of the company CIO and CFO in a business magazine: "Since the Kone Way launch in 2005, information technology has been in the center of the strategic development of the company. Process architecture defines, how the company operates. CIO is the development director, and the entire executive board takes part in IT discussions." In the same interview, the role of IT was emphasized further: "Process harmonization is the most essential thing. Kone has succeeded in understanding the value of IT across the entire organization. IT is certainly not a support process, and in fact IT is an essential part of company culture".²⁰⁶

Year by year, Kone had increased its investments in research and development (see Appendix 2). Kone's focus on innovations was also noted outside Kone internationally. As mentioned earlier, in 2011 Kone was recognized by its innovativeness, when Kone was for the first time listed among Top 100 innovative companies of the world by the U.S. based business magazine Forbes, being the only elevator and escalator company on that list. In 2013, Kone especially mentioned that it is investing in areas supporting growth including footprint in Asia-Pacific, and also in R&D, process development, and information technology.²⁰⁷ A new elevator concept was launched in 2012, and in 2013 Kone introduced a new radical innovation, as mentioned earlier. A lightweight carbon fiber robe enables building and installing elevators in up to one-kilometer tall buildings.²⁰⁸

Between 2004 and 2014 the elevator and escalator industry went through a growth cycle, because of emerging China market.²⁰⁹ Whereas, in other markets, the expansion has been through acquisitions, the growth in China took place through organic growth.²¹⁰ In 2011, Kone also increased its share in a local joint venture, Giant Kone, that it had established in 2005. Gradually, Kone brought more Kone Way processes to Giant Kone, however, Giant Kone's own identity, product portfolio, and market focus were retained, so that Kone operated in China with two strong brands.²¹¹ In practice, Giant Kone's operations were supported by global processes in selected areas,

- 209 Investor day event in London, September 29, 2017, Kone archives.
- 210 Alahuhta, 2015.
- 211 Alahuhta, 2015.

^{206 &}quot;Puhuvatko it-johtaja ja talousjohtaja koskaan rahasta?", Tivi CIO&CFO (2011), 25 December

²⁰⁷ Kone Annual Report, 2013.

²⁰⁸ Kone Annual Report, 2014.

such as financial reporting and sourcing, but they did not interfere with actual business operations.²¹² What was different compared to many other multinational companies operating in China was that, in Kone, it was mostly local employees who were responsible for the business, not expatriates. For example, in 2013, when Kone had 10,000 employees in China, the number of expatriates in China was as low as forty.

Kone invested in personnel and leadership development in the fastgrowing China operations. A lot of focus was put on recruitment to fulfill the resource needs arising from the fast growth of operations. Kone focused on developing its leadership competence in China, and Kone built a strong local leadership team. Kone's global learning and development unit carried out the same training programs in China as was carried out globally, including field supervisor development programs.

However, in China, the implementation projects of the global tools were not progressing as planned. Global processes and IT solutions were not initially designed for the needs of the fast-growing business in China. The main differences compared with other local business units were due to very high transactional volumes, due to performance issues that resulted from slow connections through Chinese firewalls, and due to different business models and clock-speed of business. For example, whereas other countries run certain customer reports weekly, China needed them daily, creating an unexpected load to the systems. China's business volumes were important for the success of the entire company, and therefore many exceptions to using global processes and tools were accepted, for example, accepting delays with moving from local tools to global systems.

6.2.5 Services and Digitalization 2014-2016

During the strategy period of 2014-2016, the Kone Way process architecture started to be increasingly challenged; and calls were made for an even more holistic Kone operating model approach. A need was identified for the Kone Way to evolve from a process framework to cover all elements of the operating model.²¹³ Governance structures were reviewed, and a change proposal was made to use existing line management meetings for Kone Way governance, when possible, instead of separate Kone Way steering meetings. This was to ensure the coherence of the Kone Way and business decisions.²¹⁴

On one hand, the consistency of the processes was understood to be important in order to reach strategic targets, and to improve productivity

²¹² Alahuhta, 2015.

²¹³ Kone Way consistency program presentation in the global IT team meeting, June 2015, Kone archives.

²¹⁴ Kone Way consistency program presentation in the global IT team meeting, June 2015, Kone archives.

and profitability. On the other hand, a clearer specification was requested for what should be harmonized globally and what was the room for local flexibility. Prioritization decisions were often made centrally, without local leadership involvement. There were needs to bring decision making closer to regional and local business, where direct business-related decisions were also made. Furthermore, the country units asked for more change management support to help them implement new processes and tools.

Despite the success that harmonization had contributed to, the Kone Way started to be challenged, and it was time for the next phase in the Kone Way program. The consistency of the processes and ways of working continued to be seen as necessary in order to reach the company's strategic objectives, and to improve its productivity and profitability further. A clearer specification was created for what needs to be done in the same way everywhere, what are the alternative options, and what is the appropriate room for flexibility in local ways of working. The key idea was an approach with mandatory consistency only where it made sense: not everywhere. Benefits were seen to be, for example: simplicity for employees through clear roles and responsibilities; superior customer service through consistent customer experience; and increased business efficiency through scalability, cost structure and productivity.²¹⁵ The existing Kone Way priorities were seen to support individual process development, however, they were slow in reaching a big enough impact, and they lacked a big picture.²¹⁶ A proposal for rebuilding the Kone Way addressed the identified disconnection between different Kone Way elements, such as processes, roles, organization, IT tools, and data.²¹⁷ For example, Kone Way processes were evaluated to be static and partly too generic, without clear connection to the actual roles of the employees, such as sales personnel or technicians working in the field operations. Role descriptions were outdated and incomplete and not based on tasks in processes. Similarly, the Kone Way provided limited guidelines for organization structures. IT tools had also been implemented without clear process and role connections. Finally, data management practices were not consistent.218

Kone increased its focus on service businesses in order to accelerate growth in maintenance and modernization. One of the most important milestones was that Kone's global maintenance base exceeded one million units in service. Kone expressed its target to be an even more highly differentiated maintenance provider with superior customer service and customer communication, and a company effectively leveraging productivity-enhancing technologies, such as field mobility tools.

^{215~} Kone Way consistency program presentation, 2015. Kone archives.

²¹⁶ Kone Way consistency program presentation, 2015. Kone archives.

²¹⁷ Kone Way consistency program presentation, 2015. Kone archives.

²¹⁸ Kone Way consistency program presentation, 2015. Kone archives.

At the same time, digitalization and the increasing speed of technological change was identified as an opportunity, both in improving Kone's productivity, and in providing added value to customers. The opportunities in information technology and digitalization were seen to enhance process and system development. Productivity improvement was realized, for example, because of an optimized maintenance schedule and the use of historical and remote monitoring data. New technology was also seen to start shaping the business. Digitalization was seen to enable the delivery of new value-added services to customers and an improved quality and productivity of operations.

Moreover, the ways of working needed to increasingly foster both efficiency and innovation in the company. When facing the pressures emerging from accelerating technological development, Kone found itself to be too shortterm focused and risk-avoiding, and it had significant internal silos across the organization.²¹⁹ This topic is explored in the following.

In September 2015, Kone announced organizational changes in order to strengthen its technological innovation capability. As a data intensive company with 450,000 customers and with one billion people using a Kone equipment every day, Kone was in a position to benefit from digitalization opportunities.²²⁰ Kone established a new Technology and Innovation unit, which brought together the research and development (R&D) and IT functions to meet the development needs in a changing business environment in the elevator and escalator industry with the opportunities emerging from the accelerating digitalization development. Kone also established a new business entity to reinforce the development of new solutions based on digital technologies for service business.

Kone extended its R&D and testing facilities in various locations to be more global with core hubs in different continents, following the principle that R&D centers need to be located close to key markets. In 2016, R&D and manufacturing facilities were expanded in Allen, Texas. Capability development in India continued with the focus on software development capabilities. Kone also renewed its testing facilities in Lohja in Finland to upgrade capabilities to develop high-rise elevators.²²¹

Kone also increased the external focus in its innovation management. As mentioned earlier, Kone had identified the changes taking place due to increased open innovation, moving the locus of innovation outside of company borderlines. Kone decided to focus its partnership efforts on technology partners, start-ups, smart building partners and customers.²²² As mentioned earlier, in 2016 Kone established a partnership with IBM to access the IoT platform and developer community in order to build customer

²¹⁹ Innovation management development project presentation, 2015. Kone archives.

²²⁰ Investor day event in Helsinki, September 28, 2016, Kone archives.

²²¹ Investor day event in Helsinki, September 28, 2016, Kone archives.

²²² Investor day event in Helsinki, September 28, 2016, Kone archives.

solutions by utilizing new technology.²²³ Kone also started to organize socalled hackathon events, an innovation concept where start-up companies are invited to innovate customer solutions. Kone worked on identifying customers and partners with which to co-create new innovations for smart buildings.

New technologies and connectivity solutions provided an opportunity to add value for customers, and, at the same, new technologies changed customers' expectations. This also encouraged product and service development to be done in closer collaboration with customers and partners. Kone was also increasingly working on developing partnerships with, for example, technology partners, start-up companies and smart building partners. For example, through co-operation with IBM Kone develops analytics capability to collect and store equipment data and build value-creating cloud-based services to its customers. Similarly, a strategic partnership with Salesforce enabled Kone to deliver faster, smarter and more personalized service to its customers.²²⁴

6.3 How Was the "Company Way" Construed in the Case Company? (RQ1)

6.3.1 What Elements and Processes Were Subject to Global Integration? (SRQ1.1)

As described earlier, the Kone Way was defined as a new way of working, the purpose of which was to speed up both the implementation of strategy and harmonization of the ways of working. Its main purpose was to support the implementation of the new strategy that was launched in 2005, by developing and implementing a global operating model. One of the overarching themes was to improve communication and collaboration between different functions.

Based on the analysis of the historical documents and the analytical chronology of the research period, it is possible to identify the elements of the global operating model, or the globally harmonized ways of working. In fact, the findings of the content of the operating model are in line with the existing literature, as will be elaborated in the following. The Kone Way consisted of the same elements as the "company ways" of some other firms: standardized business processes, technology, and organizational roles (see e.g., Lessard & Reavis, 2009).

As described in the research design of this study, the case period included two major harmonization programs, both of them sharing the

²²³ Investor day event in Helsinki, September 28, 2016, Kone archives.

²²⁴ Research & development strategy document, 2018, Kone archives.

same purpose: to prepare the company for increasingly global business. In general, both programs consisted of many same elements, but there were also differences. The first global company-wide program, the Kone Model, was more focused on function-wise process development and it was largely about ERP (SAP) implementation. The second program, the Kone Way, emphasized communication and collaboration across different functions and end-to-end process definition. It was deliberately defined to be more of an operating model than an IT project. Overall, however, IT was in a central role in harmonization.

I have categorized the key elements of the operating model into following groups: processes, IT tools and data, organizational roles, and governance. In addition, several culture and leadership related developments were introduced as part of the "company way". In fact, the term "company way" was used broadly to reflect various ongoing changes, referring to the new strategy and the ongoing change in general. This was echoed in the media, at least in the company's home country, in copious interviews and stories published about Kone's spirit and smooth processes.

Business processes

The core element of the new "company way" was a redefined process architecture that served as the core of the new "company way" of working and created a foundation for other improvements. As described earlier, process architecture was developed to set a foundation for supporting the shift to a truly global company and it was structured around five core processes with global coverage.

Process architecture was structured around core processes, in line with the process structure that is typical for organizations: a product development management process, a supply chain management process, and a customer relationship management process (see for example Davenport, 1993; Hannus, 1993; Srivastava, Shervani, & Fahey, 1999). The business processes constituted of process hierarchy from core process to work process level.

Each business process was given a named global process owner. Each global process owner's role was defined to be to understand business requirements in relevant supply and front-line units, as well as developing and implementing new business processes, tools and initiatives. Also, they were assigned the responsibility to ensure the alignment between the core processes and their collaboration. Additionally, each core process was named a business process owner from the top management. Together the global process owner and the business process owner were responsible for the global prioritization of the development and deployment of the processes, as well as for the consistency of the process implementation of across countries.

The purpose of the global processes was to define the "company way" of working. The central idea behind the introduction of the "company way" of working was to increase integration and harmonization between different business units. In practice, this meant removing overlaps in different process areas to improve productivity, clarify responsibilities and emphasize collaboration, change the company from a function-driven to a process-driven organization and enhance collaboration and full-chain view. The Kone Way was thus essentially about collaborating and removing silos. What is more, the key idea of the new operating model was to identify the best practices from within the company and deploy them globally across the company.

The new "company way" model laid out the structure and ownerships for the strategic change. It also provided a common language globally across the company. The process architecture was also well noted outside Kone, and it is possible that the outsiders had a more glamorous view on the degree of harmonization than the company employees had. The process model was clear on high-level, however, the work process level for some processes was non-existent. The newly defined business processes covered the end-to-end processes, e.g. *customer* process from order to invoicing, however they did not completely remove the silos.

IT tools and data

IT was both an enabler for global process harmonization and, at the same time, a bottleneck for the harmonization. IT development was often expensive and required vast amount of resources. Also, various IT development initiatives were often highly dependent on each other, and for example a business solution deployment in a certain country needed to wait until an IT infrastructure or IT platform development project was finished. The development of IT and other tools was organized in development portfolios according to the core processes. In addition to business process definition, IT tools and data were essential parts of process development and implementation.

The "company way" program that was started in 2005, was planned to be firstly an operating model, not a "strict IT system". The reluctance for the IT-driven change was a consequence of the previous global process and ERP implementation projects, which, in some cases, had a negative impact on business due to issues in implementation. However, the potential was seen in IT solutions to support productivity improvements and to create a foundation for building new solutions to serve the customers. In fact, the "company way" development was highly dependent on the IT projects. The company viewed IT as a central enabler, when it implemented globally unified processes, and saw that, especially in service-business, the potential of IT is remarkable. The Kone Way was also said to mean "better IT tools and support" and establishing a global IT function and central IT services can be seen as a key element in creating the global "company way" of working.

IT can be seen as both an important enabler and a major restriction for changes; with constant battle over limited development and rollout resources, and over the performance of the IT tools as described in the historical narrative, the first ERP implementations were challenging. Perhaps because of this, when the new Kone Way process architecture was introduced in 2005, the emphasis was laid on the processes and operating model, not on the IT system. Earlier IT projects had faced a lot of challenges, such as negative business impacts after rollouts, and this was to be avoided. In practice, however, information technology turned out to play a central role in the Kone Way development and implementation. Information technology was a key enabler for productivity tools, such as mobile tools for field workers. At the same time, it also became a constraint for process harmonization due to high IT development costs, lack of development resources and due to strong dependencies between the copious IT tool implementation projects.

On the other hand, old core and local legacy IT solutions hindered achieving the targeted IT savings. Based on the research material it is evident that Kone's investments in IT, like those of many other companies, had produced an organically grown, heterogeneous technology environment with high complexity and operating costs (see also Brynjolfsson & Hitt, 2004). Kone made decision to continue with the existing ERP solution and to modify it to support global harmonization, following the example of other companies who took the initiative to integrating multiple, regional enterprise solution systems into unified, global enterprise solutions models.

Organization and people

Global role descriptions were created for the roles that were used in process (flow) descriptions. Consequently, organization and roles were defined for the new ways of working. Organizational changes started from top management in setting up the new structure of the executive board, with both global business units and geographical business areas reporting directly to the CEO. Globally standardized roles were also introduced together with the process descriptions, providing the guidelines of the responsibilities and competence requirements for the common roles worldwide, e.g. for sales, installation, and maintenance. During the research period (2005-2016) the company implemented global HR processes.

$Governance\ model$

The decisions over the process and IT development were done on global level to ensure company level priorities and alignment with global strategy. Different decision-making forums were established. In fact, a governance model was organized around the process architecture. Kone Way defined the process architecture and according to it defined the governance model to decide over resource allocation between business processes and geographies. Development projects were grouped in Kone Way process portfolios. Prioritization and resource allocation decisions were made by the global process owners and solution owners in a Kone Way portfolio steering meeting. Strategic decisions were made in a governance council consisting of Kone's top management. In addition, (geographical) area steering were set up for country-level alignment.

Top management was involved in deciding the global priorities, which is in line with the dynamic capabilities framework: management plays distinctive roles in selecting and developing routines, making investment choices, and in orchestrating non-tradable assets to achieve efficiencies and appropriate returns from innovation. The structure set up by the five core business processes defined the ownership of various changes and defined the development portfolios of the process and tools development and implementation projects, as well as for the allocation of investment money and other resources as described earlier.

However, the governance model for the "company way" was headquarters focused and local country business units were often unaware of plans, without enough rollout and change management support.

The key development programs (internally called must-win battles) defined the priorities of the operating model improvements and made it possible to connect each project to a strategic objective. What is more, as recalled afterwards by several employees separately, must-win battles provided a concrete meaning for the projects and helped to position the work of an individual employee relative to the strategy.

Culture and leadership

The case company had been among the first Finnish companies to internationalize; it had invested in developing international management capability from early on. Company values were introduced at the same time with the launch of global processes, supporting the idea of the common way of working globally across the company. The company values were introduced to both support the existing cultural strengths of the company and to develop new cultural features that were necessary, such as renewal (change) and collaboration. The company started to carry out regular employee and customer surveys. Leadership development had a central role in creating a global mindset and changing the ways of working globally, with targeted training programs for the senior and middle management of the company, as well as for the field supervisors and team leaders in the company. At the same with the process development, the company was developing its culture, and introduced company values in 2006. Kone Way was seen to define how people work and to ensure consistency in operations whereas Kone values were defined in order to guide the behavior toward achieving the vision.

Values soon established their place in everyday language within the company. Important to all core processes has been the definition and harmonization of roles and aligning all company employees with applicable role description. Establishing uniform role descriptions was seen valuable to create a common framework for how the company sells, installs, maintains and modernizes its products all over the world. The "company way" was said to be about improving successful performance in productivity, operational excellence, and quality across the organization.

6.3.2 What Differences Were There Between the "Company Way" and Earlier Harmonization Programs? (SRQ1.2)

As described in the methodology chapter, the case time was selected so that it covered two major harmonization programs in the case company. In fact, the research period in my research provides a unique opportunity to explore and also to compare two main change initiatives to harmonize the ways operating model ("company ways" of working). During the case time, the company invested a remarkable amount of effort and resources in building the systems and processes necessary for the globalizing business environment. The company greatly benefited from the prevailing megatrends, especially the urbanization, and on the other hand the globalization of the industry and the business environment has set new, often conflicting requirements for the way how the company operates.

The first of the harmonization programs in the scope of this study is the Kone Model, which was effective from 1994 to 2004. The second harmonization program, called the Kone Way, started in 2005. This study follows the Kone Way program until 2016, however the Kone Way development and deployment continues further. The two harmonization programs contain several similar elements, and in fact the latter one builds on work conducted in the previous one. The drivers for the harmonization were different, and the contextual factors differed remarkably. In the following, I will summarize the key differences found in this research. I will also discuss the possible factors behind the success of the latter program.

Table 13 provides an overview of the contextual factors and the harmonization actions taken during the case period based on what has been described in the analytical chronology in Section 6.2. Table 13 starts with years from late 1960s to early 1990s, when the company expanded geographically via acquisitions. It then looks at s from 1994 to 2004, during which the company changed from a multidomestic company to a multinational company, and s from 2005 to 2016, when the company strengthened the systems and processes needed in a global company. It also summarizes the context, the integration approach, and the key harmonization elements during these three time periods. As described in the research design, the international expansion time (late 1960s to early 1990s) is not in the actual scope of this case study, but it does provide useful background for the global harmonization programs.

	International expansion Late 1960s – early 1990s	From multidomestic to multinational 1994-2004	From multinational to global 2005-2016
Context	Industry was characterized by national and regional regulation and high competition. At the same time the industry was predictable, it was consolidating fast, growth via acquisitions were typical ("acquire or become acquired"). Growth through foreign acquisitions	Increased globalization of the world's economies, emerging markets in Asia-Pacific areas. Only few companies had the systems and structures to support increasingly global business. Increasing global customers and suppliers. Acquisitions, organic growth in China	Increased globalization, China business growth, urbanization as a megatrend, accelerating technological development and open innovation setting new needs for external collaboration. Acquisitions, organic growth in China, joint ventures and partnerships
Integration approach	Foreign subsidiaries were loosely integrated.	Focus on ERP implementation and global products	Global harmonization, company values, common vision
Harmonization via processes and tools Harmonization via structures	Acquired companies were only loosely integrated to the headquarters Financial control mechanisms were developed to integrate and manage the subsidiaries First process management initiatives started due to need to exchange information across units in different countries, such as the elevator delivery process Early IT adopter, among first Finnish companies to buy computers and establish information units Headquarter – subsidiary relationship	Product innovation enabled European-wide product concept and process and streamlined sales-order- delivery process and shorter installation times Introduced a business process model ('Kone Model') to standardize systems, processes, tools and business practices based on functions Harmonization and streamlining production and supply processes	Process architecture to support global company-wide process alignment New customer processes, customer segmentation, new CRM program, e-business tools, training for sales people and managers Harmonized product offerings based on global modular technology and global design concept Increasing role of information technology Systems and support for emerging markets, especially for capturing opportunities in emerging markets Matrix organization with geographical areas with primary P&L (profit and loss) responsibility and global business units
		escalator business in one unit Combined new equipment production and supply facilities in one unit Combined all R&D units into a global organization Established a global marketing unit	Global role descriptions Chinese subsidiary with own brand and own strategy
Governance	Centralized control "local decision making with global support"		Key development programs defined the priorities for process and IT development, global decision making
Leadership	Local leadership	Global company brand name	Redefined vision
	Identified the need for developing international management competence that was lacking	Opened a factory in China after a "slow start" in China	Company values
			Global leadership development programs
			Upgraded capabilities for China market

Table 13. Key harmonization efforts during different harmonization stages.	Table 13. Kev	harmonization	efforts during	ı different	harmonization sta	ades.
--	---------------	---------------	----------------	-------------	-------------------	-------

Developing and implementing a global "company way" of working has been a long process, during which the harmonization efforts have faced a lot of challenges. Some of the targeted benefits have realized slowly. However, these efforts seem to have supported the business performance development of the company. From 2004 to 2016, Kone experienced double growth compared to the market in China. From year 2005 to 2016 the sales increased from €3,242 million to €8,942 million, the operative income margin from 9.3 % to 13.8 %, and the number of employees from 27,238 to 55,075. Basic earnings per share increased from 0.98 to 1.98 during the same time. More details can be found in Appendix 2. The Kone Way has also gained a lot of positive attention in the media, and when looking from outside the company, the Kone Way seems to have been a success.

Why did Kone Way succeed better than earlier harmonization programs and what was different this time? Firstly, the drivers for global integration were different. By the mid-1990s, the company had grown fast and expanded geographically, and because of loose integration of subsidiaries, the company had become difficult to manage. By then, harmonization was driven by the need to improve business productivity. Also, the company and its industry needed to adapt to changes in the business environment due to the European Union development and opening of the markets as trade restrictions were being removed. Also, new product technologies brought with them opportunities to develop global products. In 2005, when the Kone Way started, the harmonization was driven by the increasing globalization of business and the need to build a global company with necessary processes and systems. This time the starting point was indicated to be on the operating model, not starting from the information technology.

Internal harmonization efforts were impacted by external factors. The earlier program, Kone Model, for example, was impacted by the requirements that year 2000 and the IT system changes that it required. These changes slowed down the implementation of harmonized processes and systems. At the same time, the Euro currency conversions required changes in existing legacy IT systems, slowing down the implementation of global systems. One of the main reasons for the reduced focus on global harmonization activities may have been the Partek acquisition in 2002 (divested in 2005). This acquisition was large and required a lot of company resources and attention. Yet, during the Partek integration, the harmonization was considered mainly just from the back-office view.

Both harmonization programs started in a situation, when the company had focused back on its core business, elevators and escalators, and divested the other businesses. Common were the drivers to improve profitability and productivity, as well as the need to collect and share best practices globally across the company.

The Kone Way program emphasized global leadership development and global attention even more than earlier. Common company values quickly established their position as part of every-day language in the global company. The common vision and the common company values created foundations for the more unified company.

The Kone Way program started in a situation where technological innovations made it possible to develop global product platforms, the company had implemented a global brand, and it had entered emerging China market. What is more, information technologies that enabled the harmonization in the first face had developed and improved. All this made the starting point in 2005 remarkably different compared to what it was in 1994.

The role of information technology has been noteworthy, as explicated before. It has both enabled and prohibited the harmonization efforts. New technology has supported the efficiency improvements in field operations, improving the lead times in delivery operations, improving the tools needed for the sales personnel to do their work, as well as overall improving the information flow between different functions and gathering and using data in decision making. On the other hand, the complexity of the local legacy IT systems had made it difficult to integrate the numerous systems and exchange information between them. Developing and improving the global IT infrastructure and platforms required considerable money and resources and it took a lot of time. Thus, the planned harmonization activities have not always progressed as fast as expected and the resource allocation prioritization have been a continuous challenge. High expectations were set on the utilization of real-time data in decision-making from early on, but the realization of these benefits has taken a long time.

Finally, the role of China in the success of the new ways of working should not be underestimated. In fact, a great deal of the success has come from the emerging Chinese market, and the growth of the Chinese market has been a key driver for the operating model development and development of global processes at Kone. The different needs emerging from the local business and practices have set new demands for the global processes and tools. At the same time, also other countries have benefited from the developments made based on the Chinese requirements.

6.4 How Has the "Company Way" Dealt with Tensions Arising from Contradictory Demands? (RQ2)

In the following, I will outline the main strategic tensions that the case company has faced during the development and implementation of the harmonized "company way", as defined in the theoretical approach and the research framework of this research (Chapter 3). As described in the literature review, there is an increasing need to manage contradictions in organizations (see for example Benner & Tushman, 2015; Farjoun, 2010).

As is typical, the case company experienced several tensions arising from conflicting demands between global and local units. Firstly, tensions arose from contradicting demands between the need to be globally integrated and locally flexible. When building systems and processes that were needed for adapting to global business environment and to support management of global operations, the local units felt lack of flexibility to do business and serve the local customers. As an increasingly global company, the case company needed to develop the systems and processes that were necessary for global business. The company had grown fast via acquisitions, and the acquired companies were loosely integrated; by the mid-1990s they had become hard to manage. The subsidiaries that had been highly independent until then, resisted the global operating model. Some of the acquired companies had a longer history than Kone and this made the integration hard. Sometimes strong local cultures endured a long time. Often, they were allowed to continue with their old company and brand name even after they were acquired.

Also, some of the earlier process and IT tool implementation projects had resulted in having a negative impact on the local business performance after go-live. This created concerns towards new projects.

The industry, in which the case company operates, has been characterized by local rules and regulations, for example regarding to the end-user safety. Local laws and regulations slowed down the development of globally harmonized products and services. Also, the practices and expectations of the architects have been local. This has made the introduction of global products difficult. Entering new markets has created tensions, too. For example, the rapidly growing China market required more speed than what the company was used to. In fact, local business unit in China challenged the global processes and tools that were designed for smaller business volumes. It also challenged the way how global resources were prioritized and allocated for local support.

Tensions also existed between the needs to be efficient and innovative at the same time, in other words, being able to simultaneously exploit the existing resources and explore new things is challenging. The "company way" defined the global operating model emphasizing operational excellence, and, at the same time, the employees were challenged to maintain the entrepreneurial mindset. Ensuring meeting the requirements of existing customers and markets and improving the existing products required investing in incremental innovation, and at the same time R&D and IT resources needed to be allocated for more radical innovation that bring the results on long term. There was an increasing need for flexibility and speed, as well as for tolerating uncertainty.

Finally, the development and implementation of a harmonized "company way" meant drawing attention to company internal operations and operational excellence and it was recognized as a risk that this might reduce focus on company external topics, especially the focus on customers. Open innovation started to move the locus of innovation from inside the company to outside, and it became increasingly important to innovate with external partners and together with the customers. This also means shifting from home-country based innovation to utilizing the global organization for innovation. What is common for all these tensions, is the need to balance change and stability, to manage short-term and long-turn success, and to balance between integration and flexibility in order to have the necessary agility in the organization. Table 14 contains examples of the choices taken to manage the organizational contradictions.

	Global/Local	Exploration/ Exploitation	Internal/External
Structures and processes (& adaptation thereof)	Global harmonization was emphasized, however it was not forced	Emphasis on operational excellence to reach performance targets	From technology focus to customer focus; "we don't have internal customers" Identifying internal best practices and sharing them globally
Technologies and products (& innovation thereof)	Regional flexibility based on modular product platforms Global maintenance and installation methods	Continuous investment in R&D and IT Investing in competence development also during the hard times (e.g. 2008 world finance crisis) One of the world's most innovative companies (Forbes' list)	Expanding R&D globally Process and IT development Joint ventures Technology partnerships
Long-term and short- term view (& renewal thereof)	From local to international to global Capturing China opportunity	From products to services Service transformation New digital solutions China business model	From technology to customer focus User experience, Customer co-creation Start-up collaboration Working with architects

Table 14. Approaches to managing contradictions in case company.

6.4.1 Global Integration and (or) Local Flexibility

The need to harmonize the processes across the organization arose when the case company started to grow via acquisitions and thereby expanded its international presence. Indeed, the integration-differentiation issue has been a central management concern in international business research since early on (e.g. Lawrence & Lorsch, 1969) and the concept of global integration combines concept of strategic coordination and operational integration at the global level (Prahalad & Doz, 1987).This led to early process harmonization efforts, such as budgeting and planning processes as early as in 1970s. However, the actual global process model development was initiated in 1990s alongside with the global ERP solution implementation and then again in 2005 when the "company way" program was launched to implement harmonized business processes globally.

Structures and processes and adaptation thereof: The case study demonstrates that the importance of globally harmonizing the processes and having a globally aligned operating model was highly emphasized. However, it seems that the harmonization was not really forced and that the local units

had in fact some negotiation power in the deployment planning. Global alignment was also enhanced by bringing earlier de-decentralized functions into a global unit, for example by combining the local IT departments into a global information systems organization.

Technologies and products and innovation thereof: What comes to product innovation, the research period includes the launch of one of the case company's most radical innovation; the machine-room-less elevator in 1996, and it enabled starting to introduce global product offering. Regional flexibility was implemented based on modularized product platforms that allowed adaptation to local differences without compromising production efficiency. Also, the reduction of global trade barriers, e.g. due to the development of the European Union and the opening of Eastern European markets were changing the industry that had been characterized by local rules and regulations that hindered the development and sales of global products. Also, the development of global installation and maintenance methods contributed in more harmonized offering. All in all, the importance of identifying local best practices and implementing them globally was highlighted. The case company emphasized in its strategy communication that the common practices are based on local knowledge, and not developed in the head office.

Short-term and long-term and renewal thereof: Having the processes and practices necessary for the global operations was seen as a key for operating in global markets. The emerging markets, especially China, also challenged the global ways of working. The key role that the China unit had in business growth also gave the local unit a lot of power to express what they needed (for systemic power see e.g. Hargrave & Van de Ven, 2017). The different speed and different business volumes stretched the processes and tools that were originally developed for European markets and made the company to find more flexible ways to support capturing the China opportunity. It forced the company to decide, where to demand local unit to align with global practices, and where to allow local flexibility. Local joint ventures made it possible to have dual strategies simultaneously.

6.4.2 Effectiveness and Exploration

In this section, I reflect on my findings in light of existing literature and aim to find out what elements of the "company way" support the exploitation of existing resources and processes to ensure business results on short term. Also, more importantly, I address the question of how the "company way" supported exploration of new resources and capabilities in order ensure success in future (Teece, 2014; Birkinshaw, Zimmermann, & Raisch, 2016; Benner & Tushman, 2003; 2015). By approaching the global process model as an attempt to build dynamic capabilities, and by reflecting it to the history of the company, I aim to provide theoretical and empirical insights into the ambidexterity challenge that an incumbent company, operating in a traditional industry, has countered during its quest for increased global integration. It has been claimed that an increase in process management practices will slow organizational responsiveness in eras of technological ferment (Benner & Tushman 2003), and indeed this concern was also recognized in the case company due to the increasing needs for having more flexibility and speed, and for tolerating uncertainty.

Structures and processes and adaptation thereof: The implementation of globally harmonized processes shifted the focus on operational excellence and process development. This may favor exploitation of existing resource over exploration (Benner & Tushman, 2003; 2015). Based on business performance measures (in Appendix 2), the "company way" seemed to reach the targets that were set for it, but also concerns were expressed that it would not help with the innovation and company wanted to maintain its position as a technology leader. Towards the end of the research period of this study, the company in fact assessed its innovation capability and initiated a development program based on the assessment results.

Technologies and products and innovation thereof: Alongside the focus on cost-competitiveness and efficiency, the company also increased investment in R&D and IT in a continuous manner. It also became famous for investing in competence development even during the hard times, for example during the challenging time following the world financial crisis in 2008. Performance targets were reached, and, at the same time, the company established a position being recognized as one of the world's most innovative companies.

Short-term and long-term and renewal thereof: Global harmonization was in fact seen as a way to increase the agility in the organization. If the operating model were harmonized, it would be faster to implement changes throughout the organization when necessary. The need for improving productivity and profitability has been high, requiring exploitation of existing resources and processes (Grant, 1991). However, at the same time, the company has explored new resources and knowledge. It has intentionally developed the international management competence when the company started to grow internationally, and it has developed the processes and competences needed in transforming to a service company. At the same time, the accelerating technology growth has challenged the existing competences and ways of working.

6.4.3 Internal and External Focus

Focus on operational excellence may draw attention to company internal issues instead of customers. Internal capability development programs have been claimed to turn management attention increasingly towards company internal issues (Benner & Tushman, 2015). Contradictory demands have been claimed to have emerged when the locus of innovation has moved from inside the firm to take increasingly take place outside the firm, as the

concept of open innovation has evolved during the past years (Benner & Tushman, 2015). Technological leadership encourages innovation inside the company and in the home country even if, e.g., open innovation assumes external partners and collaboration.

Structures and processes, and adaptation thereof: Intensive focus on developing the company practices is seen to shift the focus to company internal issues. When launching the "company way", a strong focus was set on customers, and, what is more, it was emphasized that there is no such thing as an internal customer. The case company has been having a strong technology focus and identified a need to be more customer focused.

Technologies and products, and innovation thereof: The case company communicated a lot about the internal best practices to be identified and shared globally. It was mentioned that the global practices are not invented in the headquarters but collected locally. Also, the process and IT development teams had members from different countries and nationalities. There was a strong belief in the existing knowledge in the organization, and the collecting and sharing of local best practices across the company was highlighted as a means for building the common company way of working.

Short-term and long-term view, and renewal thereof: As a consequence of growing by acquisitions, the company also had a lot of local product development. The global R&D unit was established to bring the research and development together. Also, the IT and process development was centralized. At the same time, however, investments were made in local R&D units in the key markets. As the concept of open innovation started to take space, the locus of innovation started to shift outside from organizations (Benner & Tushman, 2015), and also the accelerating technology development encouraged the company to increasingly use partners for innovation. Also, the need for collaboration for innovation with customers, smaller companies, such as start-ups, research institutions, and technology companies was seen increasingly important.

6.4.4 Approaches to Managing Contradictions in Reacting to Global Integration Tensions

The current case study provides an interesting practical case analysis on global process integration in a multinational company and especially on what contradictions it has faced during the harmonization programs. Based on the longitudinal case study, there were three major contradictions that stood out from the historical research data. Firstly, these were the contradictions arising from the conflicting demands for global integration and local flexibility. Contradictions also arose from the conflicting demands for securing business success by efficient exploitation of existing resources and processes and for developing capabilities for exploration of new resources and processes. Thirdly, there were the conflicting demands from the simultaneous need to focus on internal issues in the harmonization programs and the need for external focus as the technological development accelerated.

The strategies for managing these contradictions can be analyzed further by using the process model of managing contradictions in organizations (Hargrave & Van de Ven, 2017). With this model it is possible to address the events and actions during the research period from two dimensions: what has been the sensemaking approach for the contradiction; and what has been the systemic power of the parties in the activity, in this case the headquarters (global) and the sub-units (local), defining the negotiation power of the parties in this case. This analysis framework is part of the research framework of this study as described in Figure 3 in Chapter 3.

The process model of managing contradictions in organizations integrates dialectical and paradox perspectives on managing contradictions in organizations, as described in the literature review of this study. It recognizes the strategies based of different sensemaking approach, i.e. the processes by which the organization enact their environment (Hargrave & Van de Ven, 2017). The sensemaking approaches towards the contradictions in this model are *acceptance* and *resistance*. The model recognizes the strategies that are formed by the power distribution of the units facing the contradictions. Power distribution can be *stable and symmetrical*, or it can be *unstable and/or asymmetrical*. These two dimensions, the sensemaking approach and the power distribution, provide a tool to analyze the findings in my case study. In the following I will raise some of the events and actions of the case company for managing the conflicting demands and see how they position in the process model of managing contradictions in organizations.

Examples of the different types of managerial actions in the case company during the harmonization programs are summarized in Table 15, by using the process model of managing contradictions in organizations (for the model see Hargrave & Van de Ven, 2017).

Table 15. Mapping findings with the process model of managing contradict	ons
in organizations.	

SYNERGY:	ASSIMILATION:	
SENSE-MAKING APPROACH IS ACCEPTANCE	SENSE-MAKING APPROACH IS ACCEPTANCE	
AND POWER DISTRIBUTION IS SYMMETRIC	AND POWER DISTRIBUTION IS ASYMMETRIC	
 Geographic business area leaders became Executive Board members and were included in decision-making over the global operating model. When the importance of Greater China to the entire company result increased, Greater China was promoted from under the APAC (Asia Pacific China) area to an area of its own. The need for local flexibility was accepted and the idea of global must-dos, alternative options, and local flexibility was introduced. However, the definition of these three was unclear. 	 Local best practices were collected and implemented as part of global model. This was justified by saying that the global operating model was "not developed centrally". Acquired companies possessed competences that the main company was lacking. 	
MUTUAL ADJUSTMENT:	CONFLICT:	
SENSE-MAKING APPROACH IS RESISTANCE	SENSE-MAKING APPROACH IS RESISTANCE	
AND POWER DISTRIBUTION IS SYMMETRIC	AND POWER DISTRIBUTION IS ASYMMETRIC	
 Harmonization was not forced and in some cases, headquarters did not want to "bother" subsidiaries as long as they provided business results. In some cases, the company wanted to be nice for the acquired companies. Letting them continue with their own ways of working created a positive reputation among potential acquisition candidates. Acquired companies were left rather independent especially during the early years of internationalization. 	 Large front-lines typically resisted the global ways of working and had a strong position when negotiating features of global processes and solutions. In the worst case this led to a scattered process and solution environment, where local applications of global solutions existed. China had an exceptionally strong position in the company, and thereby strong negotiation power over the allocation of global resources to support their process and solution needs. It can be argued that this made the case company to transform and become faster and more agile and that the entire company benefited from this development. 	

Paradoxical management (synergy). Organizations tend to address paradoxes through synergy (Smith & Lewis, 2011). In this case study, there were certain cases, where the sensemaking approach towards that contradiction meant acceptance of both views, and the power distribution between the global (headquarters) and local units were stable and symmetrical, or at least nearly so. This is in line with the paradox perspective that assumes that the managers are most effective when they accept contradictory elements as simultaneously valid and manage them through a combination of differentiation and synergy, rather than trying to resolve the tension between them (Andriopoulos & Lewis, 2009; Cameron & Quinn, 1988; Clegg, Cunha, & Cunha, 2002).

Throughout the harmonization programs, the case company was looking for a level of balance between global integration and local flexibility. The importance of globally harmonized ways of working was strongly emphasized, but the local needs were also recognized. The case company tried to find the workable balance between global integration and local flexibility. The room for flexibility and the scope of harmonization were defined for example so that the harmonization scope included the units that brought 80% of the result (in the early 1990s) or that the aim was to harmonize where it made business sense to do so (2005). The global operating model was designed to consist of must-dos for all units, alternative options, and areas where local flexibility was allowed (2014). However, it was not clearly defined what these three categories included.

Another example of synergy is that area business units were given the primary profit-and-loss responsibility and they were brought to the executive board, having a central role in decision making over the global operating model design and implementation.

Assimilation. When power is distributed relatively asymmetrically, the acceptance of the coexistence of contradictory elements is expressed through assimilation, not through synergy as above (Hargrave & Van de Ven, 2017). This means that the practices and arrangements which have been associated with a subordinate element come to be incorporated into the dominant element (Thornton, Ocasio, & Lounsbury, 2012). Aspects of contradictory elements are accepted as part of the dominant element and justified within the logic of the dominant element.

The identification of local best practices and their incorporation into the global operating model, could be seen as an assimilation strategy, especially as this has been justified to be because of the idea of not developing the processes and practices centrally in headquarters, but gathering them from business.

Also, the gaps in existing competences were accepted and the competences and capabilities acquired with the new units or joint ventures were welcomed.

Mutual adjustment. When power distribution is stable and symmetrical, and the actors make sense of the relationship of the elements as adversarial, contradictions may be managed through mutual adjustment. In the case company, this was demonstrated by the respect for the large country business units, especially the acquired companies. Especially during the early years of internationalization, the sub-units were relatively independent, as the integration layer consisted of financial reporting and the local unit remained to keep their own products, brands, and ways of working (prior to the mid-1990s). Also, later on, the local units were listened to when deciding over harmonization schedules.

Dialectics (conflict). In this case study, there were also cases where the sense-making approach was rather closer to resistance, and the power distribution unstable and asymmetric. This led to situations where contradictions were in fact managed through conflicts. Conflicts as a way to manage contradictions were identified especially, for example, in the emerging market in China, where the local business unit had a key position in the business growth of the entire company.

The tools and processes that were designed and developed globally were often initially developed for European practices, and they did not directly apply to the different volumes and clock-speed of emerging China business. These tensions led to contradicting demands of global pushing global practices needed for global purposes, and local units wanting to continue with their local practices, and the local unit asking the global to allocate more resources to support their local processes and solutions. Also, there were cases when the local sub-unit requested for a specific IT solution to be implemented locally, and this required reallocation of global development resources to support the local business in China. The power distribution can be seen asymmetric, as the emerging China business played a key role in the company business results. These are examples of situations, were the subordinate (Chinese) business felt they were not being served, and in fact mobilized and used tactics to make institutional change. The dominant party (headquarters) was also motivated to negotiate (Hargrave & van de Ven, 2017).

Based on the dialectical view, the conflict leads to transformation and creating something new (Hargrave & Van de Ven, 2017). These contradictions, in fact, led to a situation where the contradiction was not seen as persistent coexistence in tension, but as involving transformation through conflict. The tensions emerging from the contradictory demands between global and local needs in China may have led to actions to transform the contradiction and create something new out of it.

7.1 Key Findings

The present study explored the global integration process in an increasingly internationalizing business and the contradictions that the case organization needed to manage during the harmonization programs. The rationale to justify the approach was derived from the international business and MNC theories that explore the relationships across the organization and its units as well as the relationships with the external environment. The initial assumption was that the global harmonization leads to contradictions between global and local demands, which is in fact the central assumption in the IB theories such as integration-responsiveness (IR) framework (Prahalad & Doz, 1987) and eclectic (OLI) paradigm (Dunning, 1988).

This contradiction was, indeed, the main issue when the case company started the global harmonization program in mid-1990s and reinforced it in 2005. However, later on the challenges also arose from the need to manage the tensions between productivity and innovativeness, as process management efforts aiming to efficiency and productivity improvements tend to favor exploitation of existing resources and processes and reducing innovativeness (Benner & Tushman, 2003). The case company, too, got to know the ambidexterity challenge, in other words, the need to be able to both exploit existing resources and, simultaneously, to explore new resources and knowledge. What is more, as the locus of innovation is moving from inside to outside of the organization (Benner & Tushman, 2015), the concerns over being too internally focused emerged. Also, accelerating technological evolution, such as digitalization, increased the pressure for a more outside in approach.

Global integration was based on a global operating model that defined the common "company way" of working globally. However, developing and employing global integration has been a long process. Geographical regions and different business units and functions have had their independent ways of doing things especially during the early decades of international

growth, and the same mindset is visible in the organization even today. Management sees that efficient operations and centralization of certain functions allow business units to focus on customers. Even if management messages emphasize harmonization, it has not been forced and local needs and concerns have been respected to a great extent. This may have slowed down the harmonization speed, and allowed a level of flexibility in local units.

Global process architecture is a central element of global integration and it has created a foundation for global harmonization. Initially, the global process model was implemented to improve the information flows in the increasingly complex organization. Also, it served as basis for operational excellence, focusing in reducing process variation and aiming to productivity and efficiency improvement, as well as quality improvements. In fact, the process model was, to a great extent, about operative capabilities, supporting the daily business, rather than dynamic capabilities. In fact, towards the end of the research period of this case study, the need for more ambidextrous ways of working started to gain management attention, and global harmonization was seen as a prerequisite for future capability development, as the harmonized foundation would then allow faster changes in the organization and its ways of working, thus enabling the agility necessary for renewal.

Building of the research framework for this study started from the contradictory demands emerging from the adaptation needs to the increasingly global business environment, and the framework ended up to include three different contradictions. In addition to the tensions between global and local needs, this study addressed the tensions between productivity and exploration, and the tensions between company internal and external focus. In addition to the adaptation to the business environment, innovation and the renewal of the company were also explored as aspects of global integration. The theoretical background for selecting these three contradictions, and the different drivers behind the contradictions, as the focus of attention in this research is described in the literature review.

The question of how organizations manage tensions between contradictory elements is becoming more important as such tensions become increasingly salient due to globalization, rapid change, and more intense competition (Hargrave & Van de Ven, 2017). Thus, it is interesting to analyze how these tensions are managed. The ways that the contradictions were managed in the case organization depended on the sense-making approach, whether the contradictions were accepted or resisted. Also, they depended on the power distribution between the dominant unit (global) and the subordinates (local). A process model of managing contractions was used to explore this (Hargrave & Van de Ven, 2017).

In cases where power distribution was stable and symmetrical, the subordinate units had their say in choosing their ways of working, and these situations were managed with strategies such as synergy or mutual adjustment. For example, during the early years of internationalization, the foreign sub-units were extremely autonomous, they reported directly

to the top management, and the integration was done merely via finance reporting. As long as the numbers were good, both parties were content (mutual adjustment). Another example of the mutual adjustment strategy is the attempt to implement a type of focused harmonization, to have both global and local needs fulfilled. The idea was to define what processes need to be harmonized on global level, where to allow alternative options to choose from, and where to allow local flexibility. However, these definitions were not easy to make.

The most interesting findings come from the cases where power distribution between the dominant (global) and subordinate (local) parties were unstable and/or asymmetrical, as they seem to force the organization to create something new. This becomes salient especially in two cases. The China business unit is a subordinate unit that has a strong position to secure business results on a global level too, which, in some cases, was demonstrated as an asymmetric distribution of systemic power. Also, some of the acquired companies brought with them valuable new competences or new markets, and this affected the systemic power distribution between the units.

Collecting local best practices is a potential example of an assimilation strategy, where local practices were identified, included into the common operating model, and then shared globally. This made it easier to implement global practices to the units that may be resisting the new ways of working, and the dominant unit justifies this with the logic of that the idea in fact is to develop the global model from local practices and the purpose is not to develop everything centrally. Also, for example, the Chinese business unit required more process and IT support to manage the big business and transaction volumes, emerging from fast increasing number of offers, contracts and deliveries. As this was crucial for the emerging business in the new market, the company ensured that the use of global resources was reprioritized and that sufficient support was allocated to local support in China, justified by the logic that this would help to prepare for global solution implementation in China (assimilation).

However, there were cases where the powerful subordinate units simply resisted the global solution that was offered to them. Chinese business serves as an illustrative example also in this case. There were situations, where the global solutions or the local implementation schedules for them contradicted with the faster clock-speed and higher business volumes in China. In this case the local unit, such as the Chinese business unit, probably felt that they are not being served the way they expected, and actually used their power position and tactics to reach a change in planned priorities. Analysis of my research data provides examples of this. For example, a Chinese subsidiary wanted the company to replace their locally developed IT infrastructure with global infrastructure when this was not yet included in global plans (conflict). The local unit was powerful enough to convince the company about the needs and potential risks in case this was not done, and the company changed the implementation roadmap in favor for the local unit.

The findings of this research support the dialectical perspective (Hargrave & Van de Ven, 2017). In this case, the relationship of contradictory elements plays out through a process in which the global unit promoting the (global) solution engages in a conflict with the local unit promoting the opposed (local) solution. This conflict may release the tension between the contradictory elements and produce a new set of arrangements and practices, the transformation (Hargrave & Van de Ven, 2017). Based on this case study results, it seems that the contradictions between global and local demands in China especially led to transformation, and contributed to the renewal of the company, making it faster, more agile and more customer focused. This happened through reconfiguring the resources (Teece, 2014; Doz & Kosonen, 2010).

On the other hand, the global operating model did provide an advantage, in line with the idea of ownership advantage in eclectic paradigm (Dunning, 1988). It seems that the global operating model, even if focusing on operational excellence, efficiency and productivity, and on operative capabilities, could in fact serve as the micro-foundation for dynamic capabilities (Teece, 2007).

The existing literature recognizes various paradoxes or contradictions that firms need to address; the need to manage tensions between global and local demands seems to be important in future (Meyer, 2012; Ghemawat, 2005). Accelerating technological development will make global solutions more possible and the end-users will be better enabled - and more demanding in using them. However, the possible deglobalization development and the rise of regional strategies (Livesey, 2017; Ghemawat, 2005), together with arising trade wars to protect national interests, will certainly set challenges for global business and global operating models of the companies, including the technology solution in use.²²⁵ The contradictions between exploration and exploitation may be of increasing importance in future. The process management models are being challenged by more agile methods, and traditional hierarchical structures are challenged by more self-managed organizations. Increasing automation of work and processes may in fact release the resources from exploitative to explorative activities when automation changes the ways of working and the processes in organizations. Combined with the accelerating technological development and the innovation locus moving increasingly outside organizations, maintaining innovation requires looking more outside organizations, enabled by new ecosystems. It may be the case that, in the future, the main issue is not integration on company level across the organization, but rather integration with the external networks or ecosystems within which the company operates. It can also be assumed that, in the future, sustainability questions will challenge the ways of working in companies that are increasingly expected to not only to do good business but to 'do good' and find ways to give back to society and communities around them.

²²⁵ See e.g. Financial Times: The US-China conflict challenges the world, 21 May, 2019.

7.2 Theoretical Contribution

This research is phenomenon-driven, and, in fact, business research often starts with finding an interesting business-related topic or practical business process that is investigated considering theories and theoretical concepts, as described in the methodology chapter (Eriksson & Kovalainen, 2008). Indeed, the main target of intensive case studies is rather to explore and understand how the specific case works as a unit of analysis (see Eriksson & Kovalainen, 2008). In line with this, the existing methodology literature claims that it is difficult to generalize the results of a qualitative research to a larger population (Myers, 2013). However, a longitudinal case study allows the linking of patterns of events to analytical frameworks (Pettigrew, 1990; 1997).

Hence, for the purpose of this study, I developed a theoretical framework, building on the existing literature on international business literature, on organizational capabilities literature, and on theories on organizational paradoxes. Also, from the existing research, I identified three relevant contradictions that the case company faced and needed to manage during the global integration programs. This provided a framework in a form of matrix to reflect the case study against. What is new in this approach is that it brings the different theories together, providing a new lens through which to see the integration / responsiveness challenge. Also, as a result of an iterative process between literature review and case study, the contradictions extended from the mere issue between integration and responsiveness needs to also cover the exploration and exploitation challenge. What is more, the recent debate on the survival of incumbent firms brought up the tension between company-internal and -external focus.

The tensions that were identified in the research framework seemed to be relevant and the findings of the research supported this. The question of balancing global and local requirements is supported by existing literature; however, the present case study indicates that the need for a regional approach was evident, especially in the case of the rapidly emerging markets like China. Also, the choice of including the regional business areas leaders in the global decision making supports this finding. The ownership advantage (Dunning, 1988), in this case global processes and solutions, was seen as a key asset, however with local adjustments and local implementation speed. The findings of this research support the existing theories of exploration and exploitation and ambidextrous organizations. Indeed, process management activities support the idea of operational excellence and may favor the exploitative initiatives. However, harmonization was strongly seen as an enabler for agility, when harmonized operating model allows fast changes in the operating model in case of changes in business environment.

There are a few research findings in the present research that are interesting from the theoretical contribution viewpoint: firstly, the role of strong subsidiaries in the global harmonization and its evolution; secondly, the role of the geographical areas in the global decision making; thirdly,

the role of the company capability to innovate and develop global products and thereby differentiate from the competitors; fourthly, the alteration of company internal and external focus, especially the role of the customers and partners; and finally, the importance of recognizing the harmonization as a prerequisite and an enabler for organizational agility.

The existing literature recognizes the global integration as implementing centrally developed practices across the company. It also recognizes the need for local variations and discusses the needs for local flexibility. However, what is less visible in the earlier research is the impact of sub-units (in this case foreign subsidiaries) in influencing and developing the globally integrated practices and ways of working. In the present case study, the role of a Chinese business unit arose as an illustrative example of a sub-unit that had an equal, if not higher, systemic power compared with the main unit (headquarters) in a situation when China as an emerging market for new elevators and escalators was vital for the success of the entire company. This had an impact on the global implementation sequence of the global solutions, and it also set new requirements for the functionality (features) of the global IT solutions and their performance (capability of IT solutions to handle high transaction volumes and a high amount of data). Also, the products that were developed for China markets were useful not only for capturing the China market opportunity, but also for supporting the growth of other business units in the Asia-Pacific Area. Also, all in all, the experience in the emerging China market made the company to be faster and more agile, and made the entire company "more Chinese", as the CTO of the company mentioned in a confirmatory interview in May 2019.

All in all, the internationalization development of the case company followed the international business and MNC theories. What started as a headquarters- subsidiary structure, became a network of subsidiaries, strongly connected to the company external environments networks locally (Johansson & Vahlne, 2009). The attempts to manage the integrationresponsiveness demands, arose from the need to manage the information flows in the increasingly complex organization. As the globalization development accelerated, the pressure to have the structures and systems needed for global operations increased. In addition to managing the information flows in the case company, Kone, like other companies in a similar situation, looked for process management opportunities in order to improve productivity and efficiency, improve quality, and achieve operational excellence. It was also necessary to capture the opportunities for economies of scale, needed for the growing business. This was enabled by the information technology development (so called third industrial evolution). With the new IT technology solutions and enterprise resource planning software, together with harmonized processes, the target was to shift the complex structure to a manageable company.

The existing literature claims that, even if companies know that they need to harmonize, it is not necessarily known what factors these decisions are based on (Romero, Dijkman, Grefen, & van Weele, 2015). In this case study,

the drivers for integration efforts seemed to arise from the adaptation needs, in order to adapt to the increasingly global business environment. They also arose from the needs to maintain the innovativeness alongside with the productivity improvements, and find the balance between exploitative and explorative activities, allowing the company to manage the current business and simultaneously build the capabilities needed for future success. Thus, one of the drivers was clearly the need for renewal, creation of new opportunities. As mentioned earlier, the research framework developed for this research combines and interlinks different theories to help to understand the paradoxes arising from unifying the ways of working in a multinational company.

In the existing literature, there have been calls for studies of companies in traditional industries, and also on established companies that have succeeded over a long time in business (Ambrosini & Bowman, 2009). Maybe this research, from its part, can contribute in supporting to fill these research gaps.

7.3 Managerial Implications

The role of one specific market, the emerging market in China was exceptional. The choices that the case company made to manage the contradictions arising from the local implementation of the global operating model show that the conflicting demands actually can lead to transformation and creation of new ways of working, helping the entire company to renew, both when it comes to the operating model and when it comes to the technologies and products. Products created for the Chinese market also helped other Asian business units.

In fact, the role of technological innovation was central in global harmonization and also in the company renewal. Technological innovation²²⁶ created a foundation for global products.

The role of the geographical area business units in global decision making strengthened the ability to prioritize and allocate common resources and competences across the company.

The case company also seemed to be aware of the risks of turning attention too much on company internal topics, and emphasized a customer focus, an understanding of local customer requirements, and, towards the end of the research period, also the importance of working together with external partners and customers in developing new products and solutions.

It does not come as a surprise that there will be an increasing number of conflicting demands for companies to face in future. This case study focused on the contradictory demands for integration and responsiveness, on the needs to be simultaneously effective and innovative, and on the needs to

²²⁶ KONE EcoDisc[®] engine and the machine-room-less KONE MonoSpace[®] elevator were invented in 1996

work on company internal issues without endangering external focus. In fact, these contradictions are necessary in order to renew and create something new. Global integration has been an ownership advantage, creating a basis for global reporting and global operations. It has played a key role in risk management, allowing robust tools and practices for local units. However, it has really not been forced, which has probably diminished the benefits expected from the integration, but which may, on the other hand, have allowed the flexibility necessary in a changing business environment, where the different geographies, countries and businesses are in a different phase in their life-cycle.

Even if the intrapreneur mindset was not exactly in the scope of this research, it seems that the strong family ownership has helped to maintain a level of intrapreneurship in the company, allowing to take risks and make bold moves when necessary. On the other hand, the benefits of harmonization are strongly emphasized and seen as a key to implement the necessary agility in the organization.

The role of information technology is interesting in the harmonization development of the case company. It has, in the first place, enabled the process management and information management in an increasingly international company. It has also required a lot of resources, and demanded new skills, hence the scarcity of the development resources has been a continued topic in prioritization discussions. The role of IT is not only to support the business processes, but also to enable new business opportunities. At the same time, technology development brings along new concerns, regarding to information security, and new power constellations, when access and possession of data becomes 'the new oil' in business.

When moving through the history of the case company, it is interesting to see how much development there has been and how much has changed. The company has grown and evolved to a global player in its industry, it has established its position as a technology leader and has been acknowledged as one of the world's most innovative companies. Yet, some things seem to hold. Many of the development programs over the years were initiated in order to become faster, increase productivity, improve collaboration and increase customer focus, and the same drivers exist today. The landscape of challenges remains partly the same. What is different, however, is that the strong focus on internal development is challenged by the needs to be even more connected with the external environment and emerging business ecosystems.

In the beginning of the research period the main challenge was adapting to the increasingly globalizing business environment with processes, tools and organizations needed in a global enterprise. Towards the end of the research period, the challenges seem to be more arising from the need to maintain innovativeness and to be more outward-looking than before. These conflicts challenge established ways of working, and conflicts cannot be avoided. In fact, conflicts may be triggers for transformation and creation.

7.4 Suggestions for Further Research

Based on the literature review, three contradictions were selected to be in the scope of this research. However, as the number of conflicting demands towards organizations seems to increase rather than decline, it would be fascinating to investigate another contradiction, for example related to sustainability, within the same case company.

The implementation of global processes in China is certainly an interesting topic for future research. In China, it might be possible to explore, whether the challenge of integrating to local networks is in fact bigger than the challenge of aligning with global company. Considering other emerging markets, it would be interesting to explore the development of processes and practices in an environment where the existing infrastructure may not support the use of traditional solutions.

The "company way" and its implementation as a unit of analysis in this research arouses one's interest in understanding better how other companies have developed and implemented their "company ways" of working and if and what challenges they may be facing. This is especially interesting now, when some large companies also transform their ways of working to more lean and agile practices. It will be interesting to see, how the process management practices and gate-models will evolve together with the new ways of working.

Also, in my suggestions for further research, I follow Birkinshaw, Collis, Foss, Hoskisson, Kunisch and Mensch (2018)²²⁷ in their call for research on corporate strategy in the digital age, as digitalization – and the accelerating technological development - impacts the firm's internal organization. In line with this, the findings in my study indicate that the following questions are interesting avenues for future research: How do firms develop, deploy, and renew corporate capabilities, knowledge, and resources to cope with digital transformation? And how does the role of the corporate level differ in the digital age, or the network economy, in comparison to the industrial age?

Information technology has been in the core of the process harmonization, and exploring the future of enterprise resource planning solutions would be an interesting avenue for future research.

In addition to researching global integration on an organization-level, it would be interesting to investigate integration with external networks. Will emerging business ecosystems and platform economy change the way how companies manage their processes and IT solutions, and how much they can rely on existing processes and tools?

²²⁷ Here I refer to a recent call for papers for a special issue of Journal of Management Studies.

- Abernathy, W. J. (1978). The productivity dilemma: Roadblock to innovation in the industry. John Hopkins University Press.
- Alahuhta, M. (2015). Johtajuus kirkas suunta ja ihmisten voima. Kokemuksia ja näkemyksiä johtajuudesta Koneen ja Nokian vuosilta. Bookwell.
- Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management. International Journal of Management Reviews, 11(1), 29–49.
- Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. Strategic Management Journal, 14(1), 33–46.
- Amit, R., & Zott, C. (2001). Value creation in e-business. Strategic Management Journal, 22(6–7), 493–520.
- Andersson, U., Forsgren, M., & Holm, U. (2002). The strategic impact of external networks: Subsidiary performance and competence development in the multinational corporation. Strategic Management Journal, 23(11), 979–996.
- Andriopoulos, C., & Lewis, M. W. (2009). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of Innovation. Organization Science, 20(4), 696–717.
- Andriopoulos, C., & Lewis, M. W. (2010). Managing innovation paradoxes: Ambidexterity lessons from leading product design companies. Long Range Planning, 43(1), 104–122.
- Appelbaum, S. H., Calla, R., Desautels, D., & Hasan, L. N. (2017). The challenges of organizational agility: Part 2. Industrial and Commercial Training, 49(2), 69–74.

- Aspara, J., Tikkanen, H., Pöntiskoski, E., & Järvensivu, P. (2011). Exploration and exploitation across three resource classes: Market/ customer intelligence, brands/bonds and technologies/processes. European Journal of Marketing, 45(4), 596–630.
- Atuahene-Gima, K. (1996). Market orientation and innovation. Journal of Business Research, 35(2), 93–103.
- Augier, M., & Teece, D. J. (2009). Dynamic capabilities and the role of managers in business strategy and economic performance. Organization Science, 20(2), 410–421.
- Baldwin, R. (2006). Globalisation: The great unbundling(s). Economic Council of Finland, 30(3), 5–47.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.
- Barney, J. B. (1995). Looking inside for competitive advantage. Academy of Management Perspectives, 9(4), 49-61.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. Journal of management, 27(6), 643-650.
- Bartlett, C. A. (1986). Building and managing the transnational: The new organizational challenge.
- Bartlett, C. A., & Ghoshal, S. (1987). Managing across borders: New strategic requirements. Sloan Management Review, 28(4), 7-17.
- Bartlett C, A., & Ghoshal, S. (1989). Managing across borders. Boston: Harvard Business School Press.
- Bartlett, C. A., & Ghoshal, S. (1990). Managing innovation in the transnational corporation. Managing the global firm, 215-255.
- Bartlett, C. A., & Ghoshal, S. (1992). What is a global manager? Harvard Business School.
- Bartlett, C. A., & Ghoshal, S. (1998). The individualized corporation: A fundamentally new approach to management.
- Beechler, S., & Javidan, M. (2007). Leading with a global mindset. In The global mindset (pp. 131-169). Emerald Group Publishing Limited.

- Benner, M. J., & Tushman, M. L. (2002). Process management and technological innovation: A longitudinal study of the photography and paint industries. Administrative Science Quarterly, 47, 676–706.
- Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. Academy of Management Review, 28(2), 238–256.
- Benner, M. J., & Tushman, M. L. (2015). Reflections on the 2013 Decade Award: "Exploitation, exploration, and process management: The productivity dilemma revisited" ten years later. Academy of Management Review, 40(4), 497–514.
- Berg, B. L., & Lune, H. (2012). Qualitative research methods for the social sciences. Boston, MA: Pearson.
- Bettis, R. A., & Hitt, M. A. (1995). The new competitive landscape. Strategic Management Journal, 16(S1), 7–19.
- Birkinshaw, J., Crilly, D., Bouquet, C., & Lee, S. Y. (2016). How do firms manage strategic dualities? A process perspective. Academy of Management Discoveries, 2(1), 51–78.
- Birkinshaw, J., & Gupta, K. (2013). Clarifying the distinctive contribution of ambidexterity to the field of organization studies. Academy of Management Perspectives, 27(4), 287–298.
- Birkinshaw, J., Hamel, G., & Mol, M. J. (2008). Management innovation. Academy of Management Review, 33(4), 825-845.
- Birkinshaw, J., Morrison, A., & Hulland, J. (1995). Structural and competitive determinants of a global integration strategy. Strategic Management Journal, 16(8), 637–655.
- Birkinshaw, J., Zimmermann, A., & Raisch, S. (2016). How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. California Management Review, 58(4), 36-58.
- Bjerre, M., & Sharma, D. D. (2003). Is marketing knowledge international?:
 A case of key accounts. In Learning in the internationalization process of firms (pp. 123–141). Edward Elgar Publishing.

- Bledow, R., Frese, M., Anderson, N., Erez, M., & Farr, J. (2009). A dialectic perspective on innovation: Conflicting demands, multiple pathways, and ambidexterity. Industrial and Organizational Psychology, 2(3), 305–337.
- Bouquet, C., & Birkinshaw, J. (2011). How global strategies emerge: An attention perspective. Global Strategy Journal, 1, 243–262.
- Bouquet, C., Morrison, A., & Birkinshaw, J. (2009). International attention and multinational enterprise performance. Journal of International Studies, 40(1), 108–131.
- Bower, J. L. (1970). Managing the resource allocation process: A study of corporate planning and investment. Boston, MA: Harvard Business School.
- Bresnahan, T. F., & Trajtenberg, M. (1995). General purpose technologies 'Engines of growth'?. Journal of Econometrics, 65(1), 83-108.
- Brynjolfsson, Erik, & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. Journal of Economic Perspectives, 14(4), 23–48.
- Brynjolfsson, E., & Hitt, L. (2004). Intangible assets and the economic impact of computers. In W. Dutton, B. Kahin, R. O'Callaghan, & A.
 Wyckoff (Eds.), Transforming enterprise (pp. 27–48). Boston: MIT Press.
- Brynjolfsson, E., Renshaw, A. A., & Van Alstyne, M. (1997). The matrix of change. MIT Sloan Management Review, 38(2), 37.
- Bucheli, M., & Wadhwani, R. D. (Eds.). (2014). Organizations in time: History, theory, methods. Oxford: Oxford University Press.
- Buckley, P. J., & Casson, M. C. (1998). Analyzing foreign market entry strategies: Extending the internalization approach. Journal of International Studies, 29(3), 539–561.
- Burgelman, R. A. (1983). A model of the interaction of strategic behavior, corporate context, and the concept of strategy. Academy of Management Review, 8(1), 61–70.
- Burgelman, R. A. (1991). Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research. Organization science, 2(3), 239-262.

- Burgelman, R. A., & Sayles, L. R. (1986). Inside corporate innovation: Strategy, structure, and managerial skills. New York: Free Press.
- Burns, T., & Stalker, G. M. (1961). The management of innovation. London: Tavistock.
- Cameron, K. S., & Quinn, R. E. (1988). Organizational paradox and transformation. In R. E. Quinn & K. S. Cameron (Eds.), Ballinger series on innovation and organizational change. Paradox and transformation: Toward a theory of change in organization and management (pp. 1-18). New York, NY, US: Ballinger Publishing Co/ Harper & Row Publishers.
- Cantwell, J. (2014). Revisiting international business theory: A capabilities-based theory of the MNE. Journal of International Business Studies, 45(1), 1–7.
- Cantwell, J., Dunning, J. H., & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The coevolution of MNEs and the institutional environment. Journal of International Business Studies, 41(4), 567-586.
- Cantwell, J., & Piscitello, L. (2002). The location of technological activities of MNCs in European regions. Journal of International Management, 8(1), 69–96.
- Chakravarthy, B. S., & Doz, Y. (1992). Strategy process research: Focusing on corporate self-renewal. Strategic management journal, 13(S1), 5-14.
- Chandler, A. D. (1962). Strategy and structure: chapters in the history of American industrial enterprises. Cambridge: MIT Press.
- Chandy, R. K., & Tellis, G. J. (1998). Organizing for radical product innovation: The overlooked role of willingness to cannibalize. Journal of Marketing Research, 35(4), 474-487.
- Chandy, R. K., & Tellis, G. J. (2000). The incumbent's curse? Incumbency, size, and radical product innovation. Journal of Marketing, 64(July), 1–17.
- Chang, E., & Taylor, M. S. (1999). Control in multinational corporations (MNCs): The case of Korean manufacturing subsidiaries. Journal of Management, 25(4), 541-565.

- Chesbrough, H. W. (2006). Open Innovation: The new imperative for creating and profiting from technology. Harvard Business Press.
- Christensen, C. M., & Bower, J. L. (1995). Customer power, strategic investment, and the failure of leading firms. Strategic Management Journal, 17(8), 197–21.
- Christensen, C. M., & Raynor, M. E. (2003). The innovator's solution: Creating and sustaining successful growth. Harvard Business School Publishing Corporation.
- Clegg, S. R., Cunha, J. V., & Cunha, M. P. (2002). Management paradoxes: A relational view. Human Relations, 55(5), 483-503.
- Cohen, W. M., & Levinthal, D. A. (1990). The implications of spillovers for R&D investment and welfare: A new perspective. Administrative Science Quarterly, 35, 128–152.
- Collis, D. J. (1991). A resource-based analysis of global competition: The case of the bearings industry. Strategic Management Journal, 12(S1), 49-68.
- Collis, D. J. (1994). Research note: How valuable are organizational capabilities? Strategic Management Journal, 15, 143–152.
- Collis, J., & Hussey, R. (2003). Business research. Palgrave Macmillan.
- Czarniawska, B. (2004). Narratives in social science research. Sage.
- Danneels, E. (2002). The dynamics of product innovation and firm competences. Strategic Management Journal, 23(12), 1095–1121.
- Davenport, T. H. (1993). Process innovation: Reengineering work through information technology. In Process Innovation. Boston, Massachusetts: Harvard Business School Press.
- Davenport, T. H. (1998). Putting the enterprise into the enterprise system. Harvard Business Review, 76(4).
- Davenport, T. H. (2006). Competing on analytics. Harvard Business Review, 84(1), 98.
- Davenport, T. H., Harris, J. G., & Cantrell, S. (2004). Enterprise systems and ongoing process change. Business Process Management Journal, 10(1), 16–26.

- Devinney, T. M., Pedersen, T., & Tihanyi, L. (2012). International business and management at the crossroads. In T. M. Devinney, T. Pedersen, & L. Tihanyi (Eds.), The past, present and future of international business & management. Advances in International Management, 23 (pp. 33–41).
- Devinney, Timothy M., Midgley, D. F., & Venaik, S. (2000). The optimal performance of the global firm: Formalizing and extending the integration-responsiveness framework. Organization Science, 11(6), 674–695.
- Di Stefano, G., Peteraf, M. A., & Verona, G. (2014). The organizational drivetrain: A road to integration of dynamic capabilities research. Academy of Management Perspectives, 28(4), 307–327.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 147-160.
- Dosi, G., Nelson, R. R., & Winter, S. G. (2002). The nature and dynamics of organizational capabilities. New York: Oxford University Press.
- Doz, Y. (1980). Strategic management in multinational companies.
- Doz, Y., & Kosonen, M. (2008). The dynamics of strategic agility. California Management Review, 50(3), 95.
- Doz, Y., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. Long Range Planning, 43(2–3), 370–382.
- Doz, Y., & Prahalad, C. K. (1991). Managing DMCs: A search for a new paradigm. Strategic Management Journal, 12(special issue), 145–164.
- Doz, Y. L., Santos, J., & Williamson, P. J. (2001). From global to metanational: How companies win in the knowledge economy. Harvard Business Press.

Drucker, P. (1994). The theory of the business.

Dubois, A., Gadde, L. E., & Mattsson, L. G. (2003). Change and continuity in the supplier base: A case study of a manufacturing firm 1964-2002. Journal of Customer Behaviour, 2(3), 409-432.

- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. Journal of International Business Studies, 19(1), 1–31.
- Dunning, J. H. (2006). Comment on dragon multinationals: New players in 21st century globalization. Asia Pacific Journal of Management, 23(2), 139-141.
- Dunning, J. H., & Lundan, S. M. (2010). The institutional origins of dynamic capabilities in multinational enterprises. Industrial and Corporate Change, 19(4), 1225–1246.
- Easterby-Smith, M., Lyles, M. a., & Peteraf, M. A. (2009). Dynamic capabilities: Current debates and future directions. British Journal of Management, 20, 1–8.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? Strategic Management Journal, 21(10–11), 1105–1121.
- Eriksson, P., & Kovalainen, A. (2008). Qualitative Research in Business Studies. London: SAGE Publications Ltd.
- Fahey, L., & Randall, R. M. (1997). Learning from the future: Foresight scenarios. West Sussex: John Wiley & Sons.
- Farjoun, M. (2010). Beyond dualism: Stability and change as a duality. Academy of Management Review, 35(2), 202–225.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. Administrative Science Quarterly, 48(1), 94-118.
- Foster, R., & Kaplan, S. (2001). Creative destruction. New York: Double Day.
- Friedman, T. L. (2006). The world is flat: The globalized world in the twenty-first century. London: Penguin.
- Furman, J. L., Porter, M. E., & Stern, S. (2002). The determinants of national innovative capacity. Research Policy, 31(6), 899-933.
- Gaddis, J. L. (2002). The landscape of history: How historians map the past. Oxford University Press.

- Garvin, D. A. (1998). The Processes of organization and management. Sloan Management Review, 39(4), 33-50.
- Ghemawat, P. (2005). Regional strategies for global leadership. Harvard Business Review, 2005(12), 1–21.
- Ghemawat, P. (2011). The cosmopolitan corporation. Harvard Business Review, 89(5), 1–16.
- Ghemawat, P. (2017). Globalization in the age of Trump. Harvard Business Review, 2017(July-August), 112–123.
- Ghoshal, S. (1987). Global strategy: An organizing framework. Strategic Management Journal, 8(5), 425–440.
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. Academy of Management Review, 15(4), 603–626.
- Ghoshal, S., & Nohria, N. (1993). Horses for courses: Organizational forms for multinational corporations. MIT Sloan Management Review, 34(2), 23.
- Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. The Academy of Management Journal, 47(2), 209–226.
- Gill, M. J., Gill, D. J., & Roulet, T. J. (2018). Constructing trustworthy historical narratives: Criteria, principles and techniques. British Journal of Management, 29, 191–205.
- Golder, P. N. (2000). Historical method in marketing research with new evidence on long-term market share stability. Journal of Marketing Research, 37(2), 156–172.
- Govindarajan, V., & Gupta, A. K. (2001). Building an effective global business team. MIT Sloan Management Review, 42(4), 63.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. California Management Review, (Spring 1991), 114–135.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Change, 17(S2), 109–122.

- Greve, H. R. (2007). Exploration and exploitation in product innovation. Industrial and Corporate Change, 16(5), 945–975.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. Educational Technology Research and Development, 29(2), 75-91.
- Gupta, A. K., & Govindarajan, V. (2002). Cultivating a global mindset. Academy of Management Executive, 16(1), 116–126.
- Hackman, J. R., & Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. Administrative Science Quarterly, 309–342.
- Hamel, G. (2009). Moon shots for management. Harvard Business Review, 87(2), 91-98.
- Hamel, G. (2011). Reinventing management for the 21st century. https://www.youtube.com/watch?v=aodjgkv65MM, retrieved September,17 2018
- Hammer, M. (1996). Beyond reengineering: How the process-centered organization will change our work and our lives. New York: HarperBusiness.
- Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. American Journal of Sociology, 82: 929-964.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. American Sociological Review, 49(2), 149.
- Hannus, J. (1993). Prosessijohtaminen: Ydinprosessien uudistaminen ja yrityksen suorituskyky. HM & V Research.
- Hargrave, T. J., & Van de Ven, A. H. (2017). Integrating dialectical and paradox perspectives on managing contradictions in organizations. Organization Studies, 38(3–4), 319–339.
- Harry, M. J., & Schroeder, R. (2000). The breakthrough management strategy revolutionizing the world's top corporations. New York, NY.
- Harzing, A. W. (2000). An empirical analysis and extensions of the Bartlett and Ghoshal typology of multinational companies. Journal of International Business Studies, 31(1), 101–120.

- Hedlund, G. (1984). Organization in-between: The evolution of the mother-daughter structure of managing foreign subsidiaries in Swedish MNCs. Journal of International Business Studies, 15(2), 109–123.
- Heise, D. R. (1989). Modeling event structures. Journal of Mathematical Sociology, 14(2-3), 139-169.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). Dynamic capabilities: Understanding strategic change in organizations. Blackwell Publishing.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. Strategic Management Journal, 24(10), 997– 1010.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. Strategic Management Journal, 36(6), 831-850.
- Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the (n)ever-changing world. Strategic Management Journal, 32(11), 1243–1250.
- Henderson, R. M., & Clark, K. B. (1990). Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. Administrative Science Quarterly, 35(1), 9-30.
- Hennart, J. F. (1982). A Theory of multinational enterprise. University of Michigan Press.
- Hennart, J. F. (2010). Transaction cost theory and international business. Journal of Retailing, 86(3), 257–269.
- Herlin, H. (1974). Harald Herlin esi- ja jälkipolvien saatossa.
- Herlin, K. (1960). Kone Osakeyhtiö 1910-1960.
- Hinds, P., Liu, L., & Lyon, J. (2011). Putting the global in global work: An intercultural lens on the practice of cross-national collaboration. Academy of Management Annals, 5(1), 135–188.
- Huang, Z. (2010). A compilation research of ERP implementation critical success factors. Issues in Information Systems, 11(1), 507-512.

Hymer, S. H. (1960). On multinational corporations and foreign direct investment. The theory of transnational corporations. London: Routledge.

Hymer, S. H. (1976). International operations of national firms. MIT Press.

- Ilinitch, A. Y., D'Aveni, R. A., & Lewin, A. Y. (1996). New organizational forms and strategies for managing in hypercompetitive environments. Organization Science, 7(3), 211–220.
- Ishikawa, D. (1985). What is total quality control?: The Japanese way. Business Management.
- Jarzabkowski, P. (2008). Shaping strategy as a structuration process. Academy of Management Executive, 51(4), 621–650.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm - A model of knowledge development and increasing foreign market commitments. Journal of International Business Studies, 8(1), 23–32.
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. Journal of International Business Studies, 40(9), 1411–1431.
- Kahl, S. J. (2014). Associations, jurisdictional battles, and the development of dual-purpose capabilities. Academy of Management Perspectives, 28(4), 381–394.
- Kauppila, O.-P. (2010). Creating ambidexterity by integrating and balancing structurally separate interorganizational partnerships. Strategic Organization, 8(4), 283–312.
- Khilji, S. E., Davis, E. B., & Cseh, M. (2010). Building competitive advantage in a global environment: Leadership and the mindset. In The past, present and future of international business & management (pp. 353-373). Emerald Group Publishing Limited.
- Killing, P., Malnight, T., & Keys, T. (2005). Must-win battles. Pearson Education Limited.
- Kilpinen, P. (2013). Capability development within the multinational corporation. Aalto University Publication Series. Doctoral Dissertations, 13/2013.

- Kipping, M., Wadhwani, R. D., & Bucheli, M. (2014). Analyzing and interpreting historical sources: A basic methodology. In M. Bucheli, & D. Wadhwani (Eds), Organizations in time: History, theory, methods (pp. 303–329). Oxford: Oxford University Press.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. Journal of International Business Studies, 35(2), 124–141.
- Knight, G. A., Rialp, A., & Rialp, J. (2014). International entrepreneurship: A review and future directions. In the Routledge companion to international entrepreneurship (pp. 27–48).
- Kobrin, S. J. (1991). An empirical analysis of the determinants of global integration. Strategic Management Journal, 12(S1), 17–31.
- Kogut, B. (1989). Research notes and communications a note on global strategies. Strategic Management Journal, 10(4), 383–389.
- Kogut, B., & Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. Journal of International Business Studies, 24(4), 625–645.
- Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. Academy of Management Review, 24(2), 308–324.
- Kostova, T., Roth, K., & Dacin, M. T. (2008). Institutional theory in the study of multinational corporations: A critique and new directions. Academy of Management Review, 33(4), 994–1006.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. Academy of Management Review, 24(1), 64–81.
- Kotter, J. P. (2014). Accelerate: Building strategic agility for a fastermoving world. Harvard Business Review Press.
- Langley, A. (1999). Strategies for theorizing from process data. Academy of Management Review, 24(4), 691-710.
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and integration in complex organizations. Administrative Science Quarterly.
- Lawrence, P. R., & Lorsch, J. W. (1969). Developing organization: Diagnosis and action.

- Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: A dynamic capabilities approach. International Journal of Innovation Management, 05(03), 377–400.
- Leavy, B. (2014). Strategy, organization and leadership in a new "transientadvantage" world. Strategy & Leadership, 42(4), 3-13.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. Strategic Management Journal, 13(Summer, 1992), 111–125.
- Lervik, J. E. B. (2011). The single MNC as a research site. In R. Piekkari & C. Welch (Eds.), Rethinking the case study in international business and management research (pp. 229–250). Edward Elgar Publishing Limited.
- Lessard, D. R., & Reavis, C. (2009). CEMEX: Globalization "The CEMEX Way". In MIT Sloan Management Case Study, 09-039 (pp. 1-21).
- Lessard, D. R., Teece, D. J., & Leih, S. (2016). The dynamic capabilities of meta-multinationals. Global Strategy Journal, 6(3), 211–224.
- Levy, O., Beechler, S., Taylor, S., & Boyacigiller, N. A. (2007). What we talk about when we talk about 'global mindset': Managerial cognition in multinational corporations. Journal of International Business Studies, 38(2), 231-258.
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. Academy of Management Review, 25(4), 760–776.
- Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility. California Management Review, 56(Spring), 58–77.
- Lewis, M. W., & Smith, W. K. (2014). Paradox as a metatheoretical perspective: Sharpening the focus and widening the scope. The Journal of Applied Behavioral Science, 50(2), 127-149.
- Lieberman, M. B., & Montgomery, D. B. (1998). First-mover (dis) advantages: Retrospective and link with the resource-based view. Strategic Management Journal, 1125(June), 1111–1125.
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. Naturalistic Inquiry, 289, 331.

- Lincoln, Y. S., & Guba, E. G. (2013). The constructivistic credo. Left Coast Press.
- Lindblom, C. E. (1963). The intelligence of democracy: Decision making through mutual adjustment. New York: Free Press.
- Lipartito, K. (2014). Historical sources and data. In M. Bucheli, & D. Wadhwani (Eds.), Organizations in time: History, theory, methods (pp. 284-304). Oxford: Oxford University Press.
- Livesey, F. (2017). From global to local. New York: Pantheon Books.
- Logeman, M. (2013). Strategic change under construction: Role of strategy narratives. Aalto University School of Business. Doctoral Dissertation 216/2013.
- Lukas, B. A., & Ferrell, O. C. (2000). The effect of market orientation on product innovation. Journal of the Academy of Marketing Science, 28(2), 239–247.
- Luo, Y. (2000). Dynamic capabilities in international expansion. Journal of World Business, 35(4), 355-378.
- Magretta, J. (2002). Why business models matter. Harvard Business Review, 80(5), 86–92, 133.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. Strategic Management Journal, 401(22), 387–401.
- March, J. G. (1991). Exploration and exploitation in organizational learning. Organization Science, 2(1), 71–87.
- Marschan, R. (1996). New structural forms and inter-unit communication in multinationals: The case of Kone elevators. Doctoral Dissertation A-110. Helsinki School of Economics and Business Administration.
- Marschan-Piekkari, R., Welch, D., & Welch, L. (1999). In the shadow: The impact of language on structure, power and communication in the multinational. International Business Review, 8(4), 421–440.
- McAfee, A., & Brynjolfsson, E. (2008). Investing in the IT that makes a competitive Difference: Studies of corporate performance reveal a growing link between certain kinds of technology investments and intensifying competitiveness. Harvard Business Review, 86(7-8), 98-103.

- Meyer, K. E. (2004). Perspectives on multinational enterprises in emerging economies. Journal of International Business Studies, 35(4), 259–276.
- Meyer, K. E. (2012). What is, and to what purpose do we study, international business? AIB Insights, 13(1), 10–13.
- Meyer, K. E., & Estrin, S. (2014). Local context and global strategy: Extending the integration responsiveness framework to subsidiary strategy. Global Strategy Journal, 4(1), 1–19.
- Michelsen, K. E. (2013). Kone: Family, company and entrepreneurship in the Industrial Century. Otava.
- Miles, R. E., Miles, G., & Snow, C. C. (2006). Collaborative entrepreneurship. Organizational Dynamics, 35(1), 1–11.
- Morrison, A. J. (2000). Developing a global leadership model. Human Resource Management, 39(2–3), 117–131.
- Myers, M. D. (2013). Qualitative research in business management. London: Sage.
- Nelson, R. R., & Winter, S. G. (1982). An evolutionary theory of economic change. Cambridge.
- Nijssen, E. J., Hillebrand, B., & Vermeulen, P. A. M. (2005). Unraveling willingness to cannibalize: A closer look at the barrier to radical innovation. Technovation, 25(12), 1400–1409.
- Nijssen, E. J., Hillebrand, B., Vermeulen, P. A. M., & Kemp, R. G. M. (2006). Exploring product and service innovation similarities and differences. International Journal of Research in Marketing, 23(3), 241–251.
- Noda, T., & Bower, J. L. (1996). Strategy making as iterated processes of resource allocation. Strategic Management Journal, 17(S1), 159–192.
- Normann, R. (2001). Reframing Business: When the map changes the landscape. John Wiley & Sons Ltd.
- O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. Academy of Management Perspectives, 27(4), 324–338.

- O'Reilly, C. A., & Tushman, M. L. (2016). Lead and disrupt: How to solve the innovator's dilemma. Stanford, California: Stanford University Press.
- Ocasio, W. (1997). Towards an attention-based view of the firm. Strategic Management Journal, 18(Summer Special Issue), 187–206.
- Olson, E. M., Slater, S. F., & Hult, G. T. M. (2005). The performance implications of fit among business strategy, marketing organization structure, and strategic behavior. Journal of Marketing, 69(3), 49–65.
- Olson, E. M., Walker Jr, O. C., & Ruekert, R. W. (1995). Organizing for effective new product development: The moderating role of product innovativeness. Journal of Marketing, 59(1), 48–62.
- Osland, J. S., Bird, A., & Mendenhall, M. (2012). Developing global mindset and global leadership capabilities. In Handbook of research in international human resource management (pp. 2nd ed., 220–252). Cheltenham, UK: Edward Elgar.
- Payne, G., & Payne, J. (2004). Key concepts in social research. London: SAGE.
- Penrose, E. T. (1959). The theory of the growth of the firm. New York: Sharpe.
- Pentland, B. T. (1999). Building process theory with narrative: From description to explanation. Academy of Management Review, 24(4), 711–724.
- Perlmutter, H. V. (1969). The tortuous evolution of the multinational corporation. Columbia Journal of World Business, 4(1), 9–18.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. Strategic Management Journal, 14(3), 179–191.
- Peteraf, M. A., Di Stefano, G., & Verona, G. (2013). The elephant in the room of dynamic capabilities: Bringing two diverging conversations together. Strategic Management Journal, 34(12).
- Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. Organization Science, 1(3), 267–292.
- Pettigrew, A. M. (1997). What is processual analysis? Scandinavian Journal of Management, 13(4), 337–348.

- Piekkari, R., Welch, C., & Paavilainen, E. (2009). The case study as disciplinary convention: Evidence from international business journals. Organizational Research Methods, 12(3), 567–589.
- Poole, M. S., & Van de Ven, A. H. (1989). Using paradox to build management and organization theories. Academy of Management Review, 14(4), 562–578.
- Porter, M. E. (1986). Changing patterns of international competition. California Management Review, 28(2), 9–40.
- Powell, W. W., & DiMaggio, P. J. (Eds.). (2012). The new institutionalism in organizational analysis. University of Chicago press.
- Prahalad, C. K., & Doz, Y. (1987). The multinational mission: Balancing Global integration with local responsiveness. New York, NY.
- Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. Harvard Business Review, 68(3), 79–91.
- Prahalad, C. K., & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm? Strategic Management Journal, 15(S2), 5–16.
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. The Academy of Management Annals, 10(1), 65–171.
- Radner, R. (1993). The Organization of Decentralized Information Processing. Econometrica, 61(5), 1109–1146.
- Rialp, A., Rialp, J., Urbano, D., & Vaillant, Y. (2005). The born-global phenomenon: A comparative case study research. Journal of International Entrepreneurship, 3(2), 133–171.
- Richardson, J. (2008). The business model: An integrative framework for strategy execution. Strategic Change, 17(5–6), 133–144.
- Rindova, V. P., & Kotha, S. (2001). Continuous "morphing": Competing through dynamic capabilities, form, and function. Academy of Management Journal, 44(6), 1263–1280.
- Romero, H. L., Dijkman, R. M., Grefen, P. W. P. J., & van Weele, A. J. (2015). Factors that determine the extent of business process standardization and the subsequent effect on business performance. Business and Information Systems Engineering, 57(4), 261–270.

- Rosenzweig, P. M., & Singh, J. V. (1991). Organizational environments and the multinational enterprise. Academy of Management Review, 16(2), 240-361.
- Roth, K., & Kostova, T. (2003). The use of the multinational corporation as a research context. Journal of Management, 29(6), 883–902.
- Roth, K., & Morrison, A. J. (1992). Implementing global strategy: Characteristics of global subsidiary mandates. Journal of International Business Studies, 23(4), 715–735.
- Rowlinson, M. (2004). Historical perspectives in organization studies: Factual, narrative, and archeo-genealogical. In D. E. Hodgson & C. Carter (Eds.), Management knowledge and the new employee. Burlington, VT: Ashgate Publishing.
- Rowlinson, M., Hassard, J., & Decker, S. (2014). Research strategies for organizational history: A dialogue between historical theory and organization theory. Academy of Management Perspectives, 39(3), 250–274.
- Saarinen, J. (2016). Managing global virtual teams. Aalto University publication series Doctoral Dissertations, 184/2016.
- Salonen, A. (2011). Service transition strategies of industrial manufacturers. Industrial Marketing Management, 40(5), 683–690.
- Savitt, R. (1980). Historical research in marketing. Journal of Marketing, 44(4), 52–58.
- Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2016). Paradox research in management science. The Academy of Management Annals, 6520(May), 1–60.
- Schmitt, A., Raisch, S., & Volberda, H. W. (2018). Strategic renewal: past research, theoretical tensions and future challenges. International Journal of Management Reviews, 20(1), 81-98.
- Schumpeter, N. (1934), The theory of economic development. Cambridge, MA: Harvard University Press.
- Schwab, K. (2017). The fourth industrial revolution. Currency.
- Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. Business Horizons, 48(3), 199–207.

- Siggelkow, N. (2002). Evolution toward Fit. Administrative Science Quarterly, 47(1), 125.
- Siikonen, M. L. (1997). Planning and control models for elevators in highrise buildings. Helsinki University of Technology.
- Simon, J. (2009). Kone's prince: The colorful life of Pekka Herlin. Helsinki: Otava.
- Slater, R. (2003). Jack Welch and the GE Way. Tata McGraw-Hill Education.
- Smith, W. K., Binns, A., & Tushman, M. L. (2010). Complex business models: Managing strategic paradoxes simultaneously. Long Range Planning, 43(2–3), 448–461.
- Smith, W. K., Erez, M., Lewis, M., Jarvenpaa, S., & Tracey, P. (2017). Adding complexity to theories of paradox, tensions and dualities of innovation and change. Organization Studies, 38(3–4), 303–317.
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. Academy of Management Review, 36(2), 381–403.
- Sorescu, A. B., Chandy, R. K., & Prabhu, J. C. (2003). Sources and financial consequences of radical innovation: Insights from pharmaceuticals, 67(October), 82–102.
- Srivastava, R. K., Shervani, T. A., & Fahey, L. (1999). Marketing, business processes, and shareholder value: An organizationally embedded view of marketing activities and the discipline of marketing. Journal of Marketing, 63, 168–179.

Steger, M. B. (2001). Globalism. The new market ideology. New York.

- Stenberg, E. (1992). Steering of foreign subsidiaries: An analysis of steering system development in six Finnish companies. The Helsinki School of Economics and Business Administration. Doctoral Dissertation A-82.
- Stopford, J., & Wells, L. (1972). Managing the multinational enterprise. New York: Basic Books.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. Strategic Management Journal, 17(S2), 27–43.

- Tallman, S., & Fladmoe-Lindquist, K. (2002). Internationalization, globalization, and capability-based strategy. California Management Review, 45(1), 116-135.
- Tatikonda, M. V., & Zeithaml, V. A. (2001). Managing the new service development process: Multi-disciplinary literature synthesis and directions for future research. In New directions in supply-chain management: Technology, strategy, and implementation. New York: American Management Association.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. Strategic Management Journal, 28(13), 1319–1350.
- Teece, D. J. (2009). Dynamic capabilities and strategic management: Organizing for innovation and growth. Oxford University Press on Demand.
- Teece, D. J. (2010). Business models, business strategy and innovation. Long Range Planning, 43(2-3), 172-194.
- Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. Academy of Management Perspectives, 28(4), 328–352.
- Teece, D. J., Peteraf, M. A., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. California Management Review, 58(4), 13–35.
- Teece, D. J., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533.
- Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. Journal of Marketing, 73(1), 3-23.
- Thompson, J. D. (1967). Organizations in action: Social science bases of administrative theory. Transaction Publishers.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). The institutional logics perspective: A new approach to culture, structure, and process. Oxford University Press on Demand.

- Tikkanen, H. (1998). The process movement. Critical review. Liiketaloudellinen Aikakauskirja, 2, 204–226.
- Treacy, M., & Wiersema, F. (1993). Customer intimacy and other value disciplines. Harvard Business Review 71(1), 84.
- Tsoukas, H. (1989). The validity of idiographic research explanations. Academy of Management Review, 14(4), 551–561.
- Tsoukas, H., & Chia, R. (2002). On organizational becoming: Rethinking organizational change. Organization Science, 13(5), 567–582.
- Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. Administrative Science Quarterly, 439–465.
- Tushman, M. L., & O'Reilly, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. California Management Review, 38(4), 8–29.
- Üsdiken, B., & Kipping, M. (2014). History and organization studies: A long-term view. In M. Bucheli, & D. Wadhwani (Eds.), Organizations in time: History, theory, methods (pp. 33–55). Oxford: Oxford University Press.
- Vaara, E., & Lamberg, J.-A. (2016). Taking historical embeddedness seriously: Three historical approaches to advance strategy process and practice research. Academy of Management Review, 41(4), 633–657.
- Vahlne, J.-E., & Jonsson, A. (2017). Ambidexterity as a dynamic capability in the globalization of the multinational business enterprise (MBE): Case studies of AB Volvo and IKEA. International Business Review, 26, 57–70.
- Van de Ven, A. H. (1986). Central problems in the management of innovation. Management Science, 32(5), 590–607.
- Van de Ven, A., Polley, D. E., Garud, R., & Venkataraman, S. (1999). The innovation journey. New York: Oxford University Press.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68, 1–17.

- Venaik, S., Midgley, D., & Devinney, T. (2004). A new perspective on the integration responsiveness pressures confronting multinational firms. Management International Review, 44(1), 15–48.
- Vernon, R. (1966). International investment and international trade in the product cycle. The Quarterly Journal of Economics, 190–207.
- Wadhwani, R. D., & Jones, G. G. (2016). Historical change and the competitive advantage of firms: Explicating the 'dynamics' in the dynamic capabilities framework. Harvard Business School General Management Unit Working Paper, (17-052).
- Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171–180.
- Westney, D. E., & Zaheer, S. (2001). The multinational enterprise as an organization. In the Oxford handbook of international business (pp. 101-124). Oxford University Press.
- Wheelwright, S. C., & Clark, K. B. (1992). Revolutionizing product development: Quantum leaps in speed, efficiency, and quality. Simon and Schuster.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? Academy of Management Review, 14(4), 490–495.
- Wilson, D. C., & Jarzabkowski, P. (2004). Thinking and acting strategically: New challenges for interrogating strategy. European Management Review, 1(1), 14–20.
- Winter, S. G. (2003). Understanding dynamic capabilities. Strategic Management Journal, 24(10), 991–995.
- Winter, S. G., & Szulanski, G. (2001). Replication as strategy. Organization Science, 12(6), 730–743.
- Witkowski, T. H., & Jones, D. B. (2006). Qualitative historical research in marketing. Handbook of qualitative research methods in marketing, 70–82.
- Yates, J. (2014). Understanding historical methods in organization studies. In M. Bucheli, & D. Wadhwani (Eds.), Organizations in time: History, theory, methods (pp. 265-283). Oxford: Oxford University Press.

- Ybema, S. (2014). The invention of transitions: History as a symbolic site for discursive struggles over organizational change. Organization, 21(4), 495–513.
- Yin, R. K. (2003). Case study research design and methods third edition. Applied Social Research Methods Series, 5.
- Yin, R. K. (2009). Case study research: Design and methods. Essential guide to qualitative methods in organizational research (Vol. 24).
- Zack, M. H. (1999). Knowledge and strategy Introduction. In Knowledge and Strategy, vii-x1. Routledge.
- Zaheer, S. (1995). Overcoming the liability of foreignness. Academy of Management Journal, 38(2), 341–363.
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. Academy of Management Review, 27(2), 185–203.
- Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. Organization Science, 13(3), 339–351.
- Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: insights from a simulation study. Strategic Management Journal, 24(2), 97–125.
- Zott, C., & Amit, R. (2010). Designing your future business model: An activity system approach. Long Range Planning, 43(2), 169–226.
- Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. Journal of Management, 37(4), 1019–1042.

Appendix 1: List of Historical Documents

List of historical documents (public documents)

- Alahuhta, M. (2015). Johtajuus kirkas suunta ja ihmisten voima. Kokemuksia ja näkemyksiä johtajuudesta Koneen ja Nokian vuosilta. Bookwell.
- Alkio, J. (2014). Yksinkertainen, vaikea resepti. *Tekniikka & Talous*, 31 January
- Eilertsen, P., & Laurén, O. (2017). Interview with Matti Alahuhta. EgonZhender The Focus, XVI (1), 70-77
- Global elevators & escalators industry, Credit Suisse research, 17 August 2016
- Heiskanen, M. (2013). Koneen henki. Talouselämä, 2013(26)
- Herlin, H. (1974). Harald Herlin esi- ja jälkipolvien saatossa.
- Herlin, K. (1960). Kone Osakeyhtiö 1910-1960.
- Hurskainen, J. (1992). Business process approach to global logistics: Case Kone Elevators. In M. Jahnukainen, & A. Vepsäläinen (Eds.), *Joining the global race*. Helsinki School of Economics Press, 86-102

Jännäri, J. (2012). Koneen ylivoimaa. Kauppalehti Optio, 2012(2): 26-31

Kilpinen, P. (2013). Capability development within the multinational corporation. Aalto University Publication Series. Doctoral Dissertations, 13/2013.

Kone Annual Reports 1994 - 2018

- Kone's investor day event presentations, 2007. https://www.kone.com/ en/investors/capital-markets-days/previous-years/2007.aspx, retrieved July 30, 2018
- Kone's investor day event presentations, 2008. https://www.kone.com/ en/investors/capital-markets-days/previous-years/2008.aspx, retrieved July 30, 2018
- Kone's investor day event presentations, 2009. https://www.kone.com/ en/investors/capital-markets-days/previous-years/2009.aspx, retrieved July 30, 2018
- Kone's investor day event presentations, 2010. https://www.kone.com/ en/investors/capital-markets-days/previous-years/2010.aspx, retrieved July 30, 2018
- Kone's investor day event presentations, 2011. https://www.kone.com/ en/investors/capital-markets-days/previous-years/2011.aspx, retrieved July 30, 2018
- Kone's investor day event presentations, 2012. https://www.kone.com/en/ investors/capital-markets-days/previous-years/2012/, retrieved July 30, 2018
- Kone's investor day event presentations and webcast, 2013 https:// www.kone.com/en/investors/capital-markets-days/previousyears/2013/, retrieved July 30, 2018
- Kone's investor day event presentations and webcast, 2014. https:// www.kone.com/en/investors/capital-markets-days/previousyears/2014/2014.aspx, retrieved July 30, 2018
- Kone's investor day event presentations and webcast, 2015. https://www. kone.com/en/investors/capital-markets-days/2015/, retrieved July 30, 2018

- Kone's investor day event presentations and webcast, 2016. https://www. kone.com/en/investors/capital-markets-days/2016/, retrieved July 30, 2018
- Kone's investor day event presentations and webcast, 2017. https://www. kone.com/en/investors/capital-markets-days/2017/, retrieved July 30, 2018
- Kone presentation, Case KONE: Developing global process capability. Aalto University, 30 March 2012
- Lähteenmäki, P. (2014). Yhä ylemmäs, Talouselämä, 2014(42): 40-43
- Marschan, R. (1996). New structural forms and inter-unit communication in multinationals: The case of Kone elevators. Doctoral Dissertation A-110. Helsinki School of Economics and Business Administration
- Melender, T. (2014). Kone haluaa ykköseksi, Arvopaperi, 2014(11) 19-24
- Michelsen, K. E. (2013). Kone: Family, company and entrepreneurship in the Industrial Century. Helsinki: Otava.

People Flow, Kone's magazine, 2009, issues 1-2

People Flow, Kone's magazine, 2010, issues 3-4

People Flow, Kone's magazine, 2011, issues 5-6

People Flow, Kone's magazine, 2012, issues 7-8

People Flow, Kone's magazine, 2013, issues 9-10

People Flow, Kone's magazine, 2014, issues 11-12

People Flow, Kone's magazine, 2015, issues 13-14

People Flow, Kone's magazine, 2016, issues 15-16

- Perttula, M. (1998): Growing global is a long path. In M. Jahnukainen, & A. Vepsäläinen (Eds.), Process management works if only implemented. System Group Publication.
- Pratt, M. K. (2018). The future of manufacturing is digital, CIO, June, https://www.cio.com/article/3277960/manufacturing/the-futureof-manufacturing-is-digital.html, retrieved June 7, 2018

- Puhuvatko it-johtaja ja talousjohtaja koskaan rahasta?, Tivi CIO&CFO (2011), 25 December
- Saarinen, J. (2016). Managing global virtual teams. Aalto University publication series Doctoral Dissertations, 184/2016.
- Salonen, A. (2011). Service transition strategies of industrial manufacturers. Industrial Marketing Management, 40(5), 683–690
- Siikonen, M. L. (1997). Planning and control models for elevators in high-rise buildings. Helsinki University of Technology. Doctoral Dissertation.
- Simon, J. (2009). Kone's prince: The colorful life of Pekka Herlin. Helsinki: Otava.
- Stenberg, E. (1992). Steering of foreign subsidiaries: An analysis of steering system development in six Finnish companies. The Helsinki School of Economics and Business Administration. Doctoral Dissertation A-82.
- Suomalaisen hissin valmistus, 1951 (film). https://yle.fi/aihe/ artikkeli/2007/02/02/ylos-ja-alas-suomalaisen-hissin-valmistus, retrieved July 6, 2018
- Thompson, N., Bonnet, D. & Ye Yun, I. (2018). The Foundations of Corporate Innovation in the Digital Age. MIT Center for Digital Business & Capgemini Consulting
- Tiedeykkönen, Kone Oy:n satavuotista historiaa, 6 June, 2015 (audio). https://areena.yle.fi/1-2761679, retrieved July 6, 2018
- Tukiainen, J. (2016). Hiilikuidulla pilviin, Tekniikan Maailma, 2016(18): 58-59
- Vihma, P. (2006). Alahuhta notkistaa Koneen, Talouselämä, 2006(12): 62-65
- Vuokola, J. (2007). Tieto tuli Koneeseen, Tivi CIO, 2007(1): 42-46

www.kone.com

List of historical documents for internal audience (private)

- Balancing Business Flexibility and Standardization Locally and Globally (2006). Presentation in the Global Change Manager Meeting, May 2006
- Building efficient and globally scalable operations through Kone Way (2015). Presentation in Global Development team meeting, 24 June
- Change story from past to tomorrow (2018). Presentation in NEB Leadership Team meeting, 6 April
- Global Development China Newsletter (2013), Giant Kone SAP project kick-off, issue 1:5-7
- Global Development China Newsletter (2013), Giant Kone SAP project update, issue 2: 12-14
- Hissilehti, employee magazine, 2004(2)

Hissilehti, employee magazine, 2005(2)

Hissimääräykset 1934

- How we get to our vision through Kone Way (2016). Presentation in Management Meeting, March 2016
- Innovation management development (2015). Research report, 16 June

Kone Post, in-house magazine, 2005, issue 1

Kone Quality and Environmental manual, 2014.

Kone R&D strategy, 2018.

Kone strategy 2005 presentation, 17 May 2005

Kone strategy 2008-2010 presentation, January 2008

Kone strategy 2011-2013 presentation: Challenging industry leadership in everything we do, Kone strategy workshop, January 2011

Kone strategy 2014-2016 presentation, January 2014

Kone strategy 2017-2020 presentation, Winning with customer, January 2017

Kone Way consistency (2014). Kone presentation.

Kone Way consistency (2015). Presentation in IT team meeting, 24 Jun

Kone Way consistency program presentation, October 2015

Managing the present and succeeding in future (2015). Management webcast, September 2015

Move, Kone's internal magazine, 2007, issues 1-2

Move, Kone's internal magazine, 2008, issues 1-3

Move, Kone's internal magazine, 2009, issues 1-3

Move, Kone's internal magazine, 2010, issues 1-3

Move, Kone's internal magazine, 2011, issues 1-3

Move, Kone's internal magazine, 2012, issues 1-2

Move, Kone's internal magazine, 2013, issues 1-3

Move, Kone's internal magazine, 2014, issues 1-3

Move, Kone's internal magazine, 2015, issues 1-2

Solutions supporting Kone Way: list of solutions, systems and tools that support our common way of working, the Kone Way, version 1.2, 2007.

News & Views, Kone in-house magazine, 1994, issues 1-4

News & Views, Kone in-house magazine, 1995, issues 1-4

News & Views, Kone in-house magazine, 1996, issues 1-4

News & Views, Kone in-house magazine, 1997, issues 1-4

News & Views, Kone in-house magazine, 1998, issues 1-4

News & Views, Kone in-house magazine, 1999, issues 1-4

News & Views, Kone in-house magazine, 2000, issues 1-4

News & Views, Kone in-house magazine, 2001, issues 1-4

News & Views, Kone in-house magazine, 2002, issues 1-4 News & Views, Kone in-house magazine, 2003, issues 1-4 News & Views, Kone in-house magazine, 2004, issues 1-4 News & Views, Kone in-house magazine, 2005, issues 1-4 News & Views, Kone in-house magazine, 2006, issue 1 The story of Kone in Kunshan, visitor tour script, May 2012. Yhtymän henkilöstöpolitiikan suuntaviivat – Esimiehen ohje, 1974.

Appendix 2: Key Financial Figures of the Case Company

Key figures	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of employees at year end	25 262	27 238	29 321	32 544	34 831	33 988	33 755	35 000	39 851	43 298	47 064	49 734	52 104	55 075
Orders received, MEUR	2 136	2 639	3 116	3 675	3 948	3 432	3 809	4 465	5 496	6 151	6 813	7 959	7 621	7 554
Orders book, MEUR	1 796	2 327	2 762	3 282	3 577	3 309	3 598	4 348	5 050	5 587	6 952	8 210	8 592	8 240
Sales, MEUR	2 895	3 242	3 601	4 079	4 603	4 744	4 987	5 225	6 277	6 933	7 334	8 647	8 784	8 942
Operating income, MEUR		195	360	321	558	567	696	725	791	953	1 036	1 241	1 293	1 230
Operating income, margin, %		9,3	10,0	7,9	12,1	12,7	14,0	13,9	13,2	13,8	14,1	14,4	14,7	13,8
Cash flow, MEUR		215,4	371,7	380	527,4	825,1	857,2	820	1 071	1 213	1 345	1 474	1 509	1 263
R&D expenditure, MEUR		29,7	50,3	50,7	58,3	62	70,9	82,5	86,1	96,5	103,1	121,7	140,5	158,4
R&D expenditure as % of sales		1,4	1,4	1,2	1,3	1,3	1,4	1,6	1,4	1,4	1,4	1,4	1,6	1,8
Basic earnings per share, EUR		0,98	1,86	0,72	1,66	0,92	1,05	1,26	1,17	1,37	1,47	2,01	2,00	1,89

Source: Kone Annual Reports, 2004-2017.



Aalto University Executive Education



ISBN 978-952-60-8838-9 ISBN 978-952-60-8839-6 (pdf) ISSN 1799-4810 ISSN 1799-4829 (electronic)

Aalto University

Aalto University Executive Education www.aaltoee.com www.aalto.fi BUSINESS + ECONOMY

ART + DESIGN + ARCHITECTURE

SCIENCE + TECHNOLOGY

CROSSOVER

DOCTORAL DISSERTATIONS